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Commands User's Guide

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Chapter 1

Introduction

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This chapter contains a brief description of the *Commands User's Guide*. The contents include sections about the manual scope, audience, and organization; how to find related publications; and how to contact Oracle for assistance.

Overview

The *Commands User's Guide* provides a description of all commands used in the Oracle Communications EAGLE. The use of the term "the system" indicates that the information is common to all of the functions of the EAGLE.

Scope and Audience

This manual is intended for those who maintain and perform administration on the EAGLE. It is assumed that the user is familiar with the SS7 network and its associated protocols. The manual describes commands used in the system, and it contains a special section on debug commands and their descriptions.

Debug commands are a special group of commands used in troubleshooting and debugging the system. These commands are intended for Customer Care Center personnel and authorized engineering personnel in the operating companies. The use of these commands is restricted to those personnel who have access to the “Debug” command class.

Documentation Admonishments

Admonishments are icons and text throughout this manual that alert the reader to assure personal safety, to minimize possible service interruptions, and to warn of the potential for equipment damage.

Table 1: Admonishments

Icon	Description
	Danger: (This icon and text indicate the possibility of *personal injury*.)
	Warning: (This icon and text indicate the possibility of *equipment damage*.)
	Caution: (This icon and text indicate the possibility of *service interruption*.)
	Topple: (This icon and text indicate the possibility of *personal injury* and *equipment damage*.)

Manual Organization

This document is organized into the following chapters:

- *Introduction* contains general information about the Commands Manual, the organization of the manual and how to get technical assistance.
- *Using Commands* describes the system's Maintenance and Administration subsystem and input/output devices. This chapter also provides the method for entering commands and logging into and out of the system.
- *Alphabetical List of Commands* contains an alphabetical list of the Tekelec Signaling Products (Eagle, STP, IP7 Secure Gateway, and IP7 Front End) commands.
- *Commands* describes all commands that are not pass-through or debug commands.
- *Debug Commands* describes all debug commands.
- *Pass-Through Commands* describes all pass-through commands.
- *Reference Information* contains general information that is used by multiple commands, including point code format and conversion information, mapping tables, lists of commands by class, and loopbcck information.
- *Acronyms and Abbreviations*contains all acronyms and abbreviations used in the Commands Manual.

Note: Throughout this manual, reference to the OAP (Operation System Support Application Processor) applies also to the EOAP (Enhanced Operation System Support Application Process).

My Oracle Support (MOS)

MOS (*https://support.oracle.com*) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at *http://www.oracle.com/us/support/contact/index.html*. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request
2. Select 3 for Hardware, Networking and Solaris Operating System Support
3. Select one of the following options:
   - For Technical issues such as creating a new Service Request (SR), Select 1
   - For Non-technical issues such as registration or assistance with MOS, Select 2

You will be connected to a live agent who can assist you with MOS registration and opening a support ticket.

MOS is available 24 hours a day, 7 days a week, 365 days a year.

Emergency Response

In the event of a critical service situation, emergency response is offered by the Customer Access Support (CAS) main number at 1-800-223-1711 (toll-free in the US), or by calling the Oracle Support hotline for your local country from the list at *http://www.oracle.com/us/support/contact/index.html*. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.

Related Publications

For information about additional publications that are related to this document, refer to the *Related Publications Reference* document, which is published as a separate document on the Oracle Technology Network (OTN) site. See *Locate Product Documentation on the Oracle Help Center Site* for more information.

Customer Training

Oracle University offers training for service providers and enterprises. Visit our web site to view, and register for, Oracle Communications training:

http://education.oracle.com/communication

To obtain contact phone numbers for countries or regions, visit the Oracle University Education web site:

www.oracle.com/education/contacts

Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, *http://docs.oracle.com*. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at *http://www.adobe.com*.

1. Access the Oracle Help Center site at *http://docs.oracle.com*.
2. Click `Industries`.
3. Under the Oracle Communications subheading, click the `Oracle Communications documentation` link.
   The Communications Documentation page appears. Most products covered by these documentation sets will appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."
4. Click on your Product and then the Release Number.
   A list of the entire documentation set for the selected product and release appears.
5. To download a file to your location, right-click the `PDF` link, select `Save target as` (or similar command based on your browser), and save to a local folder.

Chapter 2

Using Commands

Topics:

- *Maintenance and Administration Subsystem ...14*
- *E5-based Control Cards 14*
- *Input/Output Devices 15*
- *About Commands 21*

This chapter provides the following information:

- A description of the system's Maintenance and Administration Subsystem
- A description of the system's input and output devices
- A description of how to enter commands
- The procedures for logging into and out of the system

This chapter is intended to assist personnel responsible for the system.

Maintenance and Administration Subsystem

The Maintenance and Administration Subsystem (MAS) is the central management point for the EAGLE.

The MAS provides user interface, maintenance communication, peripheral services, alarm processing, system disk interface, and measurements.

Management and redundancy is provided by use of two separate subsystem processors.

The MAS resides on two separate sets of Maintenance and Administration Subsystem Processor (MASP) cards and a Maintenance Disk and Alarm card (collectively referred to as control cards). The control cards are located in slots 1113 through 1118 of the EAGLE Control Shelf.

E5-based Control Cards

The E5-based set of EAGLE control cards consists of the following cards:

- Two Maintenance and Administration Subsystem Processor cards (E5-MASP cards). Each dual-slot E5-MASP card is made up of two modules:
  - Maintenance Communication Application Processor (E5-MCAP) card
  - Terminal Disk Module (E5-TDM) card
- One Maintenance Disk and Alarm card (E5-MDAL card)

Maintenance Communication Application Processor (E5-MCAP) Card

The E5-MCAP card contains the Communications Processor and Applications Processor and provides connections to the IMT bus. The card controls the maintenance and database administration activity and performs both application and communication processing. E5-MCAP cards are located in slots 1113 and 1115 of the control shelf.

Each E5-MCAP card contains one latched USB port for use with removable flash media (“thumb drive”), and one flush-mounted USB port for use with a plug-in flash drive. The removable media drive is used to install and back up customer data. The flush-mounted USB port is used for upgrade and could be used for disaster recovery.

Terminal Disk Module (E5-TDM) Card

The E5-TDM card provides the Terminal Processor for the 16 I/O ports, and interfaces to the Maintenance Disk and Alarm (E5-MDAL) card and fixed disk storage. The E5-TDM card also distributes Composite Clocks and High Speed Master clocks throughout the EAGLE, and distributes Shelf ID to the EAGLE. Each E5-TDM card contains one fixed SATA drive that is used to store primary and backup system databases, measurements, and Generic Program Loads (GPLs). E5-TDM cards are located in slots 1114 and 1116 of the control shelf.

Maintenance Disk and Alarm (E5-MDAL) Card

The E5-MDAL card processes alarm requests and provides fan control. There is only one E5-MDAL card in a control card set. Critical, major, and minor system alarms are provided for up to 6 individual frames. In addition to the 3 system alarms, the E5-MDAL card provides the system audible alarm. The E5-MDAL card provides control of fans on a per-frame basis, and allows for each fan relay to be set individually. The E5-MDAL card is located in slots 1117 and 1118 of the control shelf.

Input/Output Devices

There are two types of Input/Output (I/O) devices: terminals and printers. All I/O devices are connected to the system through the control shelf backplane. Each I/O device is described in terms of its function and its connection to the system. Refer to *Installation Guide* for backplane connection information.

Terminals and Printers

The EAGLE uses VT320 terminals for maintenance and database administration. The EAGLE also can be configured to communicate with the SEAS interface (OAP). The terminals enable you to enter information into or receive information from the system. The system is capable of communicating with terminals at data rates from 2400 to 19,200 baud, using the ASCII character set.

You must configure terminals to operate with the system. You also must set printers (and modems) for hardware flow control. To do this, enable Data Terminal Ready (DTR) through your terminal's configuration menu. A modem also must have DCD set on "high." If your terminal has the auto-wrap feature, ensure that it is disabled before using your terminal on the system.

For information on the setup values for printers and terminals on the system, see the *chg-trm* command.

Terminals provide the following capabilities:

- cmdname input and output
- Continuous alarm states
- Event/Error messages

You enter commands at the terminal to perform system operations such as displaying the system status, administering system security, and maintaining the database.

An example of a terminal screen is shown in *Figure 1: System Terminal User Display*. Note that the alarm status area is labeled either Total Alarm Status or Active Alarm Status depending on how the VT320 terminal is configured. See the *chg-stpopts* command description for configuration information.

Alarms are displayed in the alarm status area of the terminal screen. The alarm levels are as follows:

- Critical – Indicates a severe, service-affecting condition has occurred and that immediate corrective action is needed, regardless of the time of day or the day of the week.
- Major – Indicates a serious disruption of service or the failure of important circuits is taking place. These troubles require attention and response to restore or maintain system capability.
- Minor – Indicates a trouble, but one that does not have a serious affect on service.
- Inhibited – Indicates a device in the system with an inhibited alarm. A temporarily or permanently inhibited alarm does not generate unsolicited output or cause alarm indicators to be turned on. See the `inh-alm` command description for information on inhibited alarms.

Event/Error messages also are issued to terminals to report system conditions or events. If the condition or event affects service, an alarm is issued along with an Event/Error message. Event/Error messages are displayed in the scroll area of the terminal screen.

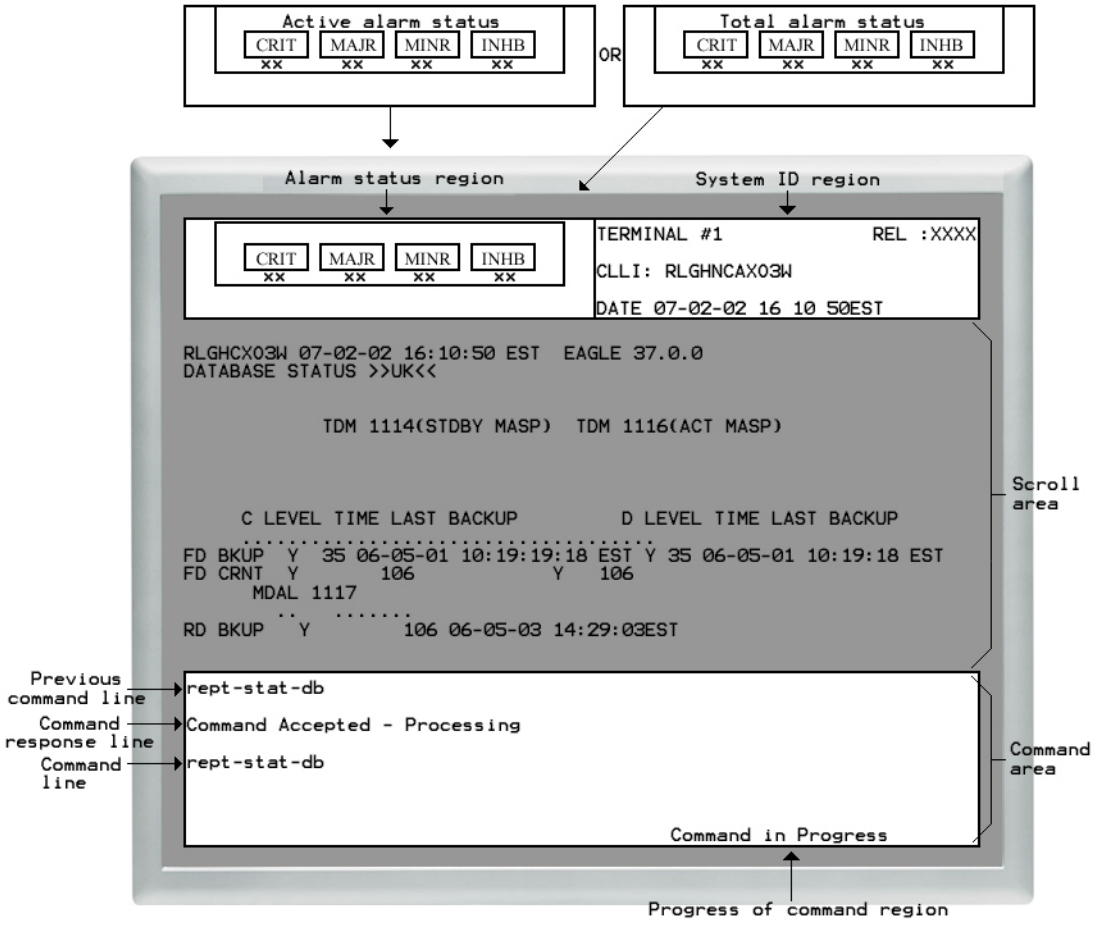

Figure 1: System Terminal User Display

Use the command line region of the terminal display () to enter commands. The command line region consists of two lines. Each of these lines can hold up to 80 characters. If you enter a command of more than 80 characters in length, the command appears on both lines. When you press the Enter key, only the first 80 characters are displayed in the previous command line, followed by a message on the command response line showing the status of the command. The remaining characters have not been rejected; they are not displayed due to line length limitations. If you recall the command by pressing the Up arrow key or Down arrow key, all the characters in the command are displayed. For a description of the arrow key functions, see *Table 3: Keyboard Functions*.

Printer Connections

Terminals and printers are connected to the Terminal Disk Module (TDM), using the control shelf backplane. The TDM also provides Keyboard Send and Receive (KSR) function. A description of the TDM can be found in *Installation Guide*.

KSR Function on VT320 Terminal Devices

The terminals can use the keyboard send and receive (KSR) mode of operation. KSR refers to a device or mode of operation that prints or displays all received data. The KSR mode of operation typically supports a teletype printer, but in the system, it also supports a video display unit and keyboard.

The KSR feature enables you to attach a dumb terminal device or teletype printer to the system's I/O ports or emulate KSR mode of operation on a VT320. KSR enhances the system's dial-up administration functions by allowing faster throughput, because the screen formatting characters associated with the VT320 mode of operation need not be transmitted.

The tested and supported terminal size in KSR mode is 24 rows/80 columns.

KSR Configuration

This feature allows you to configure the operational characteristics of system's I/O serial ports to support KSR terminal devices. See *Table 3: Keyboard Functions* for a list of the keyboard functions used by the KSR feature. For information on configuring a serial I/O port for KSR operation, see *Database Administration - SS7 User's Guide*.

Changing the Mode Of Operation

Before you attempt to change the mode of operation of the terminal, you *must* follow the "Changing the Terminal Characteristics" procedure found in *Database Administration - SS7 User's Guide*. You must perform this procedure from another terminal.

You can change the mode of operation of the terminal by pressing the **F11** key. The **F11** key instructs the system to mimic a KSR. cmdname line editing operates exactly like the VT320.

The KSR emulation resembles a printer when in operation. The entire screen is used for output. Before you enter a command, press <Ctrl-A>. The command prompt (>) is displayed. Enter a carriage return to signify the end of command entry.

While in the KSR mode, all output to the video display unit is buffered. When any character is entered from the terminal, a one-minute timer is started and data reception from the system is stopped. The system responds to the command with the appropriate response, then resumes sending data where it left off.

If a carriage return is not received during command entry, a time-out occurs and the system resumes sending data to the terminal.

Requirements

The KSR function operates on any combination of terminal type assignments for the 16 available terminal ports.

Telnet Terminals

Telnet is a user command using the underlying TCP/IP protocol for accessing remote computers. Telnet provides a connection from a remote (client) to a host (server) computer; the client keyboard and monitor (or window) act as if physically attached to the host computer. Remote users log on as if they were local users with whatever privileges may have been granted to the specific applications

and data on the remote computer. Remote users, after they log in, can use the same services as a local user.

The IP User Interface feature permits any standard telnet client to act as an EAGLE terminal. This IP-based access provides a standard interface through which EAGLE commands are entered from a telnet session to the EAGLE. The EAGLE then provides command responses back to the remote telnet terminal.

Up to 3 E5-IPSM cards or E5-ENET-B cards running the IPS application (IPSM cards) in the EAGLE, with IP connectivity, enable telnet clients to connect from anywhere on the customer's IP LAN. The EAGLE must be on the customer's LAN or WAN. Each IPSM card provides 8 telnet terminal ports (IDs 17-24 for the first card installed, 25-32 for the second card installed, and 33-40 for the third card installed), which are automatically made available when the card is installed and provisioned. See the `chg-trm` command description in this manual for more information about configuring telnet terminals.

From the telnet client, the remote user connect to any one of the equipped IPSM cards available by entering the command `telnet` <*IP address*>. For example,

```
telnet 192.168.1.100
```

The remote user then selects a terminal number from a list of available terminals. If an incorrect terminal number (one not listed in the prompt) is selected, the prompt appears again. (After three incorrect tries, the session is closed.) After the session is accepted, an EAGLE welcome message appears. At this point, broadcast messages (if provisioned) will begin to appear. See *Figure 2: Telnet Terminal Selection and Login* .

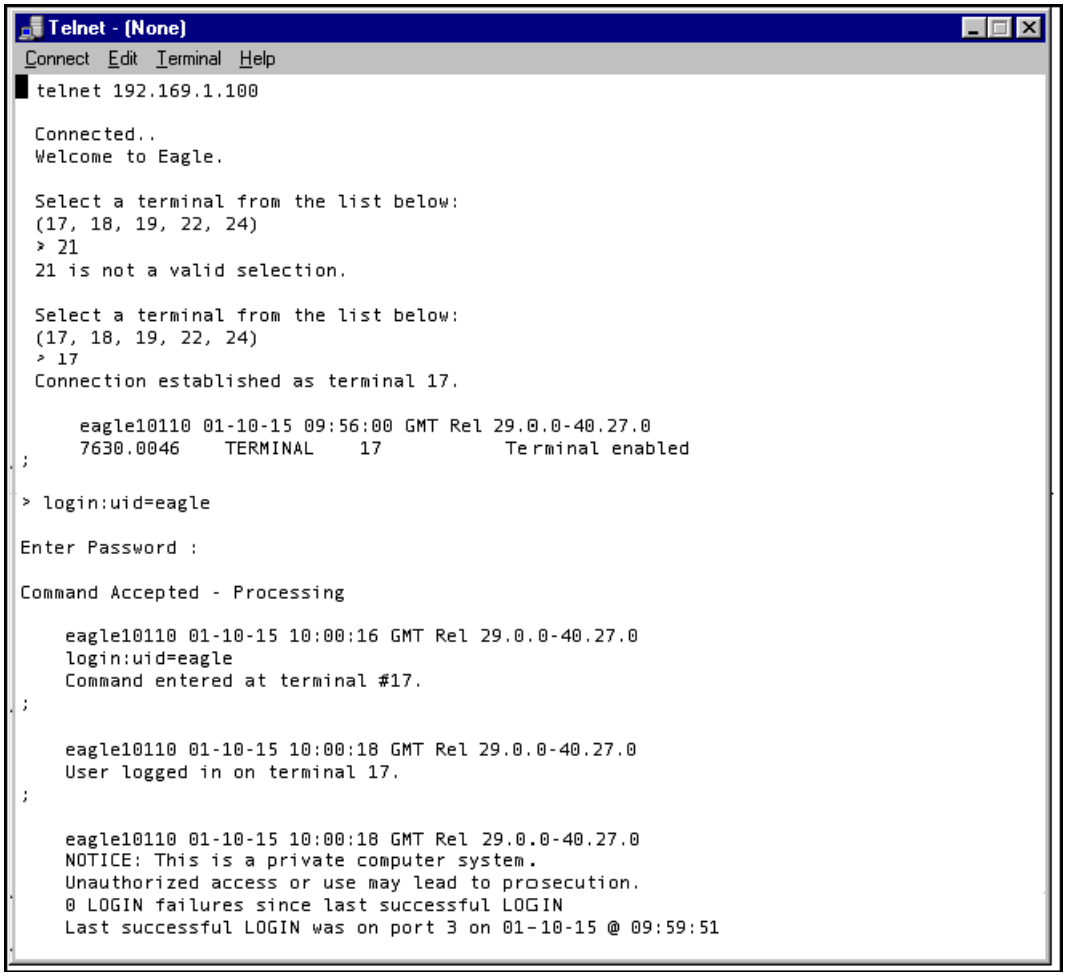

Figure 2: Telnet Terminal Selection and Login

After a connection is made, the remote user can log in using a pre-provisioned user ID and password. (The user ID and password must be provisioned from an existing serial terminal.) The `login` command can be typed directly, without typing <Ctrl-A> first.

An EAGLE serial terminal emulating a Keyboard Send/Receive (KSR) device is normally in *display mode* (where outgoing messages are displayed). In order to enter a command, the user must interrupt the display by holding down the Ctrl key and typing an "a" (the ATTENTION or Ctrl-A key sequence). When the terminal controller receives an ATTENTION, it enters a *command entry mode*. The output text is temporarily halted, and the prompt symbol ">" appears.

The telnet terminal enters *command entry mode* when any key is pressed; <Ctrl-A> is not needed.

After the login is accepted and the user presses a key to receive the standard EAGLE command line prompt, all EAGLE commands assigned to that user ID are now accessible.

The display of broadcast messages can be interrupted with any keystroke, and will resume after a command is entered or a set timeout expires. When in command entry mode, the telnet server holds any outgoing messages in a buffer while a command is entered. A command entry is completed by pressing the Enter key.

The telnet server waits up to 60 seconds between keystrokes for the command text to be completed, before timing out and resuming the broadcast display. If the command entry times out, and output resumes, the incomplete command text might scroll off the screen. Even though the incomplete command was not executed, it is saved as an entry in the command buffer. This incomplete command will be displayed again when any key is pressed. The command string can be finished by continuing the typing where it was interrupted. Pressing the Enter key submits this command as usual.

Broadcast messages are held in a buffer from the time a key is pressed, until the command is complete (timed out, aborted, canceled, or rejected). This is to allow command responses to be completely displayed. After the command completes, broadcast messages (if provisioned) will resume. The IPSM card buffer will hold up to 30 minutes of broadcast output before discarding the oldest messages.

When the user enters the `logout` command to end the telnet session, the user is logged off of the EAGLE, but the port remains assigned to the EAGLE telnet terminal. If the active port connection is lost for a reason such as hardware fault or system interruption, the telnet server resets affected ports, the session is closed, and the user ID is logged off.

The OA&M IP Security Enhancement feature provides secure connections to the EAGLE. Refer to Appendix B of the Database Administration Manual - System Management for information on using the PuTTY client to make a secure telnet connection.

SEAS Terminals

The SEAS Over IP feature provides a TCP/IP-based interface for SEAS. The SEAS interface constitutes the path between the EAGLE and a Common Channel Signaling Message Router (CCS MR). The EAGLE uses the IP User Interface feature and IPSM cards instead of EOAP to provide the paths for each SEAS TCP/IP link.

The IPSM card allows one of the eight IP terminals to function as a SEAS terminal and provide connectivity between the CCS MR and the EAGLE. The IPSM card also continues to provide the EAGLE with generic IP-based services, such as Telnet and FTP on the remaining seven IP terminals.

A maximum of 2 SEAS terminals can be configured in the EAGLE.

The `chg-trm:type=seas` command can be entered for terminals 17 - 40 when all conditions for a terminal to be set as a SEAS terminal are met.

The SEAS output group cannot be turned off for a SEAS terminal.

Element Management System Alarm Monitor

EMSALM terminalsElement Management System Alarm Monitor (EMSALM)

Element Management System Alarn Monitor (EMSALM) terminals display UAM alarm set and clear messages and the UIM 1083 “system alive” messages only. No other messages (including reports and other UIMs) are displayed. EMSALM terminals are designed to display alarm messages only. EMSALM terminals are not restricted in any other way. They can accept login, and commands; however these operations may interfere with alarm monitoring and should be performed on an alternate terminal.

Serial port terminal IDs 1-16 can be assigned as EMSALM terminals. These EMSALM terminals are a refinement of the KSR terminal, and contain all the KSR terminal communication parameters.

Telnet terminal IDs 17-40 can be assigned as EMSALM terminals when the IP User Interface feature is enabled and turned on and up to 3 IPSM cards are equipped in the system (see "Telnet Terminals" on page 4-6). These EMSALM terminals have all of the functions of a telnet type terminal.

When the `chg-trm` command is entered to change a terminal to the EMSALM type, all output group parameter values for that terminal default to YES, even if they were set to NO before the change. Even though an output group is set to YES for an EMSALM terminal, no reports or UIMS other than UIM 1083 will appear for that output group.

Individual output group values can be changed to NO by entering another `chg-trm` command for an EMSALM terminal (do this only with caution; it can cause loss of UAM alarm messages at the EMSALM terminal).

When the `chg-trm` command is entered to change a terminal from type EMSALM to another type, the output group values remain unchanged. A `chg-trm` command can be entered to change output group settings.

About Commands

Commands allow you to interact with the system to perform specific functions. Commands are available to perform the following functions:

- Obtain system status and operational status
- Modify system configuration
- Obtain measurement reports

The following sections describe how to enter commands through a system terminal. Command correction, keywords, parameters, and syntax are described.

Entering Commands

All commands are entered at the command prompt (>), located in the bottom window of the terminal display. After entering a command, you must press the **Enter** key. When the command has executed (an output message appears in the display to indicate execution), \2ou can enter another command. The **F9** function key allows you to interrupt a running command; however, you cannot enter another command until the running command completes its operation.

Commands are not case sensitive; therefore, either uppercase or lowercase characters can be used. Intermixing (using both upper and lower case) characters does not create an error message, but you must use the correct command syntax.

Action Commands

Throughout this manual, the term “action command” is used in the description of some dependencies, as in the sentence “No other action command can be in progress when this command is entered.”

Action commands are used to effect changes to the state of entities within the system, such as cards and signaling links. For example, use the `inh-card` command to change the state of the card to Out-of Service - Maintenance Disabled (OOS-MT-DSBLD).

Table 2: Action Commands and Associated System Entity lists the action commands and shows which type of system entity they are associated with.

Table 2: Action Commands and Associated System Entity

Action Commands	System Entity
act-slk, alw-slk, canc-slk, dact-slk, inh-slk, unhb-slk, blk-slk,ublk-slk, tst-slk	Link Commands
act-alm-trns, canc-alm-trns, rls-alm	Alarm Commands
alw-trm, inh-trm	Terminal Commands
alw-card, inh-card, rmv-card, rst-card	Card Commands

Command Keywords and Parameters

Commands consist of two parts: keywords and parameters. Keywords identify the principal action to be performed by the system, and consist of one to three words. Most commands also require parameters to further define the command operation.

Parameters are entered after the keyword. Each parameter must be separated from the keyword or the previous parameter with a colon. If a parameter has multiple values, the values entered are discrete and must be separated with a hyphen or comma. The parameters can be entered in any order.

Some command parameters have built-in default values that are used if a value is not specified. To accept a default value, press **Enter** after the desired keyword and parameters have been entered.

Use the following delimiters when entering commands:

- **:**separates parameters
- **-** or **,** —separates multiple values within a parameter block
- **=** —use as delimiter between the parameter and input value

The following is an example of a command entry:

```
> dact-slk:loc=1101:port=a
```

The keyword in the above example is `dact-slk` (Deactivate Signaling Link). The first parameter for this command is *loc=1101* (the actual card location in the system for the link being cancelled, based on equiptment location). The second parameter is *port=a*. This parameter signifies which signaling link port on the card in the designated location has the link that is to be cancelled.

If an error is made while typing commands, use the **Delete** key to make corrections, one character at a time.

Note: If the same parameter is entered more than once in a command, the system accepts the last parameter value that was entered. Any values for the parameter that were entered earlier in the command are ignored.

Keyboard Functions

Some keyboard functions used with commands are described in the previous section. Keyboard functions available for use with commands are listed in *Table 3: Keyboard Functions*. Arrow key functions are further described following the table.

Table 3: Keyboard Functions

VT320 Key Sequence	KSR Key Sequence	Description
		The Up arrow key recalls the previous commands entered at the prompt, one command at a time. The Up arrow key scrolls backwards through up to 10 commands for a KSR, VT320, or SCCS terminal, and up to 20 commands for an IP UI telnet terminal. See page 4-13 for a description of the Up arrow key functions.
		The Left arrow key backspaces the underline cursor without erasing.
		The Down arrow key recalls the previous command entered at the prompt, one parameter at a time. If the Up arrow key is pressed and more than one command has been entered in the session, pressing the Down arrow key displays one previously entered command at a time.The Down arrow key scrolls forward through up to 10 commands for KSR, VT320, and SCCS terminals and up to 20 commands for IP UI telnet terminals. See page 4-14 for a description of the down arrow key functions.
		The Right arrow key recalls the last command entered at the prompt, one character at a time.
F6	**F6**	The **F6** Function key refreshes the terminal screen, including any characters already input on the command line and the command response line.
F7	**F7**	The **F7** Function key clears the scroll buffer. This enables a user to stop useless information from

VT320 Key Sequence	KSR Key Sequence	Description
		passing to the scroll region of the system terminal.
F8	**F8**	The **F8** function key enables you to stop and restart the scrolling of information on the terminal screen.
F9	**F9**	The **F9** Function key allows you to interrupt a running command so that you can enter another command. Output and processing of the interrupted command continue. Pressing **F9** is the same as issuing the`canc-cmd` command with no parameters. The commands that can be interrupted by pressing **F9** are listed in the description of the canc-cmd command. If the terminal is running one of the listed commands and you press**F9**, output and processing are cancelled. This function works only on the same terminal that is running the command you want to cancel. To cancel a command from another terminal, use the canc-cmd:trm= command (see the`canc-cmd` command description).
F10	**F10**	The **F10** Function key displays help information for the last command that was entered, including parameters, parameter formats, and the command class.
F11	**F11**	The **F11** Function key allows you to toggle the terminal's mode of operation from VT320 to KSR and from KSR to VT320. This function key has no effect on IP UI telnet terminals.
Not Available	Control-A	Control-A allows you to enter a command in the KSR mode.

VT320 Key Sequence	KSR Key Sequence	Description
Control-S	Control-S	Used with the *sw* or *both* flow control (see the `chg-trm` command description for more information), this key sequence sends the XOFF character to temporarily stop sending data.
Control-Q	Control-Q	Used with the *sw* or *both* flow control (see the `chg-trm` command description for more information), this key sequence sends the XON character to resume sending data.
Ins	Ins	When Insert is toggled on, typed characters are inserted into the command line, moving existing characters to the right. When toggled off, typed characters overwrite existing characters.
Del	Del	Deletes one character at a time from the right; the cursor stays in position.
Backspace	Backspace	Deletes a character and moves the cursor one space to the left.

Arrow Key Operation

The arrow keys are used to move the cursor to a different position in a command, and to display part or all of a command that was previously entered.

On KSR, VT320, and SCCS terminals, you can scroll through the last 10 commands that were entered at the terminal during the session. On IP UI telnet terminals, you can scroll through the last 20 commands that were entered at the terminal during the session. Part or all of one command at a time is displayed. When you have scrolled through the complete list of up to 10 or 20 commands, the scrolling wraps back to the beginning of the list.

The list of previously entered commands is cleared when a terminal is inhibited and allowed (`inh-trm:trm=xx` and `alw-trm:trm=xx`) and when a file transfer is initialized with the `act-file-trns` command.

There are two modes of command recall for Up and Down arrow keys:

- Edit Mode

  Edit Mode includes any key operation that changes the command at the prompt, such as the Delete key, the Back Space key, or an alphanumeric key. Pressing one of these keys to enter or change a command puts the terminal into Edit Mode. Pressing the Enter key (or carriage return) takes the terminal out of Edit Mode.

- Non-edit Mode

Pressing the Enter key (or carriage return) puts the terminal into Non-edit Mode. A terminal remains in Non-edit Mode when you press an arrow key, a Function key, or the Insert key, which do not change the command at the prompt. When you press a key that changes the command, the terminal goes into Edit Mode until you press the Enter key again.

Up Arrow Key

The Up arrow key is used to recall up to the last 10 commands (KSR, VT320, and SCCS terminals) or the last 20 commands (IP UI telnet terminals) entered at the prompt during the session.

- In Edit Mode
  - You enter 3 characters of a command at the prompt and press the Up arrow key. If the previous command was 6 characters long, then the last 3 characters of the previous command are recalled and displayed after the 3 characters that you entered at the prompt.
  - You enter 10 characters of a command at the prompt and press the Up arrow key. If the previous command was 6 characters long, none of the previous command is displayed. The command that you entered remains as you entered it at the prompt.
  - Entering part or all of a command at the prompt puts the terminal into Edit Mode. In Edit Mode, the last (or previous) command is recalled only if the command length of the last command is greater than the command at the prompt. For example:,
- In Non-edit Mode
  - When you have pressed the Enter key and there is no command at the prompt, or you have pressed the Insert key or a Function key, the terminal is in Non-edit Mode.
  - When you press the Up arrow key in Non-edit Mode, and you have entered at least one previous command, the last command that you entered is displayed at the prompt. Pressing the Up arrow key again clears the command at the prompt (if any) and displays the next previous command that you entered (if any). By continuing to press the Up arrow key, you can scroll backwards through the last 10 commands (KSR, VT320, \2nd SCCCS terminals) or the last 20 commands (IP UI telnet terminals) that you entered at the terminal. The display wraps back to the most recent of the entered commands when all of the available commands have been recalled. The terminal remains in Non-edit Mode until you press a key that changes the displayed command.

Down Arrow Key

In Edit Mode, the Down arrow key recalls the last command that was entered at the terminal, one parameter at a time. The recalled parameter is displayed at the end of the entry that currently appears at the prompt.

In Non-edit Mode:

- If the Up arrow has not been pressed just before pressing the Down arrow key, \2he Down arrow key recalls the last command that was entered at the terminal, one parameter at a time.
- If the Up arrow key is the last key that was pressed before the Down arrow key is pressed, the Down arrow key scrolls forward through the last 10 commands (KSR, VT320, \2nd SCCS terminals) or last 20 commands (IP UI telnet terminals), displaying one complete command each time the key is pressed. The scrolling wraps to the beginning of the list when all of the available commands have been displayed.

Right Arrow Key

Each time the Right arrow key is pressed, one character of the last command is recalled and the cursor moves one position to the right. When the last command is completely displayed, pressing the Right arrow key does not cause any cursor movement or character display.

Left Arrow Key

The Left arrow key moves the underline cursor one position to the left without erasing the character. The underline cursor can be moved until it reaches the first character at the left of the command. If the Left arrow key is pressed again after the cursor reaches the first character of the command, the bell sounds.

Command Output and Messages

Reports and outputs generated through retrieve or report status commands are followed by a semi-colon (;) to signify the end of the output (this is in compliance with TL1 standards).

The following types of output messages are used on the system:

- Command Accepted-Processing: The command has been accepted by the application's command handler as syntactically correct. This message is displayed in the command area of the terminal display.
- Command Completed-The command has been entered, and the system has completed processing. This message is displayed in the scroll area of the terminal display.
- Command Executed-The command has been entered, and the system has completed processing. This message is displayed in the command area of the terminal display.
- Command Failed-The command was executed but failed due to an external reason, such as the link is not equipped or a disk drive is unable to communicate. The reason for the failure is included in this message.
- Command Rejected-The command syntax could be incorrect, or a parameter value is incorrect (semantic error). This message is displayed in the command area of the terminal display.

  The reason for rejecting the command (command syntax or incorrect parameter value) is included in this message.

- Command Aborted-The command syntax and the parameter values are ok, but for some reason the command was aborted (for example, a disk drive is inaccessible). This message is displayed in the scroll area of the terminal display.
- Command Response Messages-A command is entered at the terminal, and the response to that command is echoed on that same terminal. These messages are displayed in the scroll area of the terminal display.
- Unsolicited Messages-An example of unsolicited messages are the messages delivered in response to alarm conditions. These messages are displayed in the scroll area of the terminal display.

The unsolicited messages can be directed to a specific terminal or printer by using the `chg-trm` command to assign one or more of the groups of unsolicited output messages shown in *Table 4: Unsolicited Output Message Groups* to the specified terminal or printer.

Table 4: Unsolicited Output Message Groups

Application Server	Application Subsystem
Card	Clock
Debug	Global Title Translation
Gateway Screening	Measurements Maintenance

Monitor	MPS
SEAS Maintenance	SLAN Maintenance
System Maintenance	Security Administration
Traffic Measurements	Database Administration
Link Maintenance	Program Update
LNP Database Administration	LNP Subscription

To configure a terminal to receive unsolicited LNP database administration and LNP subscription messages, the LNP feature must be turned on (see the `enable-ctrl-feat` command).

Command Output Banners

When a command is executed in the system, one or more banner lines appear in the output that is displayed for the command.

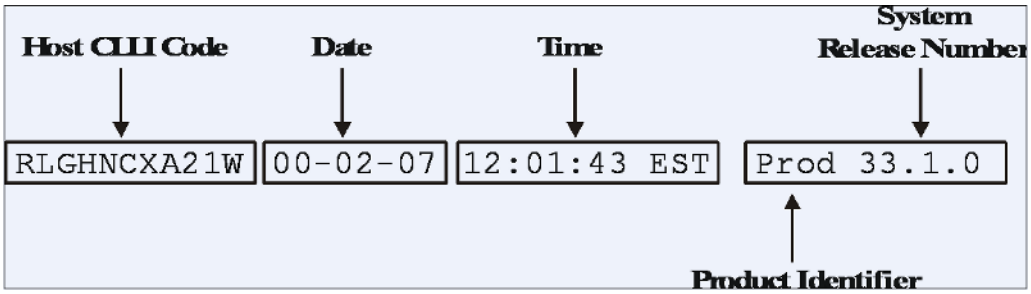

Figure 3: Output Banner Format

The following fields appear in each output banner:

- **Host CLLI code**—a maximum of one alphabetic character and ten alphanumeric characters. The CLLI code uniquely identifies the system in terms of its physical location. The CLLI code must be unique among all elements in the system.

  The CLLI code contains the following information:

  - City—4 characters
  - State— 2 characters
  - Building— 2 characters
  - Equipment type —3 characters

- Date—year-month-day
- Time—hour: minute: second time zone
- System Release Number— contains a product identifier and the version ID number.

  The product identifier, which is shown as 'Prod' in *Figure 3: Output Banner Format* and the output examples in this manual, can appear as "EAGLE" or "EAGLE5" depending on which product key is turned on in the system (see the `rtrv-ctrl-feat` output example). If one or more "EAGLE 5" features are enabled in the system, the EAGLE5 product key must also be turned on and EAGLE5 will appear in the banner. If there are no "EAGLE 5" features enabled in the system, the EAGLE product key will be turned on and EAGLE will appear in the banner. (If both the EAGLE5 and

EAGLE product keys are enabled, the EAGLE5 product key should be turned on and appear in the banner).

The version ID number identifies the GPL set that is specific to the software release that is expected to be installed on the system as approved loads. The format of the version ID number is *maj.min.maint*, defined as follows:

- *maj*—the major release ID
- *min*—the minor release ID
- *maint*—the maintenance release ID

System Security

User IDs and passwords protect the system from unauthorized entry into the system and enhance system security. To enter the system through a terminal, a user must enter a valid user ID and password at the system prompt, and the user ID and password must be authorized for use together. A user ID identifies a user to the system.

To maintain the security of the system, passwords should be changed periodically and user IDs should be deleted whenever there is a personnel change.

When prompted to enter a new password, a different password should be provided. This is the responsibility of the user, and is not enforced by the EAGLE.

Rules for User ID and Password Administration

The rules for administering User IDs User IDs and passwords, rules for administering passwords are:

- The maximum number of user ID-password combinations is 100.
- The maximum length of the user ID is 16 characters.
- The maximum length of the password is 12 characters; the minimum length is site provisionable using the `chg-secu-dflt` command, and it can be from 1 – 12 characters long.
- User IDs and passwords may contain any printable characters except the characters used as command delimiters: colon (**:**), comma (**,**), \2yphen (**-**), or equal sign (**=**).
- Each user ID must begin with an alpha character.
- A password must contain:
  - At least as many characters as specified on the minlen parameter of the `chg-secu-dflt` command
  - At least as many alphabetic characters as specified on the alpha parameter of the `chg-secu-dflt` command
  - At least as many numeric characters as specified on the num parameter of the `chg-secu-dflt` command
  - At least as many punctuation characters as specified on the punc parameter of the `chg-secu-dflt` command
- A password must not contain the associated user ID.

Command Classes

Each user ID and password combination is assigned to one or more command classes, configuration ofconfigurationcommandsclasses, command command classes to control the set of csystem security ommands that a user may enter.

There are 8 unique non-configurable command classes: Basic, Database Administration, Debug, Link Maintenance, Program Update, Security Administration, System Maintenance, and LNP Basic. (The Basic command class is assigned to all users as a default.)

There are 32 available configurable command classes. See the `chg-cmd` command description and the `chg-cmdclass` command description for information about naming and assigning commands to configurable command classes.

See the `chg-user` command description or the `ent-user` command description for more information on configuring user IDs and passwords and assigning command classes.

Login Security Checks

loginsystem security

To aid in system security, the system maintains a record of when a password was last changed and requires a user to change the password when it is older than the site-specified maximum password age. The system also keeps track of the elapsed time between successful logins. If the time between successful logins exceeds the site-specified maximum, a user is not allowed access to the system. The site systems administrator also has the ability to revoke a user ID.

When a user first logs into the system, the default unauthorized user warning is displayed as follows

```
NOTICE: This is a private computer system.
```

```
Unauthorized access or use may lead to prosecution.
```

Additional security is available for the system in that multiple logins using the same user ID are prohibited.

Intrusion Alert

To alert the system administrator to a possible attempt by an unauthorized person trying to log into the system, the system issues a scroll area message. When 5 or more consecutive attempts to log into the system have failed, the following scroll area message is sent to all terminal ports that can receive unsolicited Security Administration messages:

```
Info: xxxxxxxxxx successive LOGIN failures on port pp
```

Where:

- *xxxxxxxxxx* is the number of consecutive login failures on the port (1 – 4,294,967,295)
- *pp* is the terminal port (1 – 40) on which the login attempts were made

When the attempt to log into the system is successful after a series of failed consecutive login attempts, or if the active MASP reboots, the count of failed consecutive login attempts for that port is reset to 0.

Attempts to log into the system that are not completed normally, are not considered login attempts and are not included in the count of failed consecutive login attempts. For example, while prompting for a password you might use the **F9** key to abort the command, or errors might occur when the system is looking up a user ID or password.

Login Procedure

The commands described in this manual are entered at a terminal connected to the system.

Before you can enter most of the commands, you must enter the `login` command to log into the system and open a user session. You must enter the login command with a valid user ID and password combination. When the system accepts your user ID and password as valid, you can enter commands at the terminal in the user session.

The first procedure in this section explains how to log into the system using the `login` command.

The procedures that follow the login procedure explain how to handle common situations that can arise when you log into the system.

- You must change the password the first time that you log in with a new user ID and password.
- The user ID and password that you enter are not accepted as valid.
- Your password has expired and must be changed.
- Someone else has already logged on with your user ID and password; the system does not allow the same ID and password to be used on two terminals at the same time.

Note: You can enter the act-user command instead of the login command.

Log into the System for a User Session

Your User ID and Password were not Accepted

You Must Change Your Password

Your Password has Expired

Your User ID is Already Being Used

Login Error Messages

- E2262 Cmd Rej: Password too long, 12 maximum
- E2263 Cmd Rej: Password does not contain enough characters
- E2264 Cmd Rej: Password verification failed
- E2750 Cmd Rej: UserID already logged on (or is logging on) another port
- E2751 Cmd Rej: UserID has been revoked
- E2752 Cmd Rej: UserID has become obsolete and cannot be used
- E2753 Cmd Rej: Password does not contain enough alphabetic characters
- E2754 Cmd Rej: Password does not contain enough numeric characters
- E2755 Cmd Rej: Password does not contain enough punctuation characters
- E2756 Cmd Rej: Failed reading the password table
- E2757 Cmd Rej: Invalid userID/password combination
- E2758 Cmd Rej: ALPHA+NUM+PUNC must not be greater than 12
- E2759 Cmd Rej: Revocation of security admin userID not allowed
- E2760 Cmd Rej: Failed reading the security defaults table
- E2761 Cmd Rej: Password cannot contain userID

See the `chg-secu-dflt` command description for information on different options the system administrator has for configuring the system for password requirements.

The following is an example of the information that might be displayed in the scroll area, depending on your site FM configuration:

New password must contain

- from 8 to 12 characters

- at least 1 alphabetic character(s) (a - z)
- at least 1 numeric character(s) (0 - 9)
- at least 1 punctuation character(s) (for example, $%@#)

Logout Procedure

When a terminal session is completed, perform the following logout procedure to log out of the system *Log Out Of the System*. The terminal returns to an input idle state.

Note: You can use the `dact-user` command instead of the `logout` command.

Log into the System for a User Session

1. At the system prompt (>), enter the **login** command with your user ID.
2. Press the **Enter** key.
   The following message appears:

```
Enter Password:
```

3. At the system prompt, type your password.
   For security reasons, the password is not displayed on the terminal screen.
4. Press the **Enter** key.
   Follow the remaining steps to complete this procedure or to go to another procedure, depending on the system response to validation of your user ID and password.
5. If your user ID and password combination are accepted and the following messages appear in the terminal input/command response region, the terminal is available for a user session.

```
Command Accepted-Processing
Command Executed
```

   This procedure is complete.

6. If your user ID and password combination are not accepted and the following message appears, go to *Your User ID and Password were not Accepted*

```
E2757 Cmd Rej: Invalid UserID/Password Combination
```

7. If you entered a new user ID and password combination for the first time, the following message appears, go to *You Must Change Your Password*

```
Enter new password (password must be changed) :
```

8. If you entered your user ID and password combination and your password has expired, the following message appears, go to *Your Password has Expired*

```
Enter new password (password has expired and must be changed) :
```

9. If you entered your user ID and password combination and they are already being used at another terminal, the following message appears. Go to *Your User ID is Already Being Used*

```
E2750 Cmd Rej: UserID already logged on (or is logging on) another port
```

Your User ID and Password were not Accepted

1. This procedure outlines the steps to follow when you attempt to log into the system and your user ID and password combination are not accepted.

   When you entered the `login` command with your user ID and entered your password at the system prompt, the following message appeared:

```
E2757 Cmd Rej: Invalid UserID/Password Combination
```

   When this message is displayed, the terminal also presents a message describing the login attempt and the time and date the attempt occurred.

2. Verify that you have the correct user ID and password.

   Return to the login procedure, and log in again with the correct user ID and password.

   If the problem occurs again, contact your System Administrator.

You Must Change Your Password

1. This situation can occur when you first log in after the system administrator uses the `ent-user` command to enter a new user ID and password combination, or when you first log in after the `chg-user:pid=yes` command has been entered.

   When you entered the `login` command with your user ID and entered your password at the system prompt, the following message appeared:

```
Enter new password (password must be changed) :
```

   Type a new password, following your site guidelines.

   For security reasons, the password is not displayed on the terminal screen.

2. Press the **Enter** key.

   The system checks the password to ensure that it meets your site's password complexity requirements.

3. If your password does not meet your site's password complexity requirements, the system displays a message based on the password violation (see *Login Error Messages* for a list of possible messages).

```
The login process ends.
```

   Decide on a new password, and start the login procedure again.

4. If your password meets the complexity requirements, the following message appears:

```
Verify Password:
```

   Type the exact password again that you entered in *Step 1*.

   For security reasons, the password is not displayed on the terminal screen.

5. Press the **Enter** key.
6. If the user ID and password combination are accepted and the following messages appear in the terminal input/command response region, the terminal is available for a user session

```
Command Accepted-Processing
Command Executed
```

7. Record your new password in a secure location.

Your Password has Expired

1. When you entered the `login` command with your user ID and entered your password at the system prompt, the following message appeared:

```
Enter new password (password has expired and must be changed) :
```

   Type a new password, following your site guidelines.

   For security reasons, the password is not displayed on the terminal screen.

2. Press the **Enter** key.

   The system checks the password to ensure that it adheres to your site's password complexity requirements.

3. If your password does not meet your site's password complexity requirements, the system displays a message based on the password violation (see *Login Error Messages* for a list of possible messages).

   The login process ends.

   Decide on a new password, and start the login procedure again.

4. If your password meets the complexity requirements, the following message appears:

```
Verify Password:
```

   Type the exact password again that you entered in *Step 1*

For security reasons, the password is not displayed on the terminal screen.

5. Press the **Enter** key.
6. If the user ID and password combination are accepted and the following messages appear in the terminal input/command response region, the terminal is available for a user session

```
Command Accepted-Processing Command Executed
```

7. Record your new password in a secure location.

Your User ID is Already Being Used

1. When you entered the `login` command with your user ID and entered your password at the system prompt, the following message appeared:

```
E2750 Cmd Rej: UserID already logged on (or is logging on) another port
```

The following information is displayed in the scroll area:

```
Info: UID is currently logged on (or is logging on) to port yy.
```

where *yy* is in the range of 1 - 40.

2. Find the terminal at port *yy*, and log off your user ID at that workstation.

See *Log Out Of the System*.

3. Return to your terminal and log into the system again.

Log Out Of the System

1. At the system prompt (**>**), enter the `logout` command.
2. Press the **Enter** key.

The following messages appear on the terminal screen to confirm command completion:

```
Command Accepted-Processing
Command Executed
```

Chapter 3

Alphabetical List of Commands

Topics:

- *Alphabetical List of Commands.....37*

This chapter contains an alphabetical list of the EAGLE commands.

Alphabetical List of Commands

Commands

A

act-alm-trns
act-cdl
act-dlk
act-echo
act-file-trns
act-flash
act-ftp-trns
act-gpl
act-lbp
act-lpo
act-slk
act-user
alw-card
alw-imt
alw-map-ss
alw-slk
alw-trm
aud-data

B

blk-slk

C

canc-alm-trns
canc-cmd
canc-dlk
canc-echo
canc-lpo

canc-slk

canc-user

chg-acg-mic

chg-acg-noc

chg-ainpopts

chg-aiqopts

chg-appl-rtkey

chg-as

chg-assoc

chg-atinpqopts

chg-atm-lps

chg-attr-seculog

chg-card

chg-clkopts

chg-cmd

chg-cmdclass

chg-csl

chg-ctrl-feat

chg-db

chg-dconn

chg-deiropts

chg-dstn

chg-e1

chg-eisopts

chg-enumopts

chg-enum-prof

chg-enum-profsel

chg-feat

chg-frm-pwr

chg-ftp-serv

chg-gpl

chg-gsmmap-scrn

chg-gsm-msg

chg-gsmopts

chg-gsmsmsopts
chg-gsms-opcode
chg-gta
chg-gtcnv
chg-gtmod
chg-gtt
chg-gttact
chg-gttapath
chg-gttaset
chg-gttsel
chg-gttset
chg-gtw-stp
chg-gws-actset
chg-gws-redirect
chg-inpopts
chg-ip-card
chg-ip-conn
chg-ip-lnk
chg-is41-msg
chg-is41opts
chg-is41smsopts
chg-isup-msg
chg-j1
chg-l2t
chg-l3t
chg-lbp
chg-lnpopts
chg-lnp-serv
chg-loopset
chg-ls
chg-lsopts
chg-m2pa-tset
chg-map
chg-meas

chg-measopts
chg-mrn
chg-mtc-measopts
chg-netopts
chg-npp-as
chg-npp-serv
chg-npp-srs
chg-pid
chg-ppsopts
chg-prefix
chg-rte
chg-rtx
chg-sccp-msg
chg-sccpopts
chg-sccp-serv
chg-scr-aftpc
chg-scr-blkdpc
chg-scr-blkopc
chg-scr-cdpa
chg-scr-cgpa
chg-scr-destfld
chg-scr-dpc
chg-scr-isup
chg-scr-opc
chg-scrset
chg-scr-sio
chg-scr-tt
chg-seas-config
chg-secu-dflt
chg-secu-trm
chg-sg-opts
chg-shlf
chg-sid
chg-sip-npp

chg-sipopts
chg-slt
chg-snmp-host
chg-snmpopts
chg-srvsel
chg-ss7opts
chg-ss-appl
chg-stpopts
chg-t1
chg-tatr-msg
chg-tatropts
chg-th-alm
chg-tifopts
chg-trm
chg-ttmap
chg-ttr-msg
chg-ttropts
chg-uaps
chg-user
chg-vflx-cd
chg-vflx-opts
chg-vflx-rn
chg-vflx-vmsid
chk-unref-ent
clr-imt-stats
conn-imt
copy-disk
copy-ext-stats
copy-fta
copy-gpl
copy-meas
copy-seculog

D

dact-alm-trns
dact-cdl
dact-cmd
dact-echo
dact-lbp
dact-rstst
dact-slk
dact-user
disc-imt
disp-fta-dir
dlt-acg-mic
dlt-acg-noc
dlt-appl-rtkey
dlt-as
dlt-assoc
dlt-card
dlt-csl
dlt-cspc
dlt-dconn
dlt-dlk
dlt-dstn
dlt-e1
dlt-enum-acl
dlt-enum-prof
dlt-enum-profsel
dlt-frm-pwr
dlt-fta
dlt-ftp-serv
dlt-gserv-data
dlt-gsmmap-scrn
dlt-gsms-opcode
dlt-gsmssn-scrn
dlt-gta
dlt-gtcnv

dlt-gtmod
dlt-gtt
dlt-gttact
dlt-gttapath
dlt-gttaset
dlt-gttsel
dlt-gttset
dlt-gws-redirect
dlt-homern
dlt-home-smsc
dlt-ip-conn
dlt-ip-host
dlt-ip-node
dlt-ip-rte
dlt-j1
dlt-lbp
dlt-lnp-serv
dlt-loopset
dlt-ls
dlt-map
dlt-mrn
dlt-na
dlt-npp-as
dlt-npp-srs
dlt-pct
dlt-prefix
dlt-rmt-appl
dlt-rte
dlt-rtx
dlt-sccp-serv
dlt-scr-aftpc
dlt-scr-blkdpc
dlt-scr-blkopc
dlt-scr-cdpa

dlt-scr-cgpa
dlt-scr-destfld
dlt-scr-dpc
dlt-scr-isup
dlt-scr-opc
dlt-scrset
dlt-scr-sio
dlt-scr-tt
dlt-shlf
dlt-sip-npp
dlt-slk
dlt-snmp-host
dlt-spc
dlt-srvsel
dlt-ss-appl
dlt-subnetid
dlt-t1
dlt-tt
dlt-ttmap
dlt-uim-acthresh
dlt-user
dlt-vendid
dlt-vflx-cd
dlt-vflx-rn
dlt-vflx-vmsid

E

enable-ctrl-feat
ent-acg-mic
ent-acg-noc
ent-appl-rtkey
ent-as
ent-assoc
ent-card

ent-csl

ent-cspc

ent-dconn

ent-dlk

ent-dstn

ent-e1

ent-enum-acl

ent-enum-prof

ent-enum-profsel

ent-frm-pwr

ent-ftp-serv

ent-gserv-data

ent-gsmmap-scrn

ent-gsms-opcode

ent-gsmssn-scrn

ent-gta

ent-gtcnv

ent-gtmod

ent-gtt

ent-gttact

ent-gttapath

ent-gttaset

ent-gttsel

ent-gttset

ent-gws-redirect

ent-homern

ent-home-smsc

ent-ip-conn

ent-ip-host

ent-ip-node

ent-ip-rte

ent-j1

ent-lbp

ent-lnp-serv

ent-loopset
ent-ls
ent-map
ent-mrn
ent-na
ent-npp-as
ent-npp-srs
ent-pct
ent-rmt-appl
ent-rte
ent-rtx
ent-scr-aftpc
ent-scr-blkdpc
ent-scr-blkopc
ent-scr-cdpa
ent-scr-cgpa
ent-scr-destfld
ent-scr-dpc
ent-scr-isup
ent-scr-opc
ent-scrset
ent-scr-sio
ent-scr-tt
ent-serial-num
ent-shlf
ent-sid
ent-sip-npp
ent-slk
ent-snmp-host
ent-spc
ent-srvsel
ent-ss-appl
ent-subnetid
ent-t1

ent-tt

ent-ttmap

ent-user

ent-vendid

ent-vflx-cd

ent-vflx-rn

ent-vflx-vmsid

F

flash-card

format-disk

I

inh-alm

inh-card

inh-imt

inh-map-ss

inh-slk

inh-trm

init-card

init-ext-stats

init-flash

init-imt-gpl

init-mux

init-network

init-sys

L

lock

login

logout

P

pass

R

rept-ftp-meas

rept-imt-info

rept-imt-lvl1

rept-imt-lvl2

rept-meas

rept-stat-alm

rept-stat-applsock

rept-stat-as

rept-stat-assoc

rept-stat-card

rept-stat-cdl

rept-stat-cdt

rept-stat-clk

rept-stat-cluster

rept-stat-db

rept-stat-ddb

rept-stat-deir

rept-stat-dlk

rept-stat-dstn

rept-stat-e1

rept-stat-enet

rept-stat-enum

rept-stat-gpl

rept-stat-imt

rept-stat-ipconn

rept-stat-iptps

rept-stat-j1

rept-stat-lfs

rept-stat-lnp

rept-stat-ls

rept-stat-meas

rept-stat-mfc

rept-stat-mon
rept-stat-mps
rept-stat-mux
rept-stat-rtd
rept-stat-rte
rept-stat-rtkey
rept-stat-rtx
rept-stat-sccp
rept-stat-seas
rept-stat-seculog
rept-stat-sip
rept-stat-slan
rept-stat-slk
rept-stat-sys
rept-stat-t1
rept-stat-trbl
rept-stat-trm
rept-stat-tstslk
rept-stat-user
rept-stat-xlist
rls-alm
rmv-card
rmv-imt
rmv-trm
rst-card
rst-dstn
rst-imt
rst-trm
rtrv-acg-mic
rtrv-acg-noc
rtrv-ainpopts
rtrv-aiqopts
rtrv-appl-rtkey
rtrv-as

rtrv-assoc
rtrv-atinpqopts
rtrv-atm-lps
rtrv-atm-prm
rtrv-attr-seculog
rtrv-bip
rtrv-card
rtrv-clkopts
rtrv-cmd
rtrv-cmdclass
rtrv-csl
rtrv-cspc
rtrv-ctrl-feat
rtrv-data-rtdb
rtrv-dconn
rtrv-deiropts
rtrv-dlk
rtrv-dstn
rtrv-e1
rtrv-eisopts
rtrv-enum-acl
rtrv-enumopts
rtrv-enum-prof
rtrv-enum-profsel
rtrv-feat
rtrv-frm-pwr
rtrv-ftp-serv
rtrv-gpl
rtrv-gserv-data
rtrv-gsmmap-scrn
rtrv-gsm-msg
rtrv-gsmopts
rtrv-gsmsmsopts
rtrv-gsms-opcode

rtrv-gsmssn-scrn
rtrv-gta
rtrv-gtcnv
rtrv-gtmod
rtrv-gtt
rtrv-gttact
rtrv-gttapath
rtrv-gttaset
rtrv-gttsel
rtrv-gttset
rtrv-gtw-stp
rtrv-gtwy-acthresh
rtrv-gtwy-prmtrs
rtrv-gws-actset
rtrv-gws-redirect
rtrv-homern
rtrv-home-smsc
rtrv-inpopts
rtrv-ip-card
rtrv-ip-conn
rtrv-ip-host
rtrv-ip-lnk
rtrv-ip-node
rtrv-ip-rte
rtrv-is41-msg
rtrv-is41opts
rtrv-is41smsopts
rtrv-isup-msg
rtrv-j1
rtrv-l2t
rtrv-l3t
rtrv-lbp
rtrv-lnpopts
rtrv-lnp-serv

rtrv-log
rtrv-loopset
rtrv-ls
rtrv-m2pa-tset
rtrv-map
rtrv-measopts
rtrv-meas-sched
rtrv-mrn
rtrv-mtc-measopts
rtrv-na
rtrv-netopts
rtrv-npp-as
rtrv-npp-serv
rtrv-npp-srs
rtrv-obit
rtrv-pct
rtrv-ppsopts
rtrv-prefix
rtrv-rmt-appl
rtrv-rte
rtrv-rtx
rtrv-sccp-msg
rtrv-sccpopts
rtrv-sccp-serv
rtrv-scr-aftpc
rtrv-scr-blkdpc
rtrv-scr-blkopc
rtrv-scr-cdpa
rtrv-scr-cgpa
rtrv-scr-destfld
rtrv-scr-dpc
rtrv-scr-isup
rtrv-scr-opc
rtrv-scrset

rtrv-scr-sio

rtrv-scr-tt

rtrv-seas-config

rtrv-secu-dflt

rtrv-seculog

rtrv-secu-trm

rtrv-secu-user

rtrv-serial-num

rtrv-sg-opts

rtrv-shlf

rtrv-sid

rtrv-sip-npp

rtrv-sipopts

rtrv-slk

rtrv-slt

rtrv-snmp-host

rtrv-snmpopts

rtrv-spc

rtrv-srvsel

rtrv-ss7opts

rtrv-ss-appl

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rtrv-stpopts

rtrv-subnetid

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rtrv-tatr-msg

rtrv-tatropts

rtrv-tbl-capacity

rtrv-th-alm

rtrv-tifopts

rtrv-tps

rtrv-trbl

rtrv-trbltx

rtrv-trm

rtrv-tt

rtrv-ttmap

rtrv-ttr-msg

rtrv-ttropts

rtrv-uaps

rtrv-uim-acthresh

rtrv-user

rtrv-vendid

rtrv-vflx-cd

rtrv-vflx-opts

rtrv-vflx-rn

rtrv-vflx-vmsid

S

set-date

set-gtwy-acthresh

set-scrrej-prmtrs

set-time

set-uim-acthresh

T

tst-bip

tst-disk

tst-dlk

tst-e1

tst-imt

tst-j1

tst-msg

tst-npp-msg

tst-slk

tst-t1

U

ublk-slk

unhb-alm

unhb-slk

unlock

Debug Commands

A

act-gedti

act-upgrade

act-ip-lnk

C

cdu

chg-bip-fld

chg-bip-rec

chg-ee-card

chg-gedti-card

chg-tbl

chg-upgrade-config

clr-disk-stats

copy-tbl

D

dact-ee

dact-gedti

dact-ip-lnk

dbg-ddb

disp-bip

disp-bp

disp-disk-dir

disp-disk-stats

dlt-ee-flt

disp-mem

disp-trace

dlt-bp

dlt-trace

E

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ent-ee-flt

ent-trace

R

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rept-stat-gedti

rtrv-ee-card

rtrv-ee-flt

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S

send-msg

set-mem

Pass-Through Commands

A

arp

aslog

assocrtt

C

connmgr

F

ftptest

L

linkinfo

M

msucount

msuroute

msutrace

N

netstat

nslookup

P

pct

ping

S

sctp

sockrtt

soipdata

soiplog

T

traceroute

U

ualog

Chapter 4

Commands

This chapter describes the command conventions for commands that are not pass-through or debug commands. The commands are listed in alphabetical order.

act-alm-trns — Activate Alarm Transfer

Use this command to transfer all alarm indications from the local office to the remote maintenance center.

Parameters

This command has no parameters.

Example

`act-alm-trns`

Dependencies

No other action command can be in progress when this command is entered.

Notes

After this command is entered, use the `rept-stat-alm` command to verify the action.

New alarms cause the local maintenance center audible alarms to sound for a short period.

Output

`act-alm-trns`

```
    rlghncxa03w 04-01-09:50:17 EST  EAGLE 31.3.0
    Alarms transferred to Remote Maintenance Center
    Command Completed.
;
```

Related Commands

dact-alm-trns, *rept-stat-trm*, *rept-stat-trbl*, *rtrv-obit*, *rtrv-trbl*

act-cdl — Activate Command Driven Loopback

Use this command to initiate a command driven loopback for testing a signaling link.

Command Driven Loopback is the ability to locally drive a signaling link into a manual line loopback. The data received on the signaling link is echoed (transmitted) back. This is effectively the reverse of the `tst-slk:loopback=lxvr`, which loops the transmitted data back to the receiver.

Parameters

link (mandatory)

SS7 signaling links. The SS7 signaling link to be tested.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

loopback (optional)

Loopback test type.

Range:

line

payload

Default:

line

Example

```
act-cdl:loc=1205:link=b
```

Dependencies

The card location specified in the loc parameter must be equipped.

The signaling link specified in the link parameter must be equipped.

LFS processing must be stopped or must be allowed to complete on the specified signaling link before this command can be entered.

The loopback=payload parameter is valid only for LIM-ATM and E1-ATM cards.

Command Driven Loopback testing is not available during upgrade.

A Command Driven Loopback test cannot be in progress on the specified link when this command is entered.

A `tst-slk` command cannot be in progress on the specified link when this command is entered. The `tst-slk` processing must be stopped or must be allowed to complete before this command can be entered

The card location specified in the loc parameter must be in the In-Service-Normal (IS-NR) state.

The card location specified in the loc parameter must support Command Driven Loopback testing.

The signaling link specified in the link parameter must not be active.

The card location specified in the loc parameter cannot be reserved by the system.

Notes

None

Output

`act-cdl:loc=1205:link=b`

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Command Accepted: Command Driven Loopback message is sent.
;

    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Command Completed.
;
```

Related Commands

act-lbp, *dact-cdl*, *dact-lbp*, *rept-stat-cdl*, *tst-slk*

act-dlk

Activate Data Link

Use this command to activate an IP data link and put the link into service. The state of the link is changed from out of service maintenance disabled (OOS-MT-DSBLD) to in service normal (IS-NR).

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
act-dlk:loc=1308
```

Dependencies

No other action command can be in progress when this command is entered.

The shelf and card must be equipped.

The card location must contain a card that is running the STPLAN application.

The card location, frame, shelf, or slot must be within the allowed range.

A card location that is valid and defined in the database must be specified.

The card in the location specified by the loc parameter must be in service.

The ipaddr parameter must specify a valid IP address.

Notes

None

Output

```
act-dlk:loc=1308
```

```
    rlghncxa03w 04-01-17:00:36 EST  EAGLE 31.3.0
    Activate Link message sent to card.
    Command Completed.
;
```

Related Commands

canc-dlk, *dlt-dlk*, *ent-dlk*, *rept-stat-dlk*, *rtrv-dlk*, *tst-dlk*

act-echo Activate Echo

Use this command to force responses from the scroll area of a terminal to be printed to a specified terminal or printer. The command supports one terminal echoing to many terminals or many terminals echoing to one terminal.

Caution: Exercise restraint in using this command, because excessive echoing can cause a loss of output at the receiving terminal.

Parameters

trm (mandatory)

Serial port number.

Range:

1 - 16

Example

```
act-echo:trm=3
```

Dependencies

Terminal output cannot be echoed to a terminal that is out of service.

If a terminal is already echoing to a specified terminal, this command cannot be entered to echo the terminal's output to that same terminal.

Echo is not allowed to the terminal from which the command is issued.

Echo is not allowed to or from IP User Interface telnet ports (terminals 17-40).

Terminal output cannot be echoed to a terminal that is inhibited.

The trm parameter must be specified.

Notes

This command can be used to echo only command output responses to a terminal. For alarm and network messages to be sent to a terminal, the `chg-trm` command must be used.

To echo output to a destination port, a user must be logged in at the destination port. The following warning message appears in the scroll area of the issuing terminal if echo is attempted to a terminal that has no user logged in:

```
No user logged in at Terminal X. No echo will occur until a user
               logs in.
```

where X is the trm parameter value specified in the `act-echo` command.

Output

`act-echo:trm=2`

```
    rlghncxa03w  04-01-07  11:11:28 EST  EAGLE 31.3.0
    act-echo:trm=2
    Command entered at terminal #1.

    rlghncxa03w  04-01-07  11:11:28 EST  EAGLE 31.3.0
    Scroll Area Output is echoed to terminal 2.

    Caution:  Loss of output may occur if too many terminals are echoed.
;
```

```
act-echo:trm=3
```

```
    rlghncxa03w  04-01-07  11:11:28 EST  EAGLE 31.3.0
    act-echo:trm=3
    Command entered at terminal #1.

    rlghncxa03w  04-01-07  11:11:28 EST  EAGLE 31.3.0
    Scroll Area Output is echoed to terminal 2.
    Scroll Area Output is echoed to terminal 3.

    Caution:  Loss of output may occur if too many terminals are echoed.
;
```

Related Commands

chg-trm, *dact-echo*, *rept-stat-trm*, *rmv-trm*, *rst-trm*, *rtrv-trm*

act-file-trns — Activate File Transfer

Use this command to start a file transfer between the system and a remote computer.

Parameters

loc (optional)

The location of the fixed disk to or from which the file is to be uploaded or downloaded.

Range:

1114, 1116

Active and standby TDM locations

Default:

The active TDM location

retries (optional)

The number of times the system retries a packet before giving up.

Range:

1 - 20

Default:

10

timeout (optional)

The number of seconds the system waits for a packet before sending a negative acknowledgment or retransmitting the previous packet. This parameter also specifies the number of seconds to wait for a transfer initiation message from the remote computer.

Range:

1 - 120

Default:
30

Example

```
act-file-trns:loc=1116
```

Dependencies

The loc parameter must specify a TDM card.

Only one file transfer can be active at a time.

This command cannot be entered on a telnet terminal (IDs 17-40).

Notes

Output messages indicating transfer initiated and transfer terminated (whether successful or not) are sent to the output devices in the Security Administration output group.

LNP Measurements

When used to output LNP measurements, the `rept-meas` command sends data to the FTA. Extracting LNP measurements from the FTA requires:

- A computer with a VT320 or KSR connection to the system
- A communication program that both emulates VT terminals and supports Kermit file transfer
- A spreadsheet program that can import Comma Separated Value (CSV) text files

A PC running ProComm© for Windows and Microsoft Excel© can be used.

See *Extracting LNP Measurements from the FTA* for the method used to collect LNP measurements.

Extracting LNP Measurements from the FTA

1. Display the contents of the FTA. Enter `disp-fta-dir:loc=xxxx`.

   Where *xxxx* = the active TDM (1114 or 1116)

2. Delete any existing files from the FTA. Enter `dlt-fta:loc=xxxx:all=yes`.

   Where *xxxx* = the active TDM (1114 or 1116)

3. Enter the command to send LNP daily measurements to the FTA. For example: `rept-meas:enttype=lnp:type=mtcd`
4. Activate the file transfer. Enter `act-file-trns:loc=xxxx`.

   Where *xxxx* = the active TDM (1114 or 1116)

5. Display a list of the files transferred to the FTA. Enter `disp-fta-dir:loc=xxxx`.

   Where *xxxx* = the active TDM (1114 or 1116)

6. Use the `get` command from within the communications program configured to run Kermit in ASCII mode to transfer the desired files (with the *.csv* suffixes) to the PC.

   For example:

   ```
   > get mday_lnp.csv
   > get mday_ssp.csv
   > get mday_lrn.csv
   > get mday_npa.csv
   > finish
   ```

7. Run a spreadsheet program and open each of the collected files to view the LNP measurement data.
8. After all files are successfully transferred and confirmed, remove the files from the FTA. Enter `dlt-fta:loc=xxxx:all=yes`.

   Where *xxxx* = the active TDM (1114 or 1116)

Output

Normal session output to non-Security Administration user's terminal.

`act-file-trns:loc=1114:timeout=20:retries=2`

```
    rlghncxa03w 04-01-05 14:37:05 EST  EAGLE 31.3.0
    act-file-trns:loc=1114:timeout=20:retries=2
    Command entered at terminal #1.
;
    rlghncxa03w 04-01-05 14:37:05 EST  EAGLE 31.3.0
    Awaiting File Transfer with remote.
    Please initiate binary Kermit session on local computer
;
    rlghncxa03w 04-01-05 14:38:33 EST  EAGLE 31.3.0
    File Transfer : 0 file(s) DOWNLOADED from location 1114 successfully
    File Transfer : 1 file(s) UPLOADED to location 1114 successfully
    File Transfer : Kermit Session terminated NORMALLY
```

Normal session output to Security Administration group terminals.

`act-file-trns:loc=1114:timeout=20:retries=2`

```
    rlghncxa03w 04-01-05 14:40:42 EST  EAGLE 31.3.0
    File Transfer : INITIATED on terminal #1
;
    rlghncxa03w 04-01-05 14:41:07 EST  EAGLE 31.3.0
    File Transfer: 511_byte.bin UPLOADED to location 1114 successfully.
;
    rlghncxa03w 04-01-05 14:41:44 EST  EAGLE 31.3.0
    File Transfer : terminated NORMALLY on terminal #1
```

Normal session output to Security Administration user's terminal.

```
act-file-trns:loc=1114:timeout=20:retries=2
```

```
    rlghncxa03w 04-01-05 14:42:51 EST  EAGLE 31.3.0
    act-file-trns:loc=1114:timeout=20:retries=2
    Command entered at terminal #1.
;
    rlghncxa03w 04-01-05 14:43:29 EST  EAGLE 31.3.0
    File Transfer : INITIATED on terminal #1
;
    rlghncxa03w 04-01-05 14:43:53 EST  EAGLE 31.3.0
    Awaiting File Transfer with remote.
    Please initiate binary Kermit session on local computer
    rlghncxa03w 04-01-05 14:44:19 EST  EAGLE 31.3.0
    File Transfer: 511_byte.bin UPLOADED to location 1114 successfully.
;
    rlghncxa03w 04-01-05 14:44:52 EST  EAGLE 31.3.0
    File Transfer : 0 file(s) DOWNLOADED from location 1114 successfully
    File Transfer : 1 file(s) UPLOADED to location 1114 successfully
    File Transfer : Kermit Session terminated NORMALLY
;
    rlghncxa03w 04-01-05 14:45:31 EST  EAGLE 31.3.0
    File Transfer : terminated NORMALLY on terminal #1
;
```

Related Commands

copy-fta, *disp-fta-dir*, *dlt-fta*

act-flash

Activate Flash

Use this command to activate the trial FLASH GPL that is currently running on one target card or on a range of cards.

Parameters

Note: As of Release 43.0, the BLBEPM, BLBIOS, BLBSMG, BLCPLD, BLDIAG6, BLROM1, BLVXW6, IMTPCI, and PLDPMC1 GPLs are replaced with the BLIXP GPL. The replaced GPLs are used only during upgrade to Release 43 and hardware replacement.

eloc (optional)

End location. The location of the last card of a range of cards to be activated.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

gpl (optional)

Generic program load. The flash GPL type that is running on the cards in the specified range of cards.

Note: This parameter must be specified for cards that have more than one flash image (GPL).

Range:

xyyyyyyy 1 alphabetic character followed by up to 7 alphanumeric characters.

Valid GPLs are: *blbios*, *blbepm*, *blbsmg*, *blcpld*, *bldiag6*, *blixp*, *blmcap*, *blrom1*, *blvxw6*, *hipr2*, *imtpci*, *pldpmc1* and *multiple*.

Use "gpl=multiple" to simultaneously flash multiple E5-class cards running different GPLs, such as BLIXP, BLMCAP, etc. The command will then flash all E5-class cards in the specified range.

loc (optional)

The location of a single target card.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

sloc (optional)

Start location. The location of the first card of a range of cards to be activated.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

Example

```
act-flash:loc=1105
```

```
act-flash:sloc=1101:eloc=1112:gpl=blixp
```

Dependencies

The card, or cards, in the specified location or range of locations for this command must be actively running a flash GPL in *trial* mode.

The allowed cards are E5-ENET, E5-ENET-B, HC-MIM, E5-E1T1, E5-E1T1-B, E5-TSM, E5-IPSM, E5-MCAP, or Service Module. Card locations *xy*09 and *xy*10 (*x* is the frame, *y* is the shelf) can be specified only for MUX cards.

Each specified card does not have to be defined in the database, but it does have to be aligned on the IMT bus.

If the target card is a MUX card, then both card locations specified in the sloc and eloc parameters must contain MUX cards on the same IMT bus. For these cards, the bus is implicit based on the specified location. Location *xy*09 specifies a MUX A Bus, and location *xy*10 specifies a MUX B Bus (*x* is the frame and *y* is the shelf). For example, sloc=1109:eloc=6109 specifies all MUX cards on the A Bus only; sloc=1110:eloc=6110 specifies all MUX cards on the B Bus only. MUX cards from both the A bus and B bus cannot be flash downloaded simultaneously.

The card must be running an inactive flash GPL when this command is executed.

The provisioning subsystem mode (simple, duplex) must be established prior to executing the command.

The loc parameter cannot be specified with the eloc and sloc parameters.

Either the loc parameter or the eloc and sloc parameters must be specified.

The eloc and sloc parameters must be specified together in the command; one parameter cannot be specified without the other parameter.

The sloc parameter value cannot be greater than the eloc parameter value.

MUX cards in the specified sloc and eloc card locations must be present and able to communicate over the IMT. The cards do not have to be provisioned in the database.

The gpl parameter must be specified if the eloc and sloc parameters are specified.

The gpl parameter must be specified for cards that have more than one flash image (GPL).

MUX cards in the locations specified by the sloc and eloc parameters must be running the specified GPL. If the GPL specified is not multiple, then other cards in the range of locations can be running other GPLs but will not be activated, and only cards that are within the range and running the specified GPL will be activated.

A card that is the active MASP cannot be specified for the loc, sloc, or eloc parameter.

No other action command can be in progress when this command is entered.

A card location that is valid and defined in the database must be specified.

MUX cards specified in the sloc and eloc location parameters must be running the specified general program load (gpl). For other GPLs including multiple, all cards within the range running the specified GPL will be activated.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

The gpl=multiple parameter can be specified only if the sloc and eloc parameters are specified.

The gpl=multiple parameter can be specified only if the cards in the locations specified in the sloc and eloc parameters are E5-class cards.

Notes

None

Output

`act-flash:loc=1105`

```
    rlghncxa03w 04-01-04 13:05:05 EST  EAGLE 31.3.0
    FLASH Memory Activation for card 1105 Started.
;

    rlghncxa03w 04-01-04 13:05:05 EST  EAGLE 31.3.0
    FLASH Memory Activation for card 1105 Completed.
;

    rlghncxa03w 04-01-04 13:05:05 EST  EAGLE 31.3.0
    Command Completed.
;
```

```
act-flash:sloc=1101:eloc=1112:gpl=blixp
```

```
    rlghncxa03w 05-01-04 13:05:05 EST  EAGLE 33.0.0
    FLASH Memory Activation for cards 1101 - 1112 Started.
;

    rlghncxa03w 05-01-04 13:05:05 EST  EAGLE 33.0.0
    FLASH Activation for cards 1101 - 1112 Completed.
    LOC 1101 : PASSED
    LOC 1102 : PASSED
    LOC 1112 : PASSED

   ALL CARD RESULTS PASSED
;
    rlghncxa03w 05-01-04 13:05:05 EST  EAGLE 33.0.0
    Command Completed.
;
```

Related Commands

clr-imt-stats, *flash-card*, *init-flash*, *init-imt-gpl*, *rept-imt-info*, *rept-imt-lvl1*, *rept-imt-lvl2*, *tst-imt*

act-ftp-trns

Activate FTP Transfer

Use this command to activate an FTP transfer to send database tables from the system to the customer's FTP server.

Note: This command is not for customer use. It is for Tekelec use only.

Parameters

action (mandatory)

The operation that the command is to perform.

Range:

put

filetype (mandatory)

The system table type to be transferred.

Range:

all

Transfer all types of tables

enum

Transfer all ENUM tables

exts

Transfer the Extended Statistics table

ip

Transfer all IP tables

gtt

Transfer all Global Title Translation tables

gws

Transfer all Gateway Screening tables

mtp

Transfer all Message Transfer Part tables

vflex

Transfer all V-Flex tables

Example

```
act-ftp-trns:action=put:filetype=gtt
```

Dependencies

This command cannot be entered if another file transfer is already in progress.

The action and filetype parameters must be specified in the command.

The FTP Server table must contain at least one FTP server entry that specifies the *user* application

An IPSM card must be in service before this command can be entered.

Notes

This command communicates with the *user* application, defined in the FTP Server table. The IP address and server details necessary for an FTP transfer are also stored in the FTP Server table. One such *user* application is the FTP-based Table Retrieve Application (FTRA). Refer to the *FTP-Based Table Retrieve Application (FTRA) User Guide* for assistance.

Output

```
act-ftp-trns:action=put:filetype=ip
```

```
    tekelecstp 09-05-06 06:41:17 EST  EAGLE 41.0.0
    FTP command sent to IPSM card - Processing
;

    tekelecstp 09-05-06 06:41:17 EST  EAGLE 41.0.0
    Copy-table started - tablexxx.tbl
    Copy-table COMPLETE.
;

    tekelecstp 09-05-06 06:41:17 EST  EAGLE 41.0.0
    FTP file transfer started - tablexxx.tbl
    FTP file transfer SUCCESSFUL.
;

    tekelecstp 09-05-06 06:41:17 EST  EAGLE 41.0.0
```

```
    FTP transfer COMPLETE.
;
```

Related Commands

None.

act-gpl

Activate Generic Program Load

Use this command to change the status of the trial GPL from “trial” to “approved.” The status of the previously approved GPL is changed to “trial.”

Parameters

Note: As of Release 43.0, the BLBEPM, BLBIOS, BLBSMG, BLCPLD, BLDIAG6, BLROM1, BLVXW6, IMTPCI, and PLDPMC1 GPLs are replaced with the BLIXP GPL. The replaced GPLs are used only during upgrade to Release 43 and hardware replacement.

gpl (mandatory)

Generic program load. The name of the GPL identifier to be moved from "trial" to "approved" status on the disk.

Range:

xyyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters. Valid GPLs are:

atmhc—Used by E5-ATM and E5-ATM-B cards to allow the card to support up to 3 signaling links

blbepm—Flash GPL containing the BIOS ROM image on E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards

blbios—Flash GPL containing the BIOS ROM image on HC-MIM cards that are used for E1 or T1 signaling links

blbsmg—Flash GPL containing the BIOS ROM image on E5-SM4G and E5-SM8G-B cards

blcpld—Flash GPL containing the bit files for the CPLD on HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards that are used for E1 or T1 signaling links

bldiag6—Flash GPL containing the diagnostic code on E5-E1T1, E5-E1T1-B, HC-MIM, E5-ENET, and E5-ENET-B cards

blixp—Flash GPL containing a tar image with all code required on E5-E1T1, HC-MIM, E5-ATM, E5-IPSM, E5-TSM, E5-ENET, and E5-SM4G cards

blmcap—Flash GPL containing a tar image with all code required on E5-MCAP, E5-E1T1-B, E5-MCPM-B, E5-ATM-B, E5-ENET-B, and E5-SM8G-B cards

blrom1—Flash GPL containing the bootloader code for VxWorks operating system on HC-MIM cards

blvxw6—Flash GPL containing the VxWorks operating system on HC-MIM, E5-ATM/E5-ATM-B, E5-E1T1/E5-E1T1-B, E5-ENET/E5-ENET-B, E5-IPSM, E5-MCPM-B, E5-SM4G/E5-SM8G-B, and E5-TSM cards.

cdu—Used in the card manufacturing process

deirhc— Used by E5-SM8G-B cards to support the S13/S13' EIR feature

enumhc—Used by E5-SM8G-B cards to support the ENUM Mobile Number Portability and Tier One Address Resolution application

erthc—Used by E5-ENET and E5-ENET-B cards when the card acts as an STC card (E5-STC card) for EAGLE 5 Integrated Monitoring Support functions

glshc—Used by E5-TSM cards to download gateway screening to LIM and SCCP cards

hipr2—Communication software used on the High Speed IMT Packet Router (HIPR2) card

imtpci—Communication software that operates the IMT bus on HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards

ipghc—Used by E5-ENET and E5-ENET-B cards to support point-to-multipoint IP connectivity for ANSI and ITU point codes

iplhc—Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ANSI and ITU point codes

ipsg—Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA

ipshc—Used by E5-IPSM and E5-ENET-B cards to support the IPS application

mcphc— Used by E5-MCPM-B cards for the Measurements Platform feature

oamhc—Used by E5-MCAP cards for enhanced OAM functions

pldpmc1—Flash GPL used on HC-MIM and E5-E1T1 cards for E1 and T1 signaling links

sccphc—Used by E5-SM4G and E5-SM8G-B cards to support EPAP-based features and the LNP ELAP Configuration feature. If no EPAP-based or LNP ELAP Configuration feature is turned on, and an E5-SM4G or E5-SM8G-B card is present, then the GPL processes normal GTT traffic.

siphc— Used by E5-SM8G-B Cards to support the SIP application.

slanhc—Used by E5-ENET and E5-ENET-B cards to support the STPLAN application

ss7hc—Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards. Allows the card to support up to 32 (E5-E1T1) or 64 (HC-MIM and E5-E1T1-B) signaling links for E1 and T1 functions.

utility—Used by the factory for testing, and when directed by the Customer Care Center

vcdu—Used in the card manufacturing process

ver (mandatory)

Version. The version number of the GPL to be activated, with subfields the format of *major-minor-fix* separated by dashes.

Range:

major-minor-fix

Specify a value in the range 0–255 for each subfield of the GPL version number (*major-minor-fix*).

Example

```
act-gpl:gpl=ss7hc:ver=125-1-0
act-gpl:gpl=deirhc:ver=134-60-0
act-gpl:gpl=enumhc:ver=135-20-0
```

Dependencies

No other activate, change, copy, or retrieve GPL commands, nor a GPL audit, can be in progress when this command is entered.

The value specified for the gpl parameter must be supported. See the gpl definition for a list of supported GPLs.

Notes

Test the trial GPL by loading to a card before activating the GPL. Activating the GPL changes it from *trial* to *approved*.

The generic program load is committed on the active system and on the standby system.

Trial GPLs are downloaded to cards manually. Only approved GPLs can be downloaded to cards by the system.

Use the `rtrv-gpl` command to determine the version of the GPL.

Output

The output indicates that the specified GPL is activated on each TDM card.

```
act-gpl:gpl=ss7hc:ver=125-1-0
```

```
    tekelecstp 05-01-03 16:53:23 EST  EAGLE5 33.0.0
    SS7HC activate to 1114 completed
    SS7HC activate to 1116 completed
;
```

The output indicates that the specified GPL is activated on each TDM card.

`act-gpl:gpl=deirhc:ver=134-60-01`

```
    tekelecstp 13-03-15 19:08:39 EST EAGLE 45.1.0
    DEIRHC activate to 1114 completed
    DEIRHC activate to 1116 completed
;
```

`act-gpl:gpl=enumhc:ver=135-20-0`

```
    tekelecstp 14-05-20 14:18:32 EST EAGLE 46.1.0
    ENUMHC activate to 1114 completed
    ENUMHC activate to 1116 completed
;
```

The number of "cards of x complete" represents the total number of cards that can communicate on the IMT at the instant that this information is displayed.

`act-gpl:gpl=hipr2:ver=135-041-000`

```
    act-gpl:gpl=hipr2:ver=135-041-000

    tekelecstp 15-04-16 11:12:45 EST  EAGLE5 46.2.0-65.42.0
    5575.1104    CARD 1107,A   INFO    IP Connection Failed
    tekelecstp 15-04-16 11:12:49 EST  EAGLE5 46.2.0-65.42.0
    act-gpl:gpl=hipr2:ver=135-041-000
    Command entered at terminal #20.
;

Command Accepted - Processing
    tekelecstp 15-04-16 11:12:50 EST  EAGLE5 46.2.0-65.42.0
    HIPR2 activate on 1116 completed
    HIPR2 activate on 1114 completed
;
```

Related Commands

chg-gpl, *copy-gpl*, *rept-stat-gpl*, *rtrv-gpl*

act-lbp

Activate Loopback Point Test

Use this command to activate one or more loopback point tests for testing data signaling link elements in an SS7 transmission path. Use this command to:

- Activate a test for a specified loopback point that is defined in the LFS database table
- Activate a test for one loopback point that is not defined in the LFS database table
- Activate tests for all loopback points that have been defined in the LFS database table. See *Summary of Loopback Testing Commands and Functions* for information about loopback testing commands and functions.

The `ent-lbp` command can be used to define a maximum of 32 loopback points in the LFS database table.

Parameters

To activate a test for a single loopback point that is defined in the LFS database table, specify the loopback point number in the lbp parameter and do not specify the lfst, rle, rep, or clli parameter in the command. Information from the LFS database is used to activate the test for the specified loopback point.

To activate a test for a single loopback point that is not defined in the LFS database table, specify one or more of the lfst, rle, rep, and clli parameters in the command. (If the clli parameter is not specified, then the value is blank, a null string. If the rep parameter is not specified, the default value is **0**.)

To activate tests for all loopback points defined in the LFS database, do not specify the lbp, lfst, rle, rep, or clli parameter in the command. Information from the LFS database table is used to activate tests for all defined loopback points.

link (mandatory)

SS7 signaling link. The SS7 signaling link to be tested.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling link ports.

loc (mandatory)

The location of the card containing the signaling link to use for loopback point testing.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

clli (optional)

Common language location identifier. The CLLI code or other mnemonic identifier, used to refer to the given loopback point.

Range:

ayyyyyyyyyy

1 alphabetic character followed by up to 10 alphanumeric characters

Default:

If the rle, lfst, or rep parameter is specified—null string (blank)

If the rle, lfst, or rep parameter is not specified—the value in the LFS database

data (optional)

The data used with the *octet* or *alternate* patterns.

Range:

1 - 255

Default:

255

force (optional)

The force=yes parameter must be specified to start a test when there are 256 or more tests already running.

Range:

yes

no

Default:

no

lbp (optional)

Loopback point ID. A far-end loopback point that lies along an SS7 signaling link path between the STP and the target device (up to and including the target device).

Range:

1 - 32

Default:

If the rle, clli, rep, or lfst parameter is specified, the default is *1*.

If the rle, clli, rep, or lfst parameter is not specified, the default is all loopback points found in the LFS database (up to 32 loopback points), as shown in the `rtrv-lbp` command output.

lfst (optional)

Link fault sectionalization test.

Note: This parameter is mandatory if the rle, clli, or rep parameter is specified.

Range:

llt

latching loopback test; a software latch is set at the test point to reverse everything that is received and return it to the sender until the test is complete

mlt

manual latch loopback test; an external hardware latch is set to reverse everything that is received and return it to the sender until the test is complete (for equipment that cannot set a software latch for the test)

nlt

nonlatching loopback test; no permanent latch is set. Loopback codes are alternated with test data until the test is complete.

Default:

The value in the LFS database, as shown in the `rtrv-lbp` command output

maxerr (optional)

Bit error threshold. This parameter specifies the actual number of errors allowed for a specific time period during which loopback testing is being performed. If this threshold is exceeded, the *TEST STATUS* field in the output report indicates an error.

Range:

0 - 4838400

Default:

56

pattern (optional)

This parameter specifies the type of test pattern used to perform the LFS test.

Range:

b2047

047-bit BERT pattern sent until it is stopped by software

b511

511-bit BERT pattern sent until it is stopped by software

octet

Data (from the data parameter) sent continuously until it is stopped by software

alternate

Alternately, a count of 100 octets of the specified data (from the data parameter) followed by 100 octets of 0, sent until it is stopped by the software

The *octet* and *alternate* values are valid only when lfst=llt is specified.

Default:

b2047

rep (optional)

Repetition count. The number of link elements of the same type (not including the target device) that lie between the STP and the link element to be tested.

Range:

0 - 31

Default:

If the rle, clli, rep, or lfst parameter is specified, the default is *0*.

If the rle, clli, rep, or lfst parameter is not specified, the default is the value in the LFS database, as shown in the `rtrv-lbp` command output.

rle (optional)

Remote link element. The link element to be looped back for testing.

Note: This parameter is mandatory if the lfst, clli, or rep parameter is specified.

Range:

ds0

ocu

csu

dsu

nei

Default:

The value from the LFS database, as shown in the `rtrv-lbp` command output

time (optional)

The length of time the test must be run in order to determine success or failure. If the number of errors that actually occur during this time exceeds the threshold set by the maxerr parameter, the loopback test is identified as a failure.

Range:

1 - 240000

hhmmss—hh=hours (*00-24*), *mm*=minutes (*00-59*), *ss*=seconds (*00-59*)

For example, *time=1* or *time=000001* is one second; *time=240000* is 24 hours; *time=200* or *time=000200* is 2 minutes

Default:

1 second

Example

Activate tests for all loopback points that are defined in the LFS database table:

```
act-lbp:loc=1205:link=b:pattern=alternate:maxerr=10:time=000200
```

Activate a test for a single loopback point that is not defined in the LFS database table:

```
act-lbp:loc=1205:link=b:lbp=1:rle=ds0:lfst=llt:clli=rlghncxa05w
act-lbp:loc=1205:link=b:lbp=1:rle=ds0:lfst=llt:clli=rlghncxa05w:pattern=octet:data=h'ff
act-lbp:loc=1205:link=b:lbp=1:rle=ds0:lfst=llt:clli=rlghncxa05w:maxerr=40:time=12000
```

Activate a test for a single loopback point that is defined in the LFS database table:

```
act-lbp:loc=1205:link=b:lbp=3:pattern=alternate:maxerr=10:time=000200
```

Dependencies

The Link Fault Sectionalization (LFS) feature must be on before this command can be entered.

If the rle=nei parameter is specified, the rep=0 parameter must be specified.

The rep parameter can be specified only if the lfst=llt parameter is specified.

The rle=ds0 or the rle=nei parameter cannot be specified if the lfst=nlt parameter is specified. The DS0 and Network Element Interface (NEI) link elements do not support non-latching loopbacks.

If one or more of the rle, rep, lfst, or clli parameters are specified, the database is not used to look up their values; therefore, the lfst and rle parameters must be specified when the rep or clli parameter is specified.

The data parameter can be specified only if the pattern=octet parameter or pattern=alternate parameter is specified.

The pattern=octet and pattern=alternate parameters cannot be specified for non-latching tests (rle=nlt).

The card location (loc parameter) must contain a provisioned and equipped HC-MIM, E5-E1T1, or E5-E1T1-B card, provisioned with the LIMT1 card type, running the SS7ANSI or CCS7ITU application.

The card in the loc parameter location must be in the In-Service-Normal state.

The signaling link that is used for LFS testing must be equipped, and must be deactivated before this command is entered.

The loopback points (LBPs) must have been previously defined in the database.

Only one LFS test can be active on a signaling link at a time.

This command cannot be entered for a signaling link LFS test when the maximum number of LFS tests are active for the card. At least one LFS test must complete before this command can be entered again.

Up to 8 LFS tests at a time can be active on an HC-MIM, E5-E1T1, or E5-E1T1-B card used as a T1 card.

This command cannot be entered when the maximum combined total number of LFS and link tests (1024) are in progress in the system. At least one test must complete before this command can be entered again.

The force=yes parameter must be specified to activate a test when there are 256 or more tests already running in the system.

The specified signaling link must not be running a `tst-slk` test when this command is entered. The `tst-slk` test must be stopped or allowed to complete before this command can be entered for the link.

The specified signaling link must not be in Command Driven Loopback (CDL) when this command is entered. The link must be removed from CDL before this command can be entered for the link.

This command cannot be entered for a link that is already blocked by another link diagnostic test. The test must be canceled or allowed to complete before this command can be entered for the link.

LFS testing is not available during upgrade.

The maximum number of loopback point entries allowed in the LFS table is 32.

Notes

This command is not supported for E5-ATM or E5-ATM-B cards.

If an LFS test is aborted by a card reset, it can leave the remote far-end loopback condition active. Use the `dact-lbp` command to cancel LFS tests.

The HC-MIM, E5-E1T1, and E5-E1T1-B cards support this command on up to 8 T1 channels at a time; the command is not supported for E1.

The test can terminate with the status "ERROR, bit error exceeded threshold" for two reasons.

- The number of cumulative bit errors exceeds the specified maxerr parameter value.

- The number of bit errors for one second reaches or exceeds 255, without considering the maxerr parameter value.

Output

The LFS report is displayed when the LFS test completes.

This example shows how the test failed because the bit error rate exceeded the threshold. The maxerr=10 parameter is used for a test time of 2 minutes. Because more than 10 errors occurred within 2 minutes, the test is considered a failure and the TEST STATUS field displays the cause. The parameter values are applied to each loopback point. The maxerr value is per test, not cumulative for all tests.

```
act-lbp:loc=1205:link=b:pattern=alternate:maxerr=10:time=002000
```

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    LOC = 1205  Link = B  LSN = ls11345678  Start time = 11:10:34

    PATTERN = ALTERNATE  DATA= FF  MAXERR = 10  TIME = 00:02:00

    TEST STATUS = ERROR, bit error exceeded threshold.
    LBP  CLLI         RLE  REP  LFST  BIT_ERROR  ERRORED_SEC  DURATION
    2    rlghncxa05w  DS0  0    LLT   0          0            00:02:00
    3    ------------ OCU  0    NLT   8          2            00:02:00
    5    ------------ NEI  0    LLT   15         1            00:01:20
;
```

In this example, the test failed because the loopback could not be established.

```
act-lbp:loc=1205:link=b:pattern=alternate:maxerr=10:time=000200
```

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    LOC = 1205  Link = B  LSN = ----------  Start time = 11:10:34

    PATTERN = ALTERNATE  DATA= FF  MAXERR = 10  TIME = 00:02:00
    TEST STATUS = ERROR, loopback was not established.

    LBP  CLLI         RLE  REP  LFST  BIT_ERROR  ERRORED_SEC  DURATION
    1    rlghncxa05w  DS0  0    LLT   0          0            00:00:00
;
```

Legend

- **LOC**—Card location that contains the signaling being tested
- **LINK**—Signaling link that is being tested on the card
- **LSN**—Name of the linkset that contains the link being tested
- **Start time**—Time that the test started
- **PATTERN**—Type of test pattern used to perform the LFS test
- **DATA**—Data used with the octet or alternate patterns
- **MAXERR**—Bit error threshold; actual number of errors allowed for the specific time period during which loopback testing is being performed. If this threshold is exceeded in the specified time period, the *TEST STATUS* field in the output report indicates an error.

- **TIME**—Specified length of time to run the test in order to determine success or failure. If the number of errors that actually occur during this time exceeds the threshold set by the maxerr parameter, the loopback test is identified as a failure.
- **TEST STATUS**—Any one of the following *TEST STATUS* values can appear:
  - PASS
  - ERROR, LFS HARDWARE is not available.
  - ERROR, loopback could not be established.
  - ERROR, bit error exceeded threshold.
  - ERROR, LFS test aborted.
  - ERROR, LFS hardware failed.
- **LBP**—Loopback point used to perform the LFS test
- **CLLI**—Common Language Location Identifier (CLLI) code, or other mnemonic identifier, used to refer to the given loopback point
- **RLE**—Remote link element to be looped back for testing
- **REP**—Repetition count. The number of link elements of the same type (not including the target device) that lie between the STP and the link element to be tested.
- **LFST**—Type of link fault sectionalization loopback test to be performed
- **BIT_ERROR**—The number of bit errors observed during the test
- **ERRORED_SEC**—The number of seconds that contained bit errors during the test. (Bit errors are sampled once per second; each sample that contains bit errors adds one second to this count.)
- **DURATION**—Length of time that the test actually ran for the loopback point. For successful test, the TIME and the DURATION should be the same. If a test ran for less than the specified amount of time, the DURATION will be less than the TIME.

Related Commands

chg-lbp, *dact-lbp*, *dlt-lbp*, *rept-stat-lfs*, *rtrv-lbp*

act-lpo — Activate Local Processor Outage

Use this command to force a processor outage on the specified link. The system begins sending link status signal units (LSSUs) with a status of SIPO to the adjacent signaling point. Level 2 status remains in service, except when the link is an ATM high-speed signaling link.

Note: The signaling link's blocked status is not preserved across a LIM reboot.

Parameters

link (mandatory)

The signaling link on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
act-lpo:loc=1101:link=a
```

Dependencies

A card location that is valid and defined in the database must be specified.

No other action command can be in progress when this command is entered.

If the card in the specified location is running the IPLIM or IPLHC GPL, then the specified link must have an ipliml2 parameter value of *m2pa*.

This command is not valid for cards running the SS7IPGW, IPGWI, or IPGHC GPL.

The card must contain signaling links.

The signaling link must be equipped in the database.

This command is not valid for links belonging to proxy linksets.

The value specified for the loc parameter must refer to one of the following cards, and the referenced card must be equipped:

- E5-E1T1, E5-E1T1-B, or HC-MIM card running the SS7ANSI or CCS7ITU application
- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPLIM, IPLIMI, or IPSG application

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1*, *b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

The act-lpo command is not supported for ITU-N16 links.

This command is not valid for IPSG-M3UA signaling links.

Notes

The function of this command is the same as the `blk-slk` command.

This command generates an alarm.

If this command is followed by the `init-card` command, the local processor outage is not preserved after the `init-card` command completes.

The *Installation Guide* provides an illustration of card locations.

If the `blk-slk` or `act-lpo` command is issued for an IPSG signaling link, then an MTP3 local processor outage is initiated.

Output

`act-lpo:loc=1101:link=a`

```
tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
Local processor outage being set.

tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
* 0014.0208 * SLK 1101,A nc00027 slk local blocked
```

Related Commands

blk-slk, *canc-lpo*, *rept-stat-slk*, *ublk-slk*

act-slk — Activate Signaling Link

Use this command to change the link from OOS-MT-DSBLD (Out-of-Service-Maintenance-Disabled) to IS-NR (In-Service-Normal).

Note: The signaling link's activated status is preserved across a card reboot.

Parameters

link (mandatory)

The signaling link on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
act-slk:loc=1301:link=a
```

Dependencies

The value specified for the loc parameter must refer to one of the following cards, and the referenced card must be equipped:

- E5-E1T1, E5-E1T1-B, or HC-MIM card running the SS7ANSI or CCS7ITU application
- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPGWI, IPLIM, IPLIMI, IPSG, or SS7IPGW application

This command cannot be entered while the `tst-slk` command is in progress.

A card location that is defined in the database must be specified.

The card must contain signaling links.

No other action command can be in progress when this command is entered.

The specified signaling link must be provisioned in the database.

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1*, *b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

A link cannot be activated if the `tst-j1` command is in progress on the same port on which the particular link being activated is configured.

This command is not valid for IPSG-M3UA signaling links.

Notes

The *Installation Guide* provides an illustration of card locations.

Output

```
act-slk:loc=1301:link=a
```

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Activate Link message sent to card
;
```

Related Commands

blk-slk, *dact-slk*, *dlt-slk*, *ent-slk*, *inh-slk*, *rept-stat-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

act-user

Activate User

Use this command to log into the system. This command is an alternate to the `login` command. After the command is entered, the system requests a password. For security reasons the password is not echoed to the terminal.

Parameters

uid (mandatory)

User ID. The system prompts you for a valid password after this ID is entered.

Range:

azzzzzzzzzzzzzzz

1 alphabetic character followed by up to 15 alphanumeric characters; the first character must be a letter.

Example

```
act-user:uid=john
```

Dependencies

The first character of the user ID must be a letter.

Notes

Caution: If the OA&M IP Security Enhancements feature is not turned on, a serial terminal (terminals 1-16) must be used to log in with a new Userid and password for the first time or to change an expired password. The OA&M IP Security Enhancements feature must be turned on before the password can be changed at the prompt from an IP User Interface telnet terminal (IDs 17-40) when it is the first time the user is logging in with an assigned Userid and password or the password has expired.

The `login` command can be used instead of `act-user`. The command `act-user` has been provided in accordance with OTGR standards.

When a new system is shipped, the user ID and password are set to the system. Change these immediately to ensure system security.

Output

Not applicable.

Related Commands

chg-pid, *chg-user*, *dact-user*, *dlt-user*, *ent-user*, *login*, *logout*, *rept-stat-user*, *rtrv-secu-user*, *rtrv-user*

alw-card

Allow Card

Use this command to change the card from OOS-MT-DSBLD (Out-of-Service-Maintenance-Disabled) to IS-NR (In-Service-Normal) if the loading is successful.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

code (optional)

The GPL type to be loaded.

Caution: Do not enter the *pktgen*, *utility*, or *inactiveprtn* values for this parameter unless instructed to do so by Oracle personnel.

Range:

appr

Downloads the approved GPL

inactiveprtn

Downloads the MASP with associated GPL from the inactive partition of the TDM. This value should be specified only during a software upgrade.

pktgen

Downloads the PKTGEN GPL for the appropriate hardware type. This GPL is to be used only for engineering test purposes and must not be used in customer installations without engineering oversight.

Note: After the PKTGEN GPL is initially downloaded to a card by this command, the PKTGEN GPL will continue to be downloaded to the card until another `alw-card` command is issued.

trial

Downloads the trial GPL

utility

Downloads the CDU or VCDU GPL for the appropriate hardware type. This GPL is used primarily by the factory for testing purposes.

Default:

appr

data (optional)

High memory refresh. This parameter causes data to be reloaded to the specified card.

Note: Various conditions in the system may prevent the persistence of the data on the cards.

Range:

persist

Indicates that the database is not to be reloaded to the card. This parameter is used to request that the EAGLE perform a warm restart of the requested cards. The EAGLE performs various checks to ensure that all conditions necessary to initiate the warm restart are in place. During the card initialization and loading sequence, a warm restart is performed if the card meets the warm restart conditions, as described in the Notes section of this command.

refresh

Causes data to be reloaded to the specified card.

Default:

refresh

Example

```
alw-card:loc=2301:code=trial
alw-card:loc=1101:data=persist
```

Dependencies

The active and standby TDM card locations and the card location that is running the active OAM cannot be specified in the loc parameter.

The shelf and card must be equipped.

No other action command can be in progress when this command is entered.

The G-Flex, G-Port, INP, LNP, or V-Flex feature must be turned on, or the ATINP feature must be enabled before the data parameter can be specified.

The data parameter is valid only for SCCP card locations or GPLs, or MPS database (VSCCP) card locations or GPLs.

The card location (loc) must be within the allowed range.

A card that is the active MASP cannot be specified for the loc parameter.

A card location that is valid and defined in the database must be specified.

- Card location equipped with an E5-APP-B card cannot be specified.
- Card location equipped with a Telco Switch cannot be specified.

If an OAM card is installed in the location specified by the loc parameter, then only a value of *inactiveprtn* is supported for the code parameter.

The S13 EIR feature must be activated before allowing a card running the DEIRHC GPL.

Notes

The function of this command is the same as the `rst-card` command.

The *Installation Guide* provides an illustration of card locations.

The system previously supported the data parameter for reloading GTT data. The system does not support persistent GTT data loading, and the data parameter is now used in support of a warm restart feature.

A number of reasons exist for not being able to warm restart. If none of these conditions exists, a warm restart is possible and will be attempted following a Service Module card reset.

- The following conditions require a full data reload:
  - **AUDIT FAILED**—Checksum comparisons of the LNP database failed during card initialization. Data on the card is determined to be corrupted after the reset (was not yet detected by normal auditing).
  - **AUDIT TIMEOUT**—LNP initialization audit timed out (software failure)
  - **DB LEVEL**—Database level is not supported, or the difference exceeds incremental loading capability. This condition is caused by the reset of OAMs or if the number of updates exceeds the incremental loading capability.
  - **DB STATUS**—Database status of the card is incoherent at the time of a reset. This condition can be caused by a failed network card update or a reset during a database update to the card.
  - **DB VERSION**—LNP Database version has changed from the previous version. An import, or bulk downloads (`chg-db`), or changes from release to release may alter the database version.
  - **HW ERROR**—Hardware error bit checks on the card failed during card initialization
  - **NO AUDIT**—Unable to perform an LNP audit. The LNP audit is not on (for example, LNP options has *audit=off*). This condition can occur if the rate of LNP updates exceeds the ability of the LNP audit to compute checksums (excessive unknown checksums). This condition is more likely on a small database where there are fewer checksums. The percentage of known checksums must be 99% or more. The percentage is based on the number of checksums in use, which is smaller for small databases (such as two million TNs or fewer).
  - **POWER ON**—A power on reset (the card is pulled and reinserted)
  - **UNKNOWN/OTHER**—Unknown or other type of software failure.
  - **USER REQUEST**—User-initiated `init-card` or `init-sys` command reload type=cold. The default restart type for these commands is a cold or full LNP data reload. The user must specify data=persist for a warm restart on command.
  - **XILINX VERSION**—The M256 Xilinx program version has changed from the previous version.
- The following conditions require a cold restart for the MCPM card:
  - **DB STATUS**—Database status of the card is incoherent at the time of a reset. This condition can be caused by a failed network card update or a reset during a database update to the card.

- **MEAS DB**–Measurements database initialization failure or corruption.
- **POWER ON**—A power on reset (card is pulled and reinserted).
- **UNKNOWN/OTHER**—Unknown or other type of software failure.
- **XILINX VERSION**—D1G Xilinx program version has changed from previous version.

Caution: This command can be used to enable Measurements Platform measurements collection after the collection function has been disabled with the `inh-card` command for ALL MCPM cards in the system. To enable collection, at least 1 MCPM card must be allowed in the system. Disabling collection by inhibiting all MCPM cards CAN RESULT IN LOSING ALL PAST MEASUREMENT DATA ON THE CARDS.

When the OA&M IP Security feature is turned on, and an IPSM card is inserted and initialized for the first time or is removed, inserted, and initialized again, the "SSH Host Keys Regenerated" UIM is displayed. The UIM shows the generated SSH Host Key fingerprint that must be provided at the secure client in order for secure information transfer to occur. The SSH Host Key fingerprint is changed whenever power is lost and restored to an IPSM card.

```
 rlghncxa03 03-07-11 07:05:00 EST  EAGLE 30.2.0
 0021.1493    CARD 1111     INFO    SSH Host Keys Regenerated

84  7c  92  8b  c  7c  ds  19  1c  6  4b  de  5c  8f  c5  4d

Report Date:03-07-11  Time:22:27:36
;
```

When the OA&M IP Security feature is turned on, and an IPSM card is restarted with this command, the "SSH Host Keys Loaded" UIM is displayed. The UIM shows the current SSH Host Key fingerprint. The SSH Host Key fingerprint is not changed if the IPSM card does not lose power.

```
rlghncxa03 03-07-11 07:05:00 EST  EAGLE 30.2.0
0021.1493    CARD 1111     INFO    SSH Host Keys Regenerated

DSA Server Host Key FTRA-formatted Fingerprint=
84  7c  92  8b  c  7c  ds  19  1c  6  4b  de  5c  8f  c5  4d

Report Date:03-07-11  Time:22:27:36
;
```

If a location for an HC-MIM (type LIME1 or LIMT1), E5-E1T1 /E5-E1T1-B (type LIME1 or LIMT1), or E5-ATM/E5-ATM-B (type LIMATM or LIME1ATM) card is specified, then at least one signaling link must be provisioned for the card before it can be allowed.

Output

`alw-card:loc=2301:code=trial`

```
    rlghncxa03w 06-06-01 11:11:28 EST  EAGLE 35.0.0
    Card has been allowed.
;
```

Related Commands

dlt-card, *ent-card*, *inh-card*, *init-card*, *rept-stat-card*, *rmv-card*, *rst-card*, *rtrv-card*

alw-imt

Allow IMT

Use this command to change the state of the specified Interprocessor Message Transport (IMT) bus from OOS-MT-DSBLD (Out-of-Service-Maintenance-Disabled) to IS-NR (In-Service-Normal), if the command is successful. If the command fails, the status is IS-ANR (In-Service-Abnormal). The IMT bus is comprised of two 125 Mbps counter-rotating serial busses. If one bus fails, the other immediately assumes control of all messages.

Parameters

bus (mandatory)

The IMT bus with the status to be changed.

Range:

a

b

Example

```
alw-imt:bus=a
```

Dependencies

This command cannot be entered during an IMT Fault Isolation Test or an Extended Bit Error Rate Test (BERT).

This command cannot be entered if an IMT Rate Change sequence is in progress.

Valid IMT bus entries are "A" or "B".

Notes

This command returns an inhibited IMT bus to service.

The function of this command is the same as the `rst-imt` command.

See the `tst-imt` command to determine the location of faults on a failed or abnormal IMT bus.

Output

```
alw-imt:bus=a
```

```
    rlghncxa03w 04-01-07 11:11:28 EST EAGLE 31.3.0
```

```
    Allow IMT Bus A command issued.

    rlghncxa03w 04-01-07 11:11:28 EST EAGLE 31.3.0
    0100.0097 IMT BUS A Imt allowed
;
```

Related Commands

clr-imt-stats, *conn-imt*, *disc-imt*, *inh-imt*, *rept-imt-lvl1*, *rept-imt-lvl2*, *rmv-imt*, *rst-imt*, *tst-imt*

alw-map-ss

Allow Mated Application Subsystem

Use this command to activate a subsystem and bring it online. The AIQ, ATINPQ, EIR, INP, INPQS, LNP, LNPQS, and V-Flex subsystems can be allowed and inhibited.

Parameters

ssn (mandatory)

Subsystem number.

Range:

2 - 255

Example

```
alw-map-ss:ssn=10
```

Dependencies

No other action command can be in progress when this command is entered.

The system must be configured with at least one Service Module card running the VSCCP application.

The EIR, INP, LNP, or V-Flex feature must be turned on, or the ANSI41 AIQ or ATINPQ feature must be enabled before this command can be entered.

The value specified for the ssn parameter must be the AIQ, ATINPQ, EIR, INP, LNP or V-Flex subsystem number.

The LNP subsystem must be online before the LNPQ subsystem number can be specified as a value for the ssn parameter.

The V-Flex subsystem must be online before the V-Flex subsystem number can be specified as a value for the ssn parameter.

The ATINPQ subsystem must be online before the ATINPQ subsystem number can be specified as a value for the ssn parameter.

The INP subsystem must be online before the INP subsystem number can be specified as a value for the ssn parameter.

The EIR subsystem must be online before the EIR subsystem number can be specified as a value for the ssn parameter.

The AIQ subsystem must be online before the AIQ subsystem number can be specified as a value for the ssn parameter.

Notes

None

Output

```
alw-map-ss:ssn=11
```

```
    integrat40 00-05-24 10:37:22 EST  EAGLE5 31.0.0
    Allow map subsystem command sent to all SCCP cards.
    Command Completed.
;
```

Related Commands

inh-map-ss, *rept-stat-lnp*, *rept-stat-sccp*

alw-slk Allow Signaling Link

Use this command to return an inhibited signaling link to service. If the link was aligned when it was inhibited, a changeover occurred. This command causes a changeback on the specified link. MSUs are transmitted on the link after the changeback is issued.

Note: The signaling link's inhibited status is not preserved across a card reboot.

Parameters

link (mandatory)

The signaling link defined on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified by the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
alw-slk:loc=1301:link=b
```

Dependencies

A card location that is valid and defined in the database must be specified.

No other action command can be in progress when this command is entered.

The card must contain signaling links.

The signaling link must be equipped in the database.

This command is not valid for cards running the IPGHC GPL.

The card that contains the specified signaling link must be equipped in the specified card location.

The card in the specified card location cannot be a MUX card or the cards running the OAM application.

If IPSG-M3UA signaling links are used, then this command cannot be entered.

An appropriate value must be specified for the link parameter when an ATM card is used:

- a-a1, b—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

This command is not valid for IPSG-M3UA signaling links.

Notes

The function of this command is the same as the `unhb-slk` command.

Not every card location represents a signaling link. Be sure to address a signaling link in this command.

The *Installation Guide* provides an illustration of card locations.

Output

```
alw-slk:loc=1301:link=b
```

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Allow Link message sent to card
;
```

Related Commands

act-slk, *blk-slk*, *canc-slk* , *dact-slk*, *ent-slk*, *inh-slk*, *rept-stat-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

alw-trm Allow Terminal

Use this command to return the specified serial port to the state IS-NR (in-service normal) from the state OOS-MT-DSBLD (out-of-service maintenance-disabled) if the command is successful. If the command is not successful, the terminal's state is OOS-MT (out-of-service maintenance).

Parameters

trm (mandatory)

The ID of the serial or telnet port to be put into service.

Range:

1 - 40

Example

```
alw-trm:trm=5
```

Dependencies

No other action command can be in progress when this command is entered.

The IP User Interface feature must be enabled before terminal ports 17 through 40 can be specified in the trm parameter.

The terminal specified by the trm parameter must be equipped.

If a SEAS terminal is configured, then the IP address for the associated IPSM card must be specified before this command can be entered.

The SEAS Over IP feature must be turned on before a SEAS terminal can be specified.

The specified SEAS terminal cannot be auto-inhibited.

If a critical thermal alarm is raised against the IPSM card hosting the terminal, then the specified Telnet terminal cannot be returned to the IS-NR state.

The terminal specified by the trm parameter cannot be configured as type=none (see the `chg-trm` command).

Notes

The function of this command is the same as the `rst-trm` command.

When you attempt to return to service a terminal that is already in service, a warning message is echoed to the scroll area but no action is taken.

If a SEAS terminal is configured, then the corresponding card must be an IPSM card, and the SEAS Over IP feature must be turned on before the SEAS terminal is allowed. The SEAS terminal is auto-inhibited if the IP Address for the corresponding card is invalid.

Output

```
alw-trm:trm=12
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Allow message sent to terminal

    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    1062.0046      TERMINAL     12         Terminal Enabled
;
```

Related Commands

act-echo, *canc-echo*, *chg-trm*, *dact-echo*, *inh-card*, *rept-stat-trm*, *rmv-trm*, *rst-trm*, *rtrv-trm*

aud-data

Audit Data

Use this command to perform a data audit, which is used to determine the integrity of the static and dynamic databases. This command can also be used to perform a separate GPL audit.

Parameters

ddbqp (optional)

DDB quiet period. The minimum DDB idle time, in milliseconds, during which no DDB updates are applied. After the quiet period, it is assumed that all DDB updates in the system have been processed, and no outstanding in-flight multi-cast updates exist.

If the idle period that is reported by the network card is less than the quiet period, then additional network responses are discarded, and the DDB audit process restarts. Up to three retries of the DDB audit process are performed by system. If all of the retry efforts fail, then the system status of the DDB audit report is marked as ABORTED.

Range:

0 - 5000

Default:

500

display (optional)

This parameter specifies whether a brief or full display is provided for the audit.

This parameter applies to static and dynamic STP databases.

Range:

all

For the static database, displays the checksum values, in hexadecimal, and details for each GPL and each subset of the current and backup database. For the dynamic database, displays the checksum values, in hexadecimal, for each dynamic database table on MTP cards.

brief

For the static database, displays the data collections for the current database, the backup database on the fixed disk, and the approved and trial GPLs. For the dynamic database, displays the system status with number of cards responded with or without checksum, the list of inconsistent cards, list of non-responding cards, number of cards not meeting quiet period requirement, number of cards responded with "DDB update in progess", and active MTP cards in system.

except

For GPLs or database subsets with problems, displays the same information as *display=all*

Default:

brief

gplqp (optional)

GPL data audit quiet period. The number of audit cycles between audits of GPL data.

Note: Data audits are always performed on GPLs at the first audit cycle after the EOAM or E5-OAM card recovers from a boot.

Range:

0 - 20

0—a GPL data audit is performed for every audit cycle

Default:

No change from the current value

System Default:

20

tblid (optional)

DMS Table ID. The table where the checksum is performed.

Range:

0 - 1022

type (optional)

The database to be audited.

Range:

ddb

dynamic database

fixed

static database

Default:
fixed

Example

```
aud-data:type=ddb:display=brief
aud-data:type=ddb:ddbqp=1000
aud-data:display=except
aud-data:tblid=127
aud-data:gplqp=3
```

Dependencies

Only one `aud-data` command can be in progress at a time.

If the type=ddb parameter is specified, then the except parameter cannot be specified.

If the ddbqp parameter is specified, then the type=ddb parameter must be specified.

If the gplqp parameter is specified, then the tblid, ddbqp, and type=ddb parameters cannot be specified.

The display and tblid parameters cannot be specified together in the command.

The DMS table specified by the tblid parameter must already exist.

If the system is in upgrade mode, then this command cannot be entered.

Notes

Static Audit

The standby OAM must be available when the `aud-data` command for audit begins so that the standby OAM can receive the signal to begin auditing. If the standby OAM is not available when `aud-data` is issued, then the following messages are issued:

```
Extended Processing Time Required
```

```
Standby MASP is (or was) not available at audit start.
```

The above messages may also appear if the standby OAM is not available when the hourly periodic audit, which uses the `aud-data` command, automatically starts. The standby OAM is not performing any data auditing, so no audit results for the standby OAM are displayed in the audit report. Instead, the standby's audit results are as follows:

```
No information currently available
```

If an auditing cycle completes on either the active or standby OAM and does not produce the full set of expected results (checksums), the following message appears:

```
Audit results may be incomplete
```

The audit results may be missing some of the checksums that would normally be displayed (display=all or display=except). The results may also contain summary status information (display=brief) that might have been calculated differently had some of the missing checksums been available. This condition can be caused if the audit results for the backup database are missing, probably because a backup database has not been created.

If the "Audit results may be incomplete" message appears in the audit report, perform the following procedure: *Audit Data*

Audit Data

1. Ensure that the standby OAM is online and ready.
2. Ensure that a backup database has been created. Use `rept-stat-db` command to check whether a backup database has been created.

   If no backup has ever been created, the output of `rept-stat-db` command shows the fixed disk backup (FD BKUP) database at level 1. There will be no information under the heading " Time Last Backup."
3. If necessary, create a backup on the fixed disk by entering the following command: `chg-db:action=backup:dest=fixed` .
4. Re-enter the `aud-data` command.

If the standby OAM does not run a audit cycle and no audit information is available, the following message appears:

```
Audit results are not available
```

This condition is probably caused by the standby OAM rebooting while a audit cycle is underway. If this message appears, ensure that the standby OAM is available and re-enter the `aud-data` command. Ensure that the standby OAM remains up (is not rebooted) for the duration of the audit cycle.

Dynamic Audit

The `aud-data` command is enhanced to allow a Dynamic data audit to be triggered manually.

If a dynamic background audit is already running, and the **aud-data** command is issued for a dynamic audit, then the following message appears.

```
Periodic dynamic database audit is running with default quiet period.
```

```
Results will be displayed on completion.
```

The Standby OAM is not required for a dynamic audit.

Output

This example shows output for a full display of a fixed database audit:

`aud-data:display=all`

```
   rlghncxa03w 09-07-07 10:39:04 EST  EAGLE 41.1.0
   DATA AUDIT COMPLETE  (GPL AUD Quiet Period set to 3)
   CARD        LOC   DATA                 STATUS      NEW CS  OLD CS  REF CS
   TDM-ACTV    1114  CRNT MTP     SUBSET  OK          H'ffaf  H'ffaf  H'ffaf
                     CRNT GTT     SUBSET  OK          H'5864  H'5864  H'5864
                     CRNT GWS     SUBSET  OK          H'd089  H'd089  H'd089
                     CRNT MISC    SUBSET  OK          H'2735  H'2735  H'2735
                     CRNT DBMM    SUBSET  OK          H'1001  H'1001  H'1001
                     BKUP MTP     SUBSET  OK          H'2b85  H'2b85  H'2b85
                     BKUP GTT     SUBSET  OK          H'5864  H'5864  H'5864
                     BKUP GWS     SUBSET  OK          H'd089  H'd089  H'd089
                     BKUP MISC    SUBSET  OK          H'5af1  H'5af1  H'5af1
                     BKUP DBMM    SUBSET  OK          H'1001  H'1001  H'1001
                     APPR ATMANSI GPL     OK          H'1372  H'1372  H'1372
                     TRI  ATMANSI GPL     OK          H'1372  H'1372  H'1372
                     APPR VSCCP   GPL     OK          H'9251  H'9251  H'9251
                     TRI  VSCCP   GPL     OK          H'9251  H'9251  H'9251
                     APPR GLS     GPL     OK          H'8887  H'8887  H'8887
                     TRI  GLS     GPL     OK          H'8887  H'8887  H'8887
                     APPR UTILITY GPL     OK          H'18de  H'18de  H'18de
                     TRI  UTILITY GPL     OK          H'18de  H'18de  H'18de
                     APPR                 OK          H'b6c6  H'b6c6  H'b6c6
                     TRI                  OK          H'b6c6  H'b6c6  H'b6c6

   rlghncxa03w 09-07-07 10:39:04 EST  EAGLE 41.1.0
   DATA AUDIT COMPLETE  (GPL AUD Quiet Period set to 3)
   CARD        LOC   DATA                 STATUS      NEW CS  OLD CS  REF CS
   TDM-STDBY   1116  CRNT MTP     SUBSET  OK          H'ffaf  H'ffaf  H'ffaf
                     CRNT GTT     SUBSET  OK          H'5864  H'5864  H'5864
                     CRNT GWS     SUBSET  OK          H'd089  H'd089  H'd089
                     CRNT MISC    SUBSET  OK          H'2735  H'2735  H'2735
                     CRNT DBMM    SUBSET  OK          H'1001  H'1001  H'1001
                     BKUP MTP     SUBSET  OK          H'2b85  H'2b85  H'2b85
                     BKUP GTT     SUBSET  OK          H'5864  H'5864  H'5864
                     BKUP GWS     SUBSET  OK          H'd089  H'd089  H'd089
                     BKUP MISC    SUBSET  OK          H'5af1  H'5af1  H'5af1
                     BKUP DBMM    SUBSET  OK          H'1001  H'1001  H'1001
                     APPR ATMANSI GPL     OK          H'1372  H'1372  H'1372
                     TRI  ATMANSI GPL     OK          H'1372  H'1372  H'1372
                     APPR VSCCP   GPL     OK          H'9251  H'9251  H'9251
                     TRI  VSCCP   GPL     OK          H'9251  H'9251  H'9251
                     APPR GLS     GPL     OK          H'8887  H'8887  H'8887
                     TRI  GLS     GPL     OK          H'8887  H'8887  H'8887
                     APPR UTILITY GPL     OK          H'18de  H'18de  H'18de
                     TRI  UTILITY GPL     OK          H'18de  H'18de  H'18de
                     APPR                 OK          H'b6c6  H'b6c6  H'b6c6
                     TRI                  OK          H'b6c6  H'b6c6  H'b6c6
;
```

aud-data:display=except

```
    rlghncxa03w 09-07-07 10:39:04 EST  EAGLE 41.1.0
    Extended Processing Time Required
    Results will be displayed on completion

    rlghncxa03w 09-07-07 10:39:04 EST  EAGLE 41.1.0
    DATA AUDIT COMPLETE (GPL AUD Quiet Period set to 3):
    CARD        LOC   DATA                STATUS      NEW CS OLD CS REF CS
    TDM-ACTV  1116  CRNT MTP     SUBSET  DIFFERENT   H'aaaa H'aaaa H'cccc
                    CRNT GTT     SUBSET  CORRUPTED   H'aaaa H'bbbb H'aaaa
                    APPR MCM     GPL     CORRUPTED   H'4321 H'3456 H'4321
                    APPR GLS     GPL     CORRUPTED   H'4321 H'3456 H'4321
                    APPR VSCCP   GPL     CORRUPTED   H'4321 H'3456 H'4321

    rlghncxa03w 09-07-07 10:39:01 EST  EAGLE 41.1.0
    Extended Processing Time Required
    Results will be displayed on completion

    rlghncxa03w 09-07-07 10:39:04 EST  EAGLE 41.1.0
    DATA AUDIT COMPLETE (GPL AUD Quiet Period set to 3):
    CARD      LOC   DATA                STATUS      NEW CS OLD CS REF CS
    TDM-STDBY 1114  CRNT MTP     SUBSET  DIFFERENT   H'aaaa H'aaaa H'cccc
                    CRNT GTT     SUBSET  CORRUPTED   H'aaaa H'bbbb H'aaaa
                    APPR MCM     GPL     CORRUPTED   H'4321 H'3456 H'4321
                    APPR GLS     GPL     CORRUPTED   H'4321 H'3456 H'4321
                    APPR VSCCP   GPL     CORRUPTED   H'4321 H'3456 H'4321
;
```

This example shows output for a brief display of a fixed database audit:

aud-data or aud-data:display=brief

```
    rlghncxa03w 09-07-07 10:39:04 EST  EAGLE 41.1.0
    DATA AUDIT COMPLETE (GPL AUD Quiet Period set to 3):
    CARD        LOC   DATA        STATUS
    TDM-ACTV    1114  CRNT DB     OK
                      BKUP DB     OK
                      GPLS        OK

    rlghncxa03w 09-07-07 10:39:04 EST  EAGLE 41.1.0
    DATA AUDIT COMPLETE (GPL AUD Quiet Period set to 3):
    CARD        LOC   DATA        STATUS
    TDM-STDBY   1116  CRNT DB     OK
                      BKUP DB     OK
                      GPLS        OK
;
```

This example shows output for a full dynamic database audit:

aud-data:type=ddb:display=all

```
    tekelecstp 09/07/21 17:04:47 GMT  EAGLE 41.1.0
    DDB AUDIT REPORT
        SYSTEM STATUS             : INCONSISTENT
        ACTIVE MTP CARDS          : 21
        NON RESPONDING CARDS      : 7: 1207 1208 1211 1212 2108 2111 2112
        RESPONDING CARDS          : 14
        CARDS WITH NO DATA        : 2
        CARDS WITH DATA           : 12
```

```
      CARDS FAILING QUIET PRD   : 0
      CARDS WITH DDB UPD IN PRG : 3
      CARDS CONSIDERED FOR CKSM : 9
      INCONSISTENT CARDS        : 2: 1203 2103
      CONSISTENT CARDS          : 7
      AUDIT START TIME          : 21/07/2009  17:04:46
      QUIET PERIOD              : 600 ms

 RTE        LINK SET   LINK       CM CARD    CM CLSTR   MATED APPL MTP GLOBLS

   LOC   STATUS        CAUSE            IDLE       DDB UPD    ADDN'L STATUS
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

   1201  CONSISTENT                     700        1000
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

   1202  CONSISTENT                     700        1000
H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0

   1203  INCONSISTENT                   700        1000
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1204  NODATA        (DDB INIT)       ---------- ----------
H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8

   1205  IN UPDATE 1   (TSRC,DDB)       700        1000       (IGNORED)
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

   1206  CONSISTENT                     700        1000
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1207  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1208  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1211  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1212  NORESP                         ---------- ----------
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

   1213  CONSISTENT                     700        1000
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 ---------- H'000003e8

   2101  CONSISTENT                     700        1000
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 ---------- H'000003e8

   2102  CONSISTENT                     700        1000
H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 ---------- H'000007d0

   2103  INCONSISTENT                   700        1000       (WWA UPD=2)
---------- ---------- ---------- ---------- ---------- ---------- ----------

   2104  NODATA        (DDL XLOAD)      ---------- ----------
H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 ---------- H'00000bb8

   2105  IN UPDATE 2   (DDB)            700        1000       (IGNORED)
H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 ---------- H'00000bb8

   2106  IN UPDATE 2   (TSRC,DDB)       700        1000       (IGNORED)
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 ---------- H'000003e8
```

```
      2107  CONSISTENT                    700        1000
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      2108  NORESP                        ---------- ----------
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      2111  NORESP                        ---------- ----------
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      2112  NORESP                        ---------- ----------
;
```

This example shows output for a brief dynamic database audit:

`aud-data:type=ddb:display=brief`

```
    tekelecstp 09-07-15 07:34:13 GMT  EAGLE 41.1.0
    DDB AUDIT REPORT
        SYSTEM STATUS             : OK
        ACTIVE MTP CARDS          : 10
        NON RESPONDING CARDS      : 0
        RESPONDING CARDS          : 10
        CARDS WITH NO DATA        : 0
        CARDS WITH DATA           : 10
        CARDS FAILING QUIET PRD   : 0
        CARDS WITH DDB UPD IN PRG : 0
        CARDS CONSIDERED FOR CKSM : 10
        INCONSISTENT CARDS        : 0
        CONSISTENT CARDS          : 0
        AUDIT START TIME          : 15/07/2009  07:34:12
        QUIET PERIOD              : 20 ms

;
```

`aud-data:tblid=127`

```
    audit 09-08-12 15:49:28 EST  EAGLE 41.1.0
    Extended processing time required.
    Results will be displayed on completion.
;

    audit 09-08-12 15:50:08 EST  EAGLE 41.1.0

    CARD        LOC   TABLE ID   STATUS      NEW CS  OLD CS  REF CS
    TDM-ACTV    1114  127        OK          H'cb03  H'cb03  H'cb03
;
    TABLE mtt.tbl AUDIT COMPLETE:
    CARD        LOC   TABLE ID   STATUS      NEW CS  OLD CS  REF CS
    TDM-STDBY   1116  127        OK          H'cb03  H'cb03  H'cb03
```

This example shows output for a full DDB audit when the status is ABORTED. Cards marked ("?") reported correct replies but their status was not evaluted.

`aud-data:type=ddb:display=all:ddbqp=600`

```
    tekelecstp 09-07-21 21:07:57 GMT  EAGLE 41.1.0
    DDB AUDIT REPORT
        SYSTEM STATUS             : ABORTED
        ACTIVE MTP CARDS          : 21
```

```
      NON RESPONDING CARDS      : 18: 1207 1208 1211 1212 2108 2111 2112 2113

      RESPONDING CARDS          : 3
      CARDS WITH NO DATA        : 0
      CARDS WITH DATA           : 3
      CARDS FAILING QUIET PRD   : 1
      CARDS WITH DDB UPD IN PRG : 1
      CARDS CONSIDERED FOR CKSM : 0
      INCONSISTENT CARDS        : 0
      CONSISTENT CARDS          : 0
      AUDIT START TIME          : 21/07/2009  21:07:54
      QUIET PERIOD              : 600 ms

 RTE        LINK SET   LINK       CM CARD    CM CLSTR   MATED APPL MTP GLOBLS

   LOC   STATUS        CAUSE            IDLE       DDB UPD    ADDN'L STATUS
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

   1201  NQUIET                         100        1000
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

   1202  IN UPDATE 1   (DDB)            700        1000
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

   1203  ?                              700        1000
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1204  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1205  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1206  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1207  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1208  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1211  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1212  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   1213  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   2101  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   2102  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   2103  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   2104  NORESP                         ---------- ----------
---------- ---------- ---------- ---------- ---------- ---------- ----------

   2105  NORESP                         ---------- ----------
```

```
   ---------- ---------- ---------- ---------- ---------- ---------- ----------

     2106  NORESP                        ---------- ----------
   ---------- ---------- ---------- ---------- ---------- ---------- ----------

     2107  NORESP                        ---------- ----------
   ---------- ---------- ---------- ---------- ---------- ---------- ----------

     2108  NORESP                        ---------- ----------
   ---------- ---------- ---------- ---------- ---------- ---------- ----------

     2111  NORESP                        ---------- ----------
   ---------- ---------- ---------- ---------- ---------- ---------- ----------

     2112  NORESP                        ---------- ----------
;
```

Legend

Fixed Audit

- **CARD**—Card type
- **LOC**—Card location
- **DATA**—Type of data being audited:
  - **APPR**—Approved GPL
  - **BKUP**—Database in the backup partition
  - **CRNT**—Database in the current partition
  - **DBMM**—Database management mechanism database
  - **GLS**—GLS GPL
  - **GTT**—Global title translation database
  - **GWS**—Gateway screening database
  - **MISC**—Miscellaneous system configuration database
  - **MTP**—Message transfer part database (links, linksets, routing tables)
  - **VSCCP**—VSCCP GPL
  - **ATMANSI**—ATMANSI GPL
  - **SUBSET** or**GPL**—Indicates whether the data is a part of the database or a generic program load.
  - **TRI**—Trial GPL
- **STATUS**—Status of the database or GPL:
  - **CORRUPTED**—The database or GPL has been changed by some abnormal process. The GPL cannot be used.
  - **DIFFERENT**—The database or GPL contains information that is not consistent with the reference database or GPL
  - **OK**—The database or GPL is not corrupted and contains the same information as the reference database or GPL
- **NEW CS**—New checksum value calculated by this command
- **OLD CS**—Checksum value stored in the database or GPL
- **REF CS**—Reference checksum value stored on the active MASP

Dynamic DDB Audit

- **SYSTEM STATUS**:
  - **OK**—DDB is consistent on all active MTP cards or no active MTP card is present in system
  - **INCONSISTENT**—DDB is inconsistent
  - **UNKNOWN**—"All active MTP cards in the system responded without the checksum of DDB table" or "No active MTP card in the system responded to audit request"
  - **ABORTED**—"Checksums collected failed to meet the quiet period requirement" or "Number of cards responded with "DDB update in progess" greater than 25% number of cards responded with data"
- **ACTIVE MTP CARDS**—Number of active MTP cards
- **NON RESPONDING CARDS**—Number of non-responding cards
- **RESPONDING CARDS**—Number of responding cards
- **CARDS WITH NO DATA**—Cards sending replies without the checksum of dynamic tables, due to incomplete DDL crossload or DDB initialization
- **CARDS WITH DATA**—Cards sending replies with checksums
- **CARDS FAILING QUIET PRD**—Cards failing quiet time requirement
- **CARDS WITH DDB UPD IN PRG**—Cards sending replies marked as "DDB update in progess" due to DDB checksum not evaluated completely or TSRC task is incomplete
- **CARDS CONSIDERED FOR CKSM**—Cards sending correct replies. Replies are not marked with "DDB update in progess" or "Reply with no data".
- **INCONSISTENT CARDS**—Cards that are inconsistent
- **CONSISTENT CARDS**—Cards that are consistent
- **AUDIT START TIME**—Time that the audit started (*DD/MM/YYYYY hh:ms:ss* format)
- **QUIET PERIOD**—Minimum DDB idle time, in milliseconds, during which no DDB updates are applied
- **RTE**—Checksum of RTE Table
- **LINK SET**—Checksum of Link Set Table
- **LINK**—Checksum of Link Table
- **CM CARD**—Checksum of CM Card
- **CM CLSTR**—Checksum of CM Cluster
- **MATED APPL**—Checksum of Mated Application
- **MTP GLOBLS**—Checksum of MTP Globals Table
- **IDLE (PERIOD)**—Time elapsed, in milliseconds, since the last DDB update was received by this card
- **DDB UPD**—Total DDB updates received on the card
- **ADDN'L STATUS**—Display more information for the card, including WWA updates or whether card is considered for audit calculations
- **CAUSE**—Display the reason for sending replies of type "reply with no data " or "DDB update in progress". This value can be DDL (crossload not completed), DDB (dynamic database is not initialised), (TSRC, DDB) (TSRC task is not completed) or DDB (checksums still needs to apply on tables).
- **?**—Card status is not evaluated (inconsistent/consistent) if the system status is marked as "ABORTED"
- **IGNORED**—Card responded with "DDB update in progess" and is not considered for calculating system status
- **WWA UPD**—Number of entries that were updated by the WWA

Related Commands

chg-gpl, *rept-stat-db*, *rept-stat-ddb*, *rtrv-gpl*

blk-slk

Block Signaling Link

Use this command to force a local processor outage (LPO) on the specified link. The system begins sending link status signal units (LSSU) with status of processor outage (SIPO) to the adjacent signaling point.

Caution: Maintenance personnel should use this command only to block MSUs from being sent to the system. Level 2 status remains in service, except when the link is an ATM high-speed signaling link.

Note: The signaling link's blocked status is not preserved across a card reboot.

Parameters

link (mandatory)

The signaling link defined on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified by the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
blk-slk:loc=2311:link=a
```

Dependencies

A card location that is valid and defined in the database must be specified.

No other action command can be in progress when this command is entered.

The card must contain signaling links.

The signaling link must be equipped in the database.

The card that contains the specified signaling link must be equipped in the specified card location.

The card in the specified card location cannot be a MUX card or the cards running the OAM application.

If the card in the specified location is running the IPLHC GPL, then the specified link must have an ipliml2 parameter value of *m2pa*.

This command is not valid for links belonging to proxy linksets.

This command is not valid for cards running the SS7IPGW, IPGWI, or IPGHC links.

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

The blk-slk command is not supported for links associated with J7 APCs.

Notes

The function of this command is the same as the `act-lpo` command.

This command generates a minor alarm. Refer to the *Maintenance Guide* for information on MRNs 0201 and 0208.

If this command is followed by the `init-card` command, the signaling link blockage is not preserved after the `init-card` command completes.

The *Installation Guide* provides an illustration of card locations.

If the `blk-slk` or `act-lpo` command is issued for an IPSG signaling link, then one of the following events occurs:

- IPSG-M2PA signaling link—MTP3 local processor outage is initiated.
- IPSG-M3UA signaling link—The link is prohibited from entering service by rejecting received AS-ACTIVE messages.

Output

`blk-slk:loc=2311:link=a`

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Local processor outage being set.
;
```

This example shows the output when no signaling link is defined for link A:

`blk-slk:loc=2312:link=a`

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Link is UNEQUIPPED in the database.
```

```
    Local processor outage being set.
;
```

This example shows the output when slot 55 in the card location is not valid:

`blk-slk:loc=2355:link=a`

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Command Rejected: Slot ID out of range
;
```

`blk-slk:loc=1101:port=a`

```
    tekelecstp 13-06-20 12:37:33 EST  45.0.0-64.56.0
    blk-slk:loc=1101:port=a
    Command entered at terminal #4.
E2810 Command Rejected: Command is not valid for ITU-N16 links.
```

Related Commands

canc-lpo, *rept-stat-slk*, *ublk-slk*

canc-alm-trns Cancel Alarm Transfer

Use this command to return all audible alarm indications to the local office.

Parameters

This command has no parameters.

Example

`canc-alm-trns`

Dependencies

No other action commands can be in progress when this command is entered.

Notes

The function of this command is the same as the `dact-alm-trns` command.

After this command is entered, the `rept-stat-alm` command can be entered to verify the status of the alarms.

Output

canc-alm-trns

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Alarms returned to Local Maintenance Center
    Command Completed.
;
```

Related Commands

act-alm-trns, *dact-alm-trns*, *rept-stat-cdt*, *rept-stat-clk*, *rept-stat-trbl*, *rls-alm*, *rtrv-obit*, *rtrv-trbl*

canc-cmd

Cancel Command

This command halts processing and output of the `copy-ext-stats`, `rept-imt-info`, `rept-stat-applsock`, `rept-stat-as`, `rept-stat-assoc`, `rept-stat-card`, `rept-stat-clk`, `rept-stat-dstn`, `rept-stat-ls`, `rept-stat-rte`, `rept-stat-slk`, `rept-stat-trbl`, `rtrv-appl-rtkey`, `rtrv-as`, `rtrv-assoc`, `rtrv-cmd`, `rtrv-dstn`, `rtrv-gta`, `rtrv-gtt`, `rtrv-lbp`, `rtrv-log`, `rtrv-ls`, `rtrv-map`, `rtrv-mrn`, `rtrv-obit`, `rtrv-rte`, `rtrv-scr-aftpc`, `rtrv-scr-blkdpc`, `rtrv-scr-blkopc`, `rtrv-scr-cdpa`, `rtrv-scr-cgpa`, `rtrv-scr-destfld`, `rtrv-scr-dpc`, `rtrv-scr-isup`, `rtrv-scr-opc`, `rtrv-scrset`, `rtrv-scr-sio`, `rtrv-scr-tt`, `rtrv-seculog`, `rtrv-secu-user`, `rtrv-slk`, `rtrv-tbl-capacity`, `rtrv-trbltx`, `rtrv-uaps`, `rtrv-vflx-cd`, `rtrv-vflx-rn`, `rtrv-vflx-vmsid`, commands.

The Basic command class allows use of this command without the trm parameter (`dact-cmd`); the Security Administration command class is required for use of this command when the trm parameter is specified (`dact-cmd:trm=x`).

Entering this command without the trm parameter executes the command on the terminal that is running the `canc-cmd` command. Entering the command with the trm parameter executes the command on the terminal specified by the trm parameter.

Parameters

trm (optional)

The terminal on which the command is to be canceled.

Range:

1 - 40

Example

`canc-cmd`

`canc-cmd:trm=3`

Dependencies

The trm parameter cannot be specified in a `canc-cmd` command that is entered on the same terminal that is running the command that is to be cancelled. The terminal will return an error: system is busy.

The `canc-cmd:trm=` command requires the Security Administration command class for the terminal and for the user.

The `canc-cmd:trm=` command requires a Security Administration command class for the terminal.

Notes

The `canc-cmd` command (without the trm parameter) must be entered on the same terminal that is running the command to be cancelled.

If this command is entered on a terminal that is not running a command, the command completes successfully without returning an error. Likewise, if the `canc-cmd:trm=` command is entered and there is no command running on the specified terminal, the command completes successfully without returning an error.

When `canc-cmd` with no parameter is entered, a scroll area message appears to indicate that the command has been cancelled. For example:

```
Command aborted on terminal 2.
```

Some output can still appear after the above abort message if output accumulated in the output queue before the command was entered. When a command is cancelled, the cancellation should take no longer than 25 seconds to take effect.

The **F9** function key provides the same function as this command without the trm parameter. On a terminal in KSR mode, pressing **<CTRL>I** also provides the same function.

This command and the **F9** function key cannot be used for pure SEAS commands.

If this command is entered to cancel a command other than ones listed, the terminal will accept another command, but output and processing of the current command continue.

When this command is entered, a command status code of *AB* (command aborted) is logged in the security log as follows:

- When `canc-cmd` (without the trm parameter) is entered, no entry is logged.
- When `canc-cmd:trm=` is entered, an entry is logged.
- When `canc-cmd` (without the trm parameter) is entered as a SEAS flow-thru command, an entry is logged. The `canc-cmd:trm=` command is not allowed as a SEAS flow-thru command because the `canc-cmd:trm=` command belongs to the Security Administration Command Class.

For examples of the security log entries, see the `rtrv-seculog` command.

Output

`canc-cmd`

```
rlghncxa03w 04-07-27 17:00:36 EST  EAGLE 31.6.0
canc-cmd
Command entered at terminal #2.
```

```
    rlghncxa03w 04-07-27 17:00:36 EST  EAGLE 31.6.0
    Command aborted on terminal 2.
;
```

Related Commands

copy-ext-stats, *rept-imt-info*, *rept-stat-applsock*, *rept-stat-as*, *rept-stat-assoc*, *rept-stat-card*, *rept-stat-clk*, *rept-stat-dstn*, *rept-stat-ls*, *rept-stat-rte*, *rept-stat-slk*, *rept-stat-trbl*, *rtrv-appl-rtkey*, *rtrv-as*, *rtrv-assoc*, *rtrv-cmd*, *rtrv-dstn*, *rtrv-gta*, *rtrv-gtt*, *rtrv-lbp*, *rtrv-log*, *rtrv-ls*, *rtrv-map*, *rtrv-mrn*, *rtrv-obit*, *rtrv-rte*, *rtrv-scr-aftpc*, *rtrv-scr-blkdpc*, *rtrv-scr-blkopc*, *rtrv-scr-cdpa*, *rtrv-scr-cgpa*, *rtrv-scr-destfld*, *rtrv-scr-dpc*, *rtrv-scr-isup*, *rtrv-scr-opc*, *rtrv-scrset*, *rtrv-scr-sio*, *rtrv-scr-tt*, *rtrv-seculog*, *rtrv-secu-user*, *rtrv-slk*, *rtrv-tbl-capacity*, *rtrv-trbltx*, *rtrv-uaps*, *rtrv-vflx-cd*, *rtrv-vflx-rn*, *rtrv-vflx-vmsid*

canc-dlk

Cancel Data Link

Use this command to remove an IP data link from service. The state of the link is changed from in service normal (IS-NR) to out of service maintenance disabled (OOS-MT-DSBLD).

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
canc-dlk:loc=1308
```

Dependencies

No other action command can be in progress when this command is entered.

The shelf and card must be equipped.

The card location must contain a STPLAN card.

The card location, frame, shelf, or slot must be within the allowed range.

The signaling link must be equipped in the database.

A card location that is valid and defined in the database must be specified.

Notes

None

Output

`canc-dlk:loc=1308`

```
    rlghncxa03w 04-01-27 17:00:36 EST  EAGLE 31.3.0
    Deactivate Link message sent to card.
    Command Completed.
;
```

Related Commands

act-dlk, *dlt-dlk*, *ent-dlk*, *rept-stat-dlk*, *rtrv-dlk*, *tst-dlk*

canc-echo

Cancel Echo

Use this command to halt the echoing of command responses from the user's terminal to other terminals or printers.

Parameters

trm (optional)

The ID number of the terminal for which the echo is being canceled.

Range:

1 - 16

Default:

Cancels all active echoes

Example

`canc-echo`

`canc-echo:trm=7`

Dependencies

The echo cannot be cancelled to the same terminal from which the `canc-echo` command is entered.

An `act-echo` command must be active at the specified terminal before this command can be entered to cancel the echo.

Notes

Only the echoing of command output responses can be halted by this command. To halt the printing of alarm and network messages, the `chg-trm` command must be used.

Output

`canc-echo`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    canc-echo
    Command entered at terminal #6.
    Scroll Area Output echo disabled to all terminals.
;
```

`canc-echo:trm=7`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    canc-echo:trm=7
    Command entered at terminal #6
    Scroll Area Output echo disabled for terminal 7.
;
```

Related Commands

act-echo, *alw-trm*, *chg-trm*, *dact-echo*, *inh-trm*, *rept-stat-trm*, *rmv-trm*, *rst-trm*, *rtrv-trm*

canc-lpo

Cancel Local Processor Outage

Use this command to cancel a processor outage and restore the link to its previous state. LSSUs with status of processor outage are terminated, and the link begins sending MSUs.

Note: The signaling link's blocked status is not preserved across a card reboot.

Parameters

link (mandatory)

The signaling link defined on the card specified in the *loc* parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The address of the card containing the signaling link to be unblocked.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
canc-lpo:loc=2311:link=b
```

Dependencies

A card location must be specified that is valid and defined in the database.

No other action command can be in progress when this command is entered.

The value specified for the loc parameter must refer to one of the following cards, and the referenced card must be equipped:

- E5-E1T1, E5-E1T1-B, or HC-MIM card running the SS7ANSI or CCS7ITU application
- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPLIM, IPLIMI, or IPSG application

This command cannot be entered for IPLIMx signaling links that have an ipliml2 parameter setting that is not *m2pa*.

The card must contain signaling links.

The signaling link must be equipped in the database.

This command is not valid for links belonging to proxy linksets.

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1*, *b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

canc-lpo command is not supported for links associated with J7 APCs.

This command is not valid for IPSG-M3UA signaling links.

Notes

The function of this command is the same as the `ublk-slk` command.

Unblocking a signaling link removes a Level 2 failure resulting from a `blk-slk` of an ATM high-speed signaling link.

The *Installation Guide* provides an illustration of card locations.

Output

```
canc-lpo:loc=2311:link=a
```

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Local processor outage being cleared.
;
```

In the following example, card location 1113 is not valid:

```
canc-lpo:loc=1113:link=a
```

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Command Rejected : Location is not valid for command
;
```

Related Commands

act-lpo, *blk-slk*, *ublk-slk*

canc-slk — Cancel Signaling Link

Use this command to change the state of the specified link to OOS-MT-DSBLD (Out-Of-Service Maintenance Disabled).

Caution: This command impacts network performance and should be used only during periods of low traffic.

Parameters

link (mandatory)

Signaling link defined on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
canc-slk:loc=1301:link=a
```

Dependencies

A card location must be specified that is valid and defined in the database.

No other action command can be in progress when this command is entered.

The card must contain signaling links.

The signaling link must be equipped in the database.

The card that contains the specified signaling link must be equipped in the specified card location.

The card in the specified card location cannot be a MUX card or the cards running the OAM application.

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1*, *b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

Notes

Not every card location represents a signaling link. Be sure to address a signaling link in this command.

The *Installation Guide* provides an illustration of card locations.

After this command is entered, the `rept-stat-slk` command can be entered to verify the cancellation.

Output

```
canc-slk:loc=1301:link=a
```

```
    rlghncxa03w 05-02-07 11:11:28 EST  EAGLE5 33.0.0
    Deactivate Link message sent to card
;
```

Related Commands

act-slk, *alw-slk* , *blk-slk*, *dact-slk*, *dlt-slk*, *ent-slk*, *inh-slk*, *rept-stat-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

canc-user

Cancel User

Use this command to end a user session.

Parameters

This command has no parameters.

Example

```
canc-user
```

Dependencies

None

Notes

The `dact-echo` or `logout` command can be used in place of this command.

Output

Not applicable.

Related Commands

act-user, *chg-pid*, *chg-user*, *dact-user*, *dlt-user*, *ent-user*, *login*, *logout*, *rept-stat-user*, *rtrv-secu-user*, *rtrv-user*

chg-acg-mic

Change ACG Manually Initiated Control

Use this command to change the values of ACG controls assigned to certain queries. The control can apply to all queries or to specific query services and called party digits. A particular control is selected to be changed by either specifying that it is the type=all control or specifying its service and digits.

Parameters

aintvl (optional)

AIN interval index

Range:

1 - 15

Default:

No change to the current value

dgts (optional)

Digits

Range:

000 - 999, 000000 - 9999999999

Specify 3 digits or 6-10 digits.

drtn (optional)

Duration index. The amount of time that the ACG is in effect. This number is mapped to a time value at the LNP node.

Range:

1 - 13

Default:

No change to the current value

intvl (optional)

Interval index. The amount of time between ACGs. This number is mapped to a time value for the LNP node.

Range:

0 - 15

Default:

No change to the current value

nd (optional)

New number of digits

Range:

3, 6 - 10

Default:

No change to the current value

serv (optional)

Query service

Range:

ain

in

type (optional)

Type of control

Range:

all

sd

Default:

sd

Example

To change the type=all MIC to use 3 digits:

```
chg-acg-mic:type=all:nd=3
```

To change the MIC for AIN queries for 919-460-2132 to use an interval index of 15:

```
chg-acg-mic:serv=ain:dgts=9194602132:aintvl=15
```

To change the MIC for IN queries for 919-xxx-xxxx to use a duration index of 9 and an interval index of 5:

```
chg-acg-mic:serv=in:dgts=919:drtn=9:intvl=5
```

Dependencies

If the type=all parameter is specified, then the nd, drtn, intvl, or aintvl parameter must be specified.

If the type=all parameter is specified, then the serv and dgts parameters cannot be specified.

If the type=sd parameter is specified, then the serv and dgts parameters must be specified.

If the type=sd parameter is specified, then the nd parameter cannot be specified.

If the serv=ain parameter is specified, then the drtn or aintvl parameter must be specified.

If the serv=ain parameter is specified, then the intvl parameter cannot be specified.

If the serv=in parameter is specified, then the drtn or intvl parameter must be specified.

If the serv=in parameter is specified, then the aintvl parameter cannot be specified.

The dgts parameter value must be either 3 digits in the range 000-999 or 6-10 digits in the range 000000-9999999999.

The nd parameter value must be 3 or 6-10 to indicate the number of new digits.

The LNP feature must be turned on before this command can be entered.

If the type=all parameter is specified, then a MIC with type=all must exist.

If the type=sd parameter is specified, then a MIC with the same service and digits must exist.

Notes

None

Output

```
chg-acg-mic:type=all:nd=31
```

```
    rlghncxa03w 04-01-28 08:50:12 EST  EAGLE 31.3.0
    ACG MIC table is (11 of 256) 4% full of type SD
    CHG-ACG-MIC: MASP A - COMPLTD
;
```

Related Commands

dlt-acg-mic, *ent-acg-mic*, *rept-stat-lnp*, *rtrv-acg-noc*

chg-acg-noc

Change ACG Node Overload Control

Use this command to change the definition of a node overload level. The definition is comprised of the threshold LNP query rates for node overload levels and the values for the automatic call gappings (ACG) to be sent when at the specified level.

Parameters

lvl (mandatory)

Overload level.

Range:

1 - 10

and (optional)

AIN number of digits. The number of digits in the global title address of an AIN query.

Range:

6, 10

Default:

No change to the current value

drtn (optional)

Duration index. The amount of time that the ACG is in effect. This number is mapped to a time value at the LNP node.

Range:

1 - 13

Default:

No change to the current value

ind (optional)

IN number of digits. The number of digits in the global title address of an IN query.

Range:

6, 10

Default:

No change to the current value

intvl (optional)

Interval index. The amount of time between ACGs. This number is mapped to a time value for the LNP node.

Range:

0 - 15

Default:

No change to the current value

qr (optional)

Query rate. The number of LNP queries, which define a particular overload level, in a 30-second period.

Range:

1 - 2147483647

Default:

No change to the current value

Example

To change level 10's query rate and AIN number of digits:

```
chg-acg-noc:lvl=10:qr=900000:and=6
```

To change level 3's duration and interval indexes:

```
chg-acg-noc:lvl=3:drtn=7:intvl=3
```

Dependencies

At least one optional parameter must be specified.

The and parameter value must be either 6 or 10.

The specified overload level must be defined.

The LNP feature must be turned on before this command can be entered.

The ind parameter value must be either 6 or 10.

Notes

None

Output

```
chg-acg-noc:lvl=10:qr=900000:and=6
```

```
    rlghncxa03w 03-02-28 08:50:12 EST  EAGLE 28.1.0
    CHG-ACG-NOC: MASP A - COMPLTD
;
```

Related Commands

dlt-acg-noc, *ent-acg-noc*, *rept-stat-lnp*, *rtrv-acg-noc*

chg-ainpopts

Change AINP Options Command

Use this command to provision AINPQ-specific data. This command updates the AINPOPTS table.

Parameters

Note: The nature of address indicator parameters (rnaiv or rnai) and numbering plan parameters (rnp or rnpv) can be specified using a mnemonic or an explicit value. The mnemonic and explicit values cannot be specified at the same time for the same parameter.

defrn (optional)

Default routing number. This parameter specifies a default routing number that is used for own-network subscribers.

Range:

1 - 15 digits, *none*

Default:

No change to the current value

System Default:

none

dialnai (optional)

Digits dialed nature of address indicator.

Range:

0

National

1

International

Default:

No change to the current value

System Default:

0

dialpfx (optional)

Dialed party number prefix.

Range:

1-15 digits

Valid digits are *0-9, A-F, a-f*

Default:

No change to the current value

System Default:

none

dltpfx (optional)

Delete prefix. This parameter specifies whether to delete the DIALPFX.

Range:

yes

no

Default:

No change to the current value

System Default:

no

ndialpfx (optional)

New dialed party number prefix.

Range:

1-15 digits, *none*

Valid digits are *0-9, a-f, A-F*

System Default:

none

nec (optional)

National Escape Code.

Range:

1-15 digits, *none*

Valid digits are *0-9, A-F, a-f*

Default:

No change to the current value

System Default:

none

rfmt (optional)

Routing address format. This parameter specifies the routing address format that is suported in the AINPQ "Return Result" response messages.

Range:

asdrn

ASD + RN

asdrndn

ASD + RN + [DIALPFX] + DN

asdrnnecdn

ASD + RN + [DIALPFX] + NEC + DN

asdrnccdn

ASD + RN + [DIALPFX] + CC + DN

ccasdrndn

[DIALPFX] + CC + ASD + RN + DN

ccgrndn

[DIALPFX] + CC + GRN + DN

ccrngrndn

[DIALPFX] + CC + RN + GRN + DN

ccgrnrndn

[DIALPFX] + CC + GRN + RN + DN

ccrndn

[DIALPFX] + CC + RN + DN

ccrnasddn

[DIALPFX] + CC + RN + ASD + DN

homerndn

Home Routing Number

grn

GRN

grndn

GRN + [DIALPFX] + DN

grnrndn

GRN + RN + [DIALPFX] + DN

grnrn

GRN + RN

grnrnccdn

GRN + RN + [DIALPFX] + CC + DN

grnrnnecdn

GRN + RN + [DIALPFX] + NEC + DN

rn

Routing Number

rnasd

RN + ASD

rnasddn

RN + ASD + [DIALPFX] + DN

rnasdccdn

RN + ASD + [DIALPFX] + CC + DN

rnasdnecdn

RN + ASD + [DIALPFX] + NEC + DN

rndn

RN + [DIALPFX] + DN

rngrn

RN + GRN

rngrndn

RN + GRN + [DIALPFX] + DN

rngrnccdn

RN + GRN + [DIALPFX] + CC + DN

rngrnnecdn

RN + GRN + [DIALPFX] + NEC + DN

rnnecdn

RN + [DIALPFX] + NEC + DN

Default:

No change to the current value

System Default:

rndn

rnai (optional)

Routing nature of address indicator

Range:

frmsg

NAI from the incoming message

intl

International number

natl

National significant number

Default:

No change to the current value

System Default:

frmsg

rnaiv (optional)

Routing nature of address indicator value

Range:

0

National

1

International

Default:

No change to the current value

System Default:

none

rnp (optional)

Routing numbering plan

Range:

e164

IS41 Telephony Number

e212

IS41 Land Mobile Number

priv

IS41 Private Number

unknown

IS41 Numbering Plan Unknown

Default:

No change to the current value

System Default:

e164

rnpv (optional)

Routing numbering plan value

Range:

0 - 15

Default:

No change to the current value

System Default:

2

snai (optional)

Service Nature of Address indicator.

Range:

sub

Subscriber Number

intl

International Number

natl

National Significant Number

none

NAI value none

unknown

Unknown NAI value

Default:

No change to the current value

System Default:

none

sporttype (optional)

Service Portability type. This parameter specifies whether Service Portability is performed for the associated feature.

Note: If Service Portability is performed, then the Service Portability prefix (RTDB 'GRN'entity id) is applied.

The S-Port feature must be enabled before this parameter can be specified. The S-Port feature must be turned on before any change to the parameter will impact the associated feature.

Range:

all

apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

gsm

apply Service Portability prefix for own-network GSM subscribers

is41

apply Service Portability prefix for own-network IS41 subscribers

none

Service Portability is not performed for the feature.

Default:

No change to the current value

System Default:

none

sprestype (optional)

SP response type. The type of message sent by the system if an NPREQ message is received, the DN digits match, and the HLR ID is present.

Range:

rrwdgts

The system sends a "Return Results with Digits" message.

rrwodgts

The system sends a "Return Results without Digits" message.

Default:

No change to the current value

System Default:

rrwodgts

Example

```
chg-ainpopts:rfmt=rn:rnp=e164:rnai=intl:dialpfx=fac:dltpfx=yes
```

```
chg-ainpopts:rfmt=rndn:rnp=e212:rnai=intl:dialpfx=fac:dltpfx=no
:dialnai=1:snai=natl
```

```
chg-ainpopts:rfmt=rngrnccdn:rnp=e164:rnai=intl:dialpfx=fac:dltpfx=yes
```

```
chg-ainpopts:sprestype=rrwdgts:rfmt=rnnecdn:nec=abcd1
```

```
chg-ainpopts:rfmt=rnnecdn:nec=abcd1
```

```
chg-ainpopts:rfmt=rnnecdn:nec=0
```

```
chg-ainpopts:rfmt=asdrnccdn:rnp=e164:rnai=intl:dialpfx=fac:dltpfx=yes
```

Dependencies

At least one optional parameter must be specified.

The rnp and rnpv parameters cannot be specified together in the command.

The rnai and rnaiv parameters cannot be specified together in the command.

If the ndialpfx or dltpfx parameter is specified, then the dialpfx parameter must be specified.

The dialpfx=none parameter cannot be specified.

If the ndialpfx=none parameter is specified, then the dltpfx parameter cannot be specified.

If the ndialpfx and dialpfx parameters are specified, then the value specified for the dialpfx parameter must already exist in the AINPOPTS table.

The value specified for the ndialpfx parameter cannot already exist in the AINPOPTS table.

A maximum of 2 Dialed Party Number Nature of Address values are allowed.

The dialnai and snai parameters must be specified together in the command.

If the snai=none parameter is specified, then the value specified for the dialnai parameter must already exist in the AINPOPTS table.

The National Escape Code (nec parameter) can contain between 1 and 5 digits. Otherwise the value is *none*.

A maximum of 40 Dialed Party Number Prefix values can be provisioned.

If the nec=none parameter is specified, then values of *asdrnnecdn*, *rnasdnecdn*, *rnnecdn*, *rngrnnecdn*, and *grnrnnecdn* cannot be specified for the rfmt parameter.

The S-Port feature must be enabled before the sporttype parameter can be specified.

The AINPQ feature must be enabled before this command can be entered.

Output

```
chg-ainpopts:rfmt=rnasd:nec=0
```

```
    tekelecstp 09-06-03 15:15:44 EST  EAGLE 41.1.0
    CHG-AINPOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-ainpopts

chg-aiqopts

Change AIQ Options

Use this command to provision AIQ specific data. This command updates the AIQOPTS table.

Parameters

digmaxlen (optional)

Maximum Length of Digit String. The maximum length of a digit string that is considered valid in the*Digits(Dialed)*field of an AnalyzedInformation query.

Range:

1 - 32

Default:

No change to the current value

System Default:

32

digminlen (optional)

Minimum Length of Digit String. The minimum length of a digit string that is considered valid in the*Digits(Dialed)*field of an AnalyzedInformation query.

Range:

1 - 32

Default:

No change to the current value

System Default:

1

pfx (optional)

Digit String. The digit string associated with a Trigger Type (value of trigtype parameter). The value specified for the pfx parameter is encoded in the response message.

Range:

1-21 digits, *none*

none —deletes the associated Trigger Type value

Default:

No change to the current value

System Default:

none

resfmt (optional)

Response format. The format of outgoing routing digits in the AnalyzedInformation response message.

Range:

pfxdn

the value specified for the pfx parameter + the incoming dialed digits

pfx

the value specified for the pfx parameter

Default:

No change to the current value

System Default:

pfxdn

respar (optional)

Response Digits. The TCAP field used to encode the AnalyzedInformation response message.

Range:

rtdigits

TCAP*RoutingDigits*field

digits

TCAP*Digits(Dialed)*field

Default:

No change to the current value

System Default:

rtdigits

tcaperr (optional)

TCAP Error Code. The TCAP error code used in a Return Error response.

Range:

129 - 255

- 129—UnrecognizedMIN
- 130—UnrecognizedESN
- 131—MIN/HLR Mismatch
- 132—OperationSequenceProblem
- 133—ResourceShortage
- 134—OperationNotSupported
- 135—TrunkUnavailable
- 136—ParameterError
- 137—SystemFailure
- 138—UnrecognizedParameterValue
- 139—FeatureInactive
- 140—MissingParameter
- 141-239—Reserved
- 240-255—Reserved for Protocol Extension

Default:

No change to the current value

System Default:

138

trigtype (optional)

TriggerType Value. An individual trigger used to specify an association between a trigger and a corresponding address digit string (value of pfx parameter).

A maximum of 20 trigtype - pfx entries are supported. The pfx digit string corresponding to the specified Trigger Type present in the Incoming AnalyzedInfo Query is encoded in the Response message.

Range:

0 - 255

Table 5: TRIGTYPE Parameter Values lists the mnemonic for each TRIGTYPE decimal value.

Example

This example specifies the provisioning of a Trigger Type – Prefix string pair:

```
chg-aiqopts:trigtype=2:pfx=65432
```

This example deletes an already provisioned Trigger Type:

```
chg-aiqopts:trigtype=2:pfx=none
```

This example specifies the digminlen-digmaxlen range (5-7):

```
chg-aiqopts:digminlen=5:digmaxlen=7
```

This example provisions the response parameter and response format:

```
chg-aiqopts:respar=rtdigits:resfmt=pfx
```

Dependencies

The ANSI41 AIQ feature must be enabled before this command can be entered.

The pfx and trigtype parameters must be specified together in the command.

The value specified for the digminlen parameter must be less than or equal to the value specified for the digmaxlen parameter.

A maximum of 20 trigtype - pfx entries can be specified in the AIQOPTS table.

A pfx - trigtype pair must be specified with a supported value for the trigtype parameter before the pfx=none parameter can be specified.

Notes

If the same value is specified for the digminlen and digmaxlen parameters, then only MSUs with dialed digits of the specified length are accepted for processing.

The value of the*Digits (Dialed)*length must be between the values specified for the digminlen and digmaxlen parameters.

A maximum of 20 pfx - trigtype pairs can be specified.

Table 5: TRIGTYPE Parameter Values lists the decimal value and mnemonic for each TRIGTYPE parameter value.

Table 5: TRIGTYPE Parameter Values

Decimal Value	Mnemonic	Decimal Value	Mnemonic
0	Unspecified.	24	Local_Call.
1	All_Calls.	25	Local_Toll_Call.
2	Double_Introducing_Star.	26	Non-Local_Toll_Call
3	Single_Introducing_Star.	27	World_Zone_Call.
4	Reserved [for Home_System_Feature_Code]	28	International_Call.

Decimal Value	Mnemonic	Decimal Value	Mnemonic
5	Double_Introducing_Pound.	29	Unrecognized_Number.
6	Single_Introducing_Pound.	30	Prior_Agreement.
7	Revertive_Call.	31	Specific_called_Party_Digit_String.
8	0_Digit.	32	Mobile_Termination.
9	1_Digit.	33	Advanced_Termination.
10	2_Digit.	34	Location.
11	3_Digit.	35-63	Reserved. Treat a reserved value the same as value 0, Unspecified.
12	4_Digit.	64	Terminating_Resource_Available.
13	5_Digit.	65	T_Busy.
14	6_Digit.	66	T_No_Answer.
15	7_Digit.	67	T_No_Page_Response.
16	8_Digit.	68	T_Unroutable.
17	9_Digit.	69-219	Reserved. Treat a reserved value the same as value 0, Unspecified.
18	10_Digit.	220	Reserved for TDP-R DP value.
19	11_Digit.	221	Reserved for TDP-N DP value.
20	12_Digit.	222	Reserved for EDP-R DP value.
21	13_Digit.	223	Reserved for EDP-N DP value.
22	14_Digit.	224-255	Reserved for TIA-41 protocol extension. If unknown, treat the same as value 0, Unspecified.
23	15_Digit.		

Output

```
chg-aiqopts:trigtype=2:pfx=65432:respar=rtdigits:tcaperr=135
```

```
    tekelecstp 09-12-03 12:40:16 EST  EAGLE 42.0.0
    CHG-AIQOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-aiqopts

chg-appl-rtkey

Change Static Routing Key Table Entries

Use this command to change static entries in the Routing Key table. Only one attribute can be changed at a time.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Note: See *Table 57: Valid CIC Ranges for SI and MSU Types* for valid CIC values for specified SI and MSU types.

cice (optional)

The end range of circuit identification codes assigned to the routing key. The cice and cics parameters identify the routing key to be changed.

Range:

0 - 4294967295

cics (optional)

The start range of circuit identification codes assigned to the routing key. The cics and cice parameters identify the routing key to be changed.

Range:

0 - 4294967295

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number--sub number area--main number area* (*un-sna-mna*).

Range:

un--000--127

sna--000--15

mna--000--31

ncics (optional)

The new start range of circuit identification codes assigned to the routing key. Specify the ncics and/or ncice parameter to change the range of the circuit identification codes assigned to the routing key.

Range:

0 - 4294967295

ncice (optional)

The new end range of circuit identification codes assigned to the routing key. Specify the ncice and/or ncics parameter to change the range of the circuit identification codes assigned to the routing key.

Range:

0 - 4294967295

nrcontext (optional)

This parameter modifies the routing context value assigned to this routing key.

Routing context is mandatory for routing keys associated with SUA Application Servers. Routing context is optional for routing keys associated with M3UA Application Servers.

An AS can be associated with only 1 routing key with routing context. An AS can be associated with multiple routing keys that do not contain routing context. An AS cannot be simultaneously assigned to a routing key with routing contexts and to routing keys without routing contexts.

Range:

0 - 4294967295

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Originating point code. Valid only (and required) if *si=4, 5*, or *13*.

opci (optional)

ITU international originating point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

opcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un--000--127

sna--000--15

mna--000--31

rcontext (optional)

This parameter specifies a routing key by its routing context when a routing key needs to be changed as an alternative to entering the dpc/si/ssn/opc/cics/cice/type parameters.

Split operations are invalid for routing keys with routing context.

Range:

0 - 4294967295

si (optional)

The service indicator.

Range:

0-15 or equivalent text values:

Number =Text—Description

0=snm—Signaling network management messages

1=regtest—Signaling network testing and maintenance regular

2=spltest—Signaling network testing and maintenance special

3= sccp —SCCP

4= tup —Telephone user part

5= isup —ISDN user part

13= qbicc

See *Table 57: Valid CIC Ranges for SI and MSU Types* and *Table 6: Valid Parameter Combinations for chg-appl-rtkey Routing Key Types* for valid si values in combination with other parameters.

split (optional)

The CIC value where the routing key with the specified CICS and CICE range will be split. The specified routing key is split into two entries with adjacent CIC ranges. The existing routing key retains the range of CICs that is lower than the split value. The value of split minus 1 is used as the end range for this entry. The range of CICs assigned to the original entry is the values of cics to split minus 1.

A new routing key entry is created with the high end of the original range. The split value is used as the start of the CIC range for this entry. The range of CICs assigned to the new entry is the values of split to cice.

This parameter is valid only if *si=4*, *5*, or *13* and is not valid with ncics or ncice. See *Table 57: Valid CIC Ranges for SI and MSU Types* and *Table 6: Valid Parameter Combinations for chg-appl-rtkey Routing Key Types*.

Range:

0 - 16363

ssn (optional)

Subsystem number.

Range:

0 - 255

type (optional)

Type of routing key.

Range:

full

default

partial

Default:

full

Example

```
chg-appl-rtkey:dpc=123-230-245:si=5:opc=123-230-244:cics=1:cice=100:split=50
chg-appl-rtkey:dpc=123-230-245:si=5:opc=123-230-244:cics=1:cice=50:ncice=100
chg-appl-rtkey:dpcn24=10-100-10:si=5:opcn24=10-100-11:cics=1:cice=100:ncice=200
chg-appl-rtkey:dpc=8-8-8:si=3:ssn=5:rcontext=500
chg-appl-rtkey:dpci=s-3-11-1:si=5:opci=s-4-11-1:cics=1:cice=1000:ncice=500
chg-appl-rtkey:rcontext=5:ncice=100
chg-appl-rtkey:rcontext=1:nrcontext=2
chg-appl-rtkey:dpcn16=121-10-15:si=5:opcn16=121-10-15:cics=1:cice=50:ncice=100
```

Dependencies

Optional parameters that must be specified with the `chg-appl-rtkey` command depend on the type of routing key being changed. See *Table 6: Valid Parameter Combinations for chg-appl-rtkey Routing Key Types* for valid parameter combinations.

For SS7IPGW and IPGWI applications running on E5-ENET or E5-ENET-B cards, there is a limit of 2500 routing keys in the system. The srkq parameter (see the `chg-sg-opts` command) limits the maximum number of static routing keys that can be provisioned with the `ent-appl-rtkey` command.

The subsystem number is mandatory and valid only when the si=3 (or sccp) parameter is specified; if the si parameter does not equal *3* (or sccp), the ssn parameter cannot be specified.

The value entered for the starting circuit identification code (cics) must be less than or equal to the value entered for the ending circuit identification code (cice).

The value entered for the new starting circuit identification code (ncics) must be less than or equal to the value entered for the new ending circuit identification code (ncice).

A circuit identification code range (cics to cice) cannot be specified that overlaps an existing routing key.

When si=4, 5, or 13 (or tup, isup, or qbicc), the opc, cics, and cice parameters are required. The opc, cics, and cice parameters can be specified only if si=4, 5, or 13.

The value entered for the split parameter must be greater than the value entered for the cics parameter and less than or equal to the value entered for the cice parameter.

The value entered for the ncics parameter must be less than or equal to the value entered for the cice parameter when the ncice parameter is not specified.

The value entered for the ncice parameter must be greater than or equal to the value entered for the cics parameter when the ncics parameter is not specified.

The si parameter must have a value of *4*, *5*, or *13* (or *tup*, *isup*, or *qbicc*) before the split, ncics, and ncice parameters can be specified.

A DPC/SI routing key must be specified when the DPC is ANSI and the si=4 parameter is specified (TUP is used only in an ITU network).

Table 57: Valid CIC Ranges for SI and MSU Types shows valid CIC values for SI types 4, 5, and 13.

Partial point codes are not allowed; no asterisks can be specified in the point codes in the command.

Mixed point code types are not allowed; opc and dpc types must match.

If the type=partial or type=default parameter is specified, then the split and resize parameters cannot be specified.

If the type=default parameter is specified, then the dpc, si, ssn, opc, cics, and cice parameters cannot be specified.

When the type=full parameter is specified, the dpc and si parameters must be specified.

The following types of partial routing keys are supported:

- DPC-SI-OPC (ignore CIC) can be used as a partial match key for CIC- based traffic.
- DPC-SI (ignore all other fields) can be used as a partial match key for CIC- based traffic or SCCP traffic.
- DPC only (ignore all other fields) can be used as a partial match for any type of traffic.
- SI only (ignore all other fields) can be used as a partial match for any type of traffic.

If the rcontext parameter is specified, then the split, ncics and ncice parameters cannot be specified.

The rcontext parameter must be specified for routing keys that are associated with SUA Application Servers.

The specified rcontext parameter value must already exist in the database.

If specified, the service indicator parameter must be si=3 for routing keys that are associated with SUA Application Servers.

An AS cannot be simultaneously assigned to a routing key with routing contexts and routing keys without routing context. To assign an M3UA or SUA association to multiple routing keys with routing context, the M3UA/SUA association must be assigned to more than one AS, and each AS must be assigned to a routing key with routing context.

The AS name and parameters specified for a routing key must use an address format that is valid for the adapter type assigned to the AS.

The routing context value should be unique.

Table 6: Valid Parameter Combinations for chg-appl-rtkey Routing Key Types

Action	dpc	si	ssn	opc	cics	cice	ncics	ncice	split	type
Split CIC Range	X	X		X	X	X			X	full
Re-size CIC Range	X	X		X	X	X	X	X		full
Socket Name Override (SI=ISUP or 5)	X	X		X	X	X				full
Socket Name Override (SI = SCCP or 3)	X	X	X							full
Socket Name Override (SI = not 3, 4, 5, or 13)	X	X								full
Socket Name Override (SI = 4, 5, or 13)	X	X		X						partial
Socket Name Override (SI = 3, 4, 5 or 13)	X	X								partial
Socket Name Override SI-only key		X								partial
Socket Name Override	X									partial

Action	dpc	si	ssn	opc	cics	cice	ncics	ncice	split	type
DPC-only key										
Socket Name Overrride Default key										default

The value of the nrcontext parameter cannot be changed for a routing key if the rcontext parameter has not been configured for that routing key.

The attributes that are required to change a routing key must be specified in the command.

J7 support feature must be enabled before the dpcn16/opcn16 parameter can be specified.

Notes

A routing key entry associates a routing key with a socket name or Application Server (AS) name.

The dpc, si, ssn, opc, cics, and cice parameters are used to identify the routing key to be changed.

The split, ncics, and ncice parameters are used to specify new values for the routing key.

The opc, cics, and cice parameters are not required for partial routing keys.

The cics, cice, ncice, ncice, and split parameters are required when si=4 and ITU DPCs (dpci, dpcn) are specified. These parameters are not valid when an ANSI DPC (dpc, dpca) is specified and si=4.

The following changes can be made for routing keys. Only one of these changes is allowed per command.

- A routing key can be split into two entries with adjacent CIC ranges. The resulting entries retain the socket associations of the original entry.
- The range of CICs assigned to a routing key can be changed as long as it does not overlap another routing key. The new entry retains the socket associations of the original entry.

Group codes are required for ITU-N point codes (DPCN/OPCN) when the Duplicate Point Code feature is turned on.

Routing context is a routing key parameter that uniquely identifies routing keys. Routing context is mandatory for routing keys associated with SUA Application Servers and optional for routing keys associated with M3UA Application Servers.

An AS cannot be simultaneously assigned to a routing key with routing contexts and routing keys without routing contexts.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

```
chg-appl-rtkey:dpc=123-230-245:si=3:ssn=250:nsname=socket5
```

```
    rlghncxa03w 04-01-28 08:50:12 EST  EAGLE 31.3.0
    CHG-APPL-RTKEY: MASP A - COMPLTD
;
```

Related Commands

dlt-appl-rtkey, *ent-appl-rtkey*, *rtrv-appl-rtkey*

chg-as

Change Application Server

Use this command to change the characteristics of an existing Application Server (AS).

Parameters

asname (mandatory)

Application Server name.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter.

mode (optional)

Traffic mode assigned to the AS.

Range:

loadshare

override

Default:

No change to the current value

System Default:

loadshare

tr (optional)

Recovery timer value for the AS in milliseconds.

Range:

10 - 2000

Default:

No change to the current value

System Default:

200

Example

```
chg-as:asname=asx:mode=override
```

Dependencies

The value specified for the asname parameter must already exist in the AS table.

Association connection parameters must be unique.

The connection state for all associations assigned to the AS must be open=no before the mode parameter can be changed.

Notes

By default, the AS recovery timer value is set to 200 ms when an AS is entered. This value can be changed at any time using the `chg-as` command. The new timer value will be used the next time the AS enters the AS-Pending state.

Output

```
chg-as:asname=asx:mode=override
```

```
    rlghncxa03w 04-01-17 15:35:05 EST  EAGLE 31.3.0
    CHG-AS: MASP A - COMPLTD
;
```

Related Commands

dlt-as, *ent-as*, *rept-stat-as*, *rtrv-as*

chg-assoc Change Association

Use this command to configure existing SCTP associations in the IPAPSOCK table.

Parameters

aname (mandatory)

Name assigned to this association (in the IPAPSOCK table).

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter.

adapter (optional)

Adapter layer for the association.

Range:

diam

m2pa

m3ua

sua

Default:

No change to the current value

System Default:

m3ua

alhost (optional)

Alternate local host name. This parameter configures the SCTP association as a multi-homed endpoint.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string of characters beginning with a letter and comprising up to 60 characters in length

Valid characters are *a–z*, *A–Z*, *0–9*, - (dash), . (period)

none —The alhost is not configured; the SCTP association is configured as a uni-homed endpoint.

alw (optional)

The parameter specifies whether the connection manager should allow or disallow the association to carry SS7 traffic.

Range:

yes

allow the association to carry SS7 traffic.

no

prohibit the association from carrying SS7 traffic.

Default:

No change to the current value

System Default:

no

bufsize (optional)

Association buffer size in Kilobytes.

Range:

8 - 400

cwmin (optional)

Minimum congestion window. The minimum and initial sizes, in bytes, of the association's congestion window.

Range:

1500 - 409600

Default:

No change to the current value

System Default:

3000

hbtimer (optional)

Heartbeat timer in milliseconds. The value of heartbeat interval at which heartbeat request should be sent.

Note: If the heartbeat timer value is not a multiple of 100, then its value will be set to the largest multiple of 100 that is less than the specified hbtimer value. For example, if the specified hbtimer value is 777, then its value would be set to 700.

Range:

500 - 10000

Default:

500

istrms (optional)

SCTP Inbound Stream Value. A 16-bit unsigned integer that defines the number of streams the sender allows the peer end to create in this association.

Range:

1 - 2

lhost (optional)

Local host name. The local host name as defined in the IP Host table.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string of characters beginning with a letter and comprising up to 60 characters in length.

Valid characters are *0-9*, *a-z*, *A-Z*, - (dash), . (period).

Default:

No change to the current value

link (optional)

Signaling link for the association.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

Default:

No change to the current value

lport (optional)

Local port. The SCTP port number for the local host.

Range:

1024 - 65535

Default:

No change to the current value

m2patset (optional)

M2PA timer set assigned to this association.

Range:

1 - 20

Default:

1

open (optional)

Connection state (open or closed) that the connection manager is to put the association in when the socket is operational.

The `chg-assoc` command allows initiation of SCTP graceful shutdown on a per association basis for IPSG M3UA associations or diameter connections (maintained in the DCONN table) . The `chg-assoc:open=no` command aborts the association and closes the diameter connection (if associated) unless graceful shutdown is provisioned (see the `chg-uaps` command). If provisioned, then SCTP graceful shutdown for an association occurs after execution of `chg-assoc:open=no`.

Range:

yes

The connection manager is to open the association if the association is operational.

no

The connection manager will not open the association.

Default:

No change to the current value

System Default:

no

ostrms (optional)

SCTP Outbound Stream Value. The 16-bit unsigned integer that defines the number of streams the sender wants to create in this association.

Range:

1 - 2

rhost (optional)

Remote host. The name of the remote host as defined in the IP Host table.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string of characters beginning with a letter and comprising up to 60 characters in length.

Valid characters are *a–z, A–Z, 0–9,* - (dash), . (period)

Default:

No change to the current value

rhosttype (optional)

Remote host type. This parameter specifies whether the remote host is a primary or alternate remote address.

Note: The alternate remote address is used for multi-homed remote hosts.

Range:

alternate

alternate remote address

primary

primary remote address

Default:

No change to the current value

System Default:

primary

rhostval (optional)

Remote host validation. The validation mode for the association when an SCTP INIT/INIT-ACK message is received.

Range:

match

accept the message if the message contains the primary remote host value and the alternate remote host value (if the alternate remote host is provisioned). If the alternate remote host is not provisioned, then accept the message if the message contains the primary remote host value. Reject the message if it contains any IP address other than that of the primary or alternate remote host.

The rules determining the use of the *relaxed* and *match* modes depend on multiple conditions, including whether an alternate remote host is provisioned. See *Table 8: Validation Rules for Association Establishment* for validation rules that are used to establish an association for the *relaxed* and *match* modes.

relaxed

accept the message if the IP address for the primary or alternate remote host matches the IP address, source IP address, or host name in the message

Default:

No change to the current value

System Default:

relaxed

rmax (optional)

Maximum retransmission timeout. The maximum value of the calculated retransmission timeout in milliseconds.

Range:

10 - 1000

Default:

No change to the current value

System Default:

800

rmin (optional)

Minimum retransmission timeout. The minimum value of the calculated retransmission timeout in milliseconds.

Range:

10 - 1000

Default:

No change to the current value

System Default:

120

rmode (optional)

Retransmission mode. The retransmission policy used when packet loss is detected.

Range:

lin

The Oracle Linear Retransmission Policy where each retransmission timeout value is the same as the initial transmission timeout, and only the slow start algorithm is used for congestion control.

rfc

Standard RFC 2960 algorithm in the retransmission delay doubles after each retransmission. The RFC 2960 standard for congestion control is also used.

Default:

No change to the current value

System Default:

lin

rport (optional)

Remote port. The SCTP port number for the remote host.

Range:

1024 - 65535

Default:

No change to the current value

rtimes (optional)

Maximum retransmission retries. The number of times a data retransmission will occur before closing the association.

Range:

1 - 12

Default:

No change to the current value

System Default:

10

rtxthr (optional)

Retransmission threshold. The value of the retransmission threshold to tune the IP Connection Excess Retransmits alarm.

Range:

0 - 65535

Default:

0

uaps (optional)

User adapter parameter set. The set used by the M3UA, SUA or M2PA associations for various timer and parameter values including False IP Connection Congestion Timer, UA Heartbeat Period Timer, UA Heartbeat Received Timer, ASP SNM options, ASP/AS Notifications, UA Serviceability options, and Payload Protocol Indicator byte order option.

Range:

1 - 10

ver (optional)

Version. The M2PA version supported by the association.

Note: The M2PA version is valid only for associations with the adapter=m2pa parameter specified.

Range:

d6

rfc

Example

```
chg-assoc:aname=a1:lhost=gw105.nc.tekelec.com:lport=1030:
rhost=gw100.nc.tekelec.com:rport=1030:open=yes:alw=yes:uaps=10
```

```
chg-assoc:aname=m3ua03:rtxthr=65535
```

```
chg-assoc:aname=a1:lhost=tek1.com:lport=1030:rport=1030:rhost=tek2.com:
rhostval=match:rhosttype=primary
```

```
chg-assoc:aname=a1:rhost=tek.com:rhostval=relaxed:rhosttype=alternate
```

```
chg-assoc:aname=assoc1:adapter=diam
```

```
chg-assoc:aname=a1:hbtimer=1000
```

Dependencies

At least one optional parameter must be specified.

The value specified for the aname parameter must already exist in the IPAPSOCK table.

An association's connection parameters (lhost, rhost, lport, rport) must be unique.

The connection state must be open=no to change the lhost, rhost, lport, rport, port, alhost, adapter, m2patset, istrms, ostrms, rmode, rmin, rmax, rtimes, cwmin, bufsize, and hbtimer parameters.

The lhost, lport, rhost, and rport parameters must be specified before the open=yes parameter can be specified. The aname parameter and at least one other optional parameter must be specified before the open=no parameter can be specified.

The value of the uaps parameter can be changed for an association if the open=yes parameter is specified.

The hostnames specified in the lhost and alhost parameters must refer to different IP addresses.

The hostnames specified in the lhost and alhost parameters must refer to IP addresses on the same IP card.

An association with an SUA or M3UA adapter cannot be specified as a local host on a card running the IPLIM or IPLIMI application.

An association with an M2PA adapter cannot be specified as a local host on a card running the SS7IPGW or IPGWI application.

An association with an SUA adapter cannot be specified as the local host on a card running the IPSG application.

The local host must have a signaling link assigned to its associated signaling link port before the open=yes parameter can be specified.

An association's lhost and alhost cannot be assigned to a card's Ethernet interface B.

The adapter layer cannot be changed for an association that is already associated with an Application Server (AS).

Before the local host can be changed, the new local host must have a signaling link assigned to its associated signaling link port.

Links A-A7 and B-B7 can be specified for an E5-ENET or E5-ENET-B card running the IPLIM or IPLIMI application.

The card location for the card associated with the lhost and alhost must exist in the IP Link table.

The allowed maximum is 1 association per signaling link on IPLIMx cards.

A maximum of 50 connections (association-to-AS assignments) can be specified per local host on IPGWx cards.

A maximum of 4000 connections (association-to-AS assignments + sockets) are allowed per system.

Table 7: Maximum IP Associations and Links shows the maximum number of associations and links for E5-ENET and E5-ENET-B cards.

Table 7: Maximum IP Associations and Links

GPL	Max # of Associations	Max # of Links
IPLHC	16	16
IPGHC	50	1
IPSG	32	32
DEIRHC	32	-

The rmin parameter value must be less than or equal to the rmax parameter value.

The cwmin parameter value must be less than or equal to the bufsize parameter value.

To assign an association on an IPLIMx card for a local host, the association must have an adapter parameter value that is the same as the ipliml2 setting of its assigned signaling link. An association having an adapter value of *m2pa* must be assigned to an IPLIM signaling link having an ipliml2 value of *m2pa*.

If the m2patset parameter is specified, the adapter=m2pa parameter must be specified.

The trade ratio states the quantity of associations to sockets that may be provisioned on a certain card, as follows:

- Trade Ratio = a:s
- Where: a=associations and s=sockets

The requested buffer size increase cannot exceed available buffer space on the card. Use the `rtrv-assoc` command with the aname, lhost, or alhost parameter to display used and total buffer space on the card.

The ver parameter can only be specified if the adapter=m2pa parameter is specified.

If the value specified for the lhost parameter indicates an IPSG card or DEIR card running the DEIRHC GPL, then the link parameter cannot be specified.

If an IPSG card is being used, and if the association is referenced by a signaling link, then new values cannot be specified for the lhost or adapter parameters.

An IPSG card or DEIR card can contain a maximum of 32 associations.

If the value specified for the aname parameter refers to an M3UA association on an IPSG card, then the alw parameter cannot be specified.

The value specified for the lhost parameter cannot change the local host for the association from an IPLIMx or IPGWx card to an IPSG card or from an IPSG card to an IPLIMx or IPGWx card.

The rhosttype=primary parameter must be specified before the rhosttype=alternate parameter can be specified.

If the rhosttype parameter is specified, then the rhost parameter must be specified.

The value specified for the alternate remote host cannot be the same as the value specified for the lhost, alhost, or rhost parameter in the same association.

The value specified for the rhost parameter cannot be the same as the value specified for the alternate remote host or for the lhost or alhost parameter in the same association.

The host name specified by the lhost parameter must exist in the IP Host table and must be provisioned as local to this EAGLE.

A valid value must be specified for the host parameter. If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

The ALHOST parameter must not be specified when the association has adapter of DIAM type.

Realm must be associated with the RHOST specified in the IPHOST table for diameter associations.

RHOST must be present in the IPHOST table.

The remote IP address (RHOST) must not exist in the IPLINK table.

RHOSTTYPE = alternate cannot be specified with diameter associations.

The local host name (lhost) parameter must be configured before the alternate local host name (alhost) parameter is configured.

The allowed maximum is 1 connection per signaling link on IPLIMx cards.

No two open associations can have the same value for the LHOST/LPORT parameters.

Notes

The command that is entered cannot exceed a total of 150 characters in length.

The IPAPSOCK table is used to associate the Local Host/Local Port to a Remote Host/Remote Port. This fully specifies the connection.

If the open=yes parameter is specified, the association's lhost and lport configuration must not match that of any open association.

If the card's application is IPLIM or IPLIMI, then the adapter parameter value and the ipliml2 value for the assigned signaling link must be *m2pa*.

An association with an adapter value of *m2pa* cannot be assigned to an SS7IPGW or IPGWI host.

For diameter associations (adapter=DIAM), realm must be associated with lhost and rhost parameters before open=yes parameter can be specified.

The alhost and link parameters are not allowed with diameter associations (adapter=DIAM).

The M2PA version is supported if the application is IPLIMx and the adapter=m2pa parameter is specified. When changing the association adapter type to *m2pa* and a version is not specified, the m2pa=rfc value is assigned by default.

Table 8: Validation Rules for Association Establishment shows the validation rules used to establish an association.

Table 8: Validation Rules for Association Establishment

RHOSTVAL	RHOST Configured	ARHOST Configured	Source Parameter in IP Header	IP Address List in INIT/INIT ACK	Host Name Address Present in INIT/INIT ACK
RELAXED	Y	N	RHOST	NA (1 or more IP addresses can be present, not necessarily match RHOST.)	N
RELAXED	Y	N	NA	RHOST (other IP addresses can also be present)	N
RELAXED	Y	N	RHOST	NA	RHOST
MATCH	Y	N	RHOST	N	N
MATCH	Y	N	RHOST	RHOST only (no additional addresses can be present)	N
MATCH	Y	N	RHOST	NA	RHOST only
RELAXED	Y	Y	RHOST or ARHOST	NA	N
RELAXED	Y	Y	NA	RHOST or ARHOST	N

RHOSTVAL	RHOST Configured	ARHOST Configured	Source Parameter in IP Header	IP Address List in INIT/INIT ACK	Host Name Address Present in INIT/INIT ACK
RELAXED	Y	Y	Same as Hostname	NA (Ignore any IP addresses present)	RHOST or ARHOST
MATCH	Y	Y	RHOST	ARHOST must be present. RHOST can also be present. No other additional addresses.	N
MATCH	Y	Y	ARHOST	RHOST must be present. ARHOST can also be present. No other additional addresses	N

Output

```
chg-assoc:aname=a1:lhost=gw105.nc.tekelec.com:lport=1030:rport=1030:
uaps=10:rhost=gw100.nc.tekelec.com:alw=yes:rhostval=match:rhosttype=primary
```

```
    rlghncxa03w 09-03-19 15:35:05 EST  EAGLE 41.0.0
    CHG-ASSOC: MASP A - COMPLTD
;
```

Related Commands

dlt-assoc, *ent-assoc*, *rept-stat-assoc*, *rtrv-assoc*

chg-atinpqopts

Change ATINP Options

Use this command to provision ATINP-specific data. This command updates the ATINPQOPTS table.

Parameters

atiackimsi (optional)

ATIACK IMSI parameter for ATI ACK response message. This parameter specifies formatting of IMSI digits in the ATI ACK response message. The result of formatting determines whether the IMSI parameter will be included in the response.

Range:

srfimsi

If an entity was found during RTDB lookup, and SRFIMSI was provisioned in the EPAP entity, then include the IMSI parameter and encode the IMSI digits as the SRFIMSI.

asd

If an entity was found during RTDB lookup and ASD (Additional Subscriber Data) was provisioned in the EPAP entity, then include the IMSI parameter and encode the IMSI digits as ASD.

grn

If an entity was found during RTDB lookup, and GRN (Generic Routing Number) was provisioned in the EPAP entity, then include the IMSI parameter and encode the IMSI digits as GRN.

none

Do not include the IMSI parameter in the response message.

Default:

none

atiackmsisdn (optional)

MSISDN parameter for ATI ACK response message. This parameter specifies the formatting of MSISDN parameter in the ATI ACK response message. The result of formatting determines whether the MSISDN parameter will be included in the response.

Range:

msisdn

Include the MSISDN parameter in the ATI ACK response and encode MSISDN digits as the MSISDN from the incoming ATI query.

asd

If an entity was found during RTDB lookup and ASD (Additional Subscriber Data) was provisioned in the entity, then include the MSISDN parameter and encode the MSISDN digits as ASD.

asddlmmsisdn

Include the MSISDN parameter in the ATI ACK response and encode MSISDN digits as ASD + delimiter (atidlm) + MSISDN. ASD is encoded if an entity is found and ASD is provisioned. The specified outbound message digits delimiter (atidlm) value is encoded if the value is not *none*. MSISDN is encoded as the MSISDN from the incoming ATI query.

grn

If an entity was found during RTDB lookup and GRN (Generic Routing Number) was provisioned in the EPAP entity, then include the IMSI parameter and encode the IMSI digits as GRN.

grndlmmsisdn

Include the MSISDN parameter in the ATI ACK response and encode MSISDN digits as GRN + delimiter (atidlm) + MSISDN. GRN is encoded if GRN entity is found. The specified outbound message digits delimiter (atidlm) value is encoded if the value is not *none*. MSISDN is encoded as the MSISDN from the incoming ATI query.

none

Do not include the MSISDN parameter in the response message.

Default:

msisdn

atiackrn (optional)

Routing number parameter for ATI ACK response message. This parameter specifies the formatting of the routing number parameter in the ATI ACK response message. The result of formatting determines whether the routing number parameter will be included in the response.

Range:

rn

Routing number.

- If an entity was found in RTDB lookup and the entity type was RN, include the routing number parameter and encode routing number digits as found in the entity ID.
- If MSISDN was found in RTDB lookup, but no entity was found and the default routing number parameter value (atidfltrn) is not *none*, include the routing number parameter and encode routing number digits as the atidfltrn value.
- If MSISDN was not found in RTDB lookup and the default routing number parameter value (atidfltrn) is not *none*, include the routing number parameter and encode routing number digits as the atidfltrn value.
- If an entity was found in RTDB lookup, the entity type is SP, and the atidfltrn value is not *none*, include the routing number parameter and encode routing number digits as the atidfltrn value.

rnsp

Routing number or signaling point.

- If an entity was found in RTDB lookup and the entity type was either SP or RN, include routing number parameter and encode routing number digits as found in the entity ID.
- If MSISDN was found in RTDB lookup but no entity was found and the default routing number parameter value (atidfltrn) is not *none*, include the routing number parameter and encode routing number digits as the atidfltrn value.
- If MSISDN was not found in RTDB lookup and the default routing number parameter value (atidfltrn) is not *none*, include the routing

number parameter and encode routing number digits as the atidfltrn value.

- If an entity was found in RTDB lookup and the entity type was not SP or RN and the default routing number parameter value (atidfltrn) is not *none*, include the routing number parameter and encode routing number digits as the atidfltrn Entity.

asddlmrnsp

ASD, delimiter and routing number or signaling point.

Format routing number digits as ASD (if supported and available from lookup entity) + atidlm (if not *none*) + entity digits (as described in the atiackrn=rnsp parameter).

- If this format results in 0 digits (no ASD, atidlm=none, and no entity digits), the routing number will not be included in the response message.
- If the formatting results only in the specified outbound message digits delimiter (atidlm) digits, the routing number parameter will not be encoded in the response.
- If no entity digits (atiackrn=rnsp) are found, the result is ASD + delimiter digits.

rnspdlmasd

Routing number or signaling point, delimiter, ASD

Format routing number digits as entity digits (as described in atiackrn=rnsp) + delimiter (if atidlm is not *none*) + ASD (if supported and available from lookup entity).

- If this formatting results in 0 digits (no ASD, atidlm=none, and no RN digits, the routing number will not be included in the response message.
- If the formatting results only in delimiter digits, the routing number will not be encoded in the response.
- If there are outbound message delimiter digits (the atidlm value is not *none*) and ASD digits are available, the delimiter will be included even if entity digits are not found (resulting in delimiter + ASD).

srfimsi

Encode routing number digits as SRFIMSI configured in the entity data.

If SRFIMSI was not found (MSISDN not found in RTDB lookup, or MSISDN found but no entity found, or entity found but SRFIMSI not configured) then the routing number will not be included in the response message.

srfimsidlmasd

SRFIMSI, delimiter, ASD

Encode routing number digits as SRFIMSI + delimiter (if atidlm is not *none*) + ASD (if supported and available from lookup entity). SRFIMSI is encoded as described in the atiackrn=srfimsi option.

- If this formatting results in 0 digits, the routing number parameter will not be included in the response message.
- If the formatting results only in delimiter digits, the routing number parameter will not be encoded in the response message.

asddlmsrfimsi

ASD, delimiter, SRFIMSI

Encode routing number as ASD (if supported and available from lookup entity) + delimiter (if atidlm is not *none*) + SRFIMSI(encoded as specified in the atiackrn=srfimsi parameter).

- If this format results in 0 digits, the routing number parameter will not be included in the response message.
- If the formatting results only in delimiter digits, the routing number parameter will not be encoded in the response.
- If the outbound message digits delimiter value (atidlm) is not *none* and ASD digits are available, the delimiter will be included even if SRFIMSI does not have any digits (resulting in ASD + delimiter).

grndlmrnsp

GRN, delimiter, Routing number or signaling point

Encode routing number as GRN (if supported and available from RTDB lookup) + delimiter (if atidlm is not *none*) + RNSP (encoded as specified in the atiackrn=rnsp parameter).

- If this format results in 0 digits, the routing number parameter will not be included in the response message.
- If the formatting results only in delimiter digits, the routing number parameter will not be encoded in the response.
- If the outbound message digits delimiter value (atidlm) is not *none* and GRN digits are available, the delimiter will be included even if RNSP does not have any digits (resulting in GRN + delimiter).

rnspdlmgrn

Routing number or signaling point, delimiter, GRN

Encode routing number as entity digits (as described in atiackrn=rnsp) + delimiter (if atidlm is not *none*) + GRN (if supported and available from RTDB lookup).

- If this format results in 0 digits, the routing number parameter will not be included in the response message.
- If the formatting results only in delimiter digits, the routing number parameter will not be encoded in the response.
- If the outbound message digits delimiter value (**atidlm**) is not**none**and GRN digits are available, the delimiter will be included even if RNSP does not have any digits (resulting in delimiter + GRN).

srfimsidlmgrn

SRFIMSI, delimiter, GRN

Encode routing number as SRFIMSI (encoded as specified in the atiackrn=srfimsi parameter) + delimiter (if atidlm is not *none*) + GRN (if supported and available from RTDB lookup).

- If this format results in 0 digits, the routing number parameter will not be included in the response message.
- If the formatting results only in delimiter digits, the routing number parameter will not be encoded in the response.
- If the outbound message digits delimiter value (atidlm) is not *none* and GRN digits are available, the delimiter will be included even if SRFIMSI does not have any digits (resulting in delimiter + GRN).

grndlmsrfimsi

GRN, delimiter, SRFIMSI

Encode routing number as GRN (if supported and available from RTDB lookup) + delimiter (if atidlm is not *none*) + SRFIMSI (encoded as specified in the atiackrn=srfimsi parameter).

- If this format results in 0 digits, the routing number parameter will not be included in the response message.
- If the formatting results only in delimiter digits, the routing number parameter will not be encoded in the response.
- If the outbound message digits delimiter value (atidlm) is not *none* and GRN digits are available, the delimiter will be included even if SRFIMSI does not have any digits (resulting in GRN + delimiter).

none

Do not include the Routing Number field in the response message.

Default:

rn

atiackvlrnum (optional)

The formatting of the VLR-number in the ATI ACK response message.

Range:

rn

routing number

- If an RN entity was found in RTDB lookup, the VLR-number is formatted as RN.
- If RN entity was found in RTDB lookup, the portability type is zero, and the S-Port feature is enabled or the IGM feature is on, the VLR-number is formatted as GRN (if provisioned).
- If MSISDN was found in RTDB lookup, no entity was found, and the atidfltrn value is not *none*, the VLR-number is formatted as the atidfltrn value.
- If MSISDN was not found in RTDB lookup, atinptype=always and the atidfltrn value is not *none*, the VLR-number is formatted as the atidfltrn value.

- If an SP entity was found in RTDB lookup, and the atidfltrn value is not none, the VLR-number is formatted as the atidfltrn value.
- If the format results in 0 digits (no entity digits), the VLR-number is formatted as the incoming MSISDN.

rnsp

Routing number or signaling point.

- If an RN or SP entity was found in RTDB lookup, the VLR-number is formatted as the entity ID.
- If MSISDN was found in RTDB lookup, no entity was found, and the atidfltrn value is not *none*, the VLR-number is formatted as the atidfltrn value.
- If MSISDN was not found in RTDB lookup, atinptype=always, and the atidfltrn value is not *none*, the VLR-number is formatted as the atidfltrn value.
- If an entity was found in RTDB lookup, the entity type was not RN or SP, and the atidfltrn value is not *none*, the VLR-number is formatted as the atidfltrn value.
- If the format results in 0 digits (no entity digits), the VLR-number is formatted as the incoming MSISDN.

asddlmrnsp

ASD, delimiter and routing number or signaling point.

Format the VLR-number as ASD (if provisioned) + atidlm (if not *none*) + entity digits (RN or SP).

- If the formatting results in 0 digits (no ASD, atidlm=none, and no entity digits), the VLR-number is formatted as the incoming MSISDN.
- If the formatting results only in atidlm digits, the VLR-number is formatted as the incoming MSISDN.
- If no entity digits are found, the VLR-number is formatted as ASD + delimiter digits.

rnspdlmasd

Routing number or signaling point, delimiter, ASD

- If the formatting results in 0 digits (no ASD, atidlm=none, and no RN digits), the VLR-number is formatted as the incoming MSISDN.
- If the formatting results only in delimiter digits, the VLR-number is formatted as the incoming MSISDN. If there are outbound message delimiter digits (the atidlm value is not *none*) and ASD digits are available, the delimiter is included even if entity digits are not found (resulting in delimiter + ASD).

srfimsi

Format the VLR-number as SRFIMSI configured in the entity data.

If SRFIMSI was not found (MSISDN not found in RTDB lookup, or MSISDN found but no entity found, or entity found but SRFIMSI not configured) then the VLR-number is formatted as the incoming MSISDN.

srfimsidlmasd

SRFIMSI, delimiter, ASD

Format the VLR-number as SRFIMSI + delimiter (if atidlm is not *none*) + ASD (if provisioned).

- If the formatting results in 0 digits, the VLR-number is formatted as the incoming MSISDN.
- If the formatting results only in delimiter digits, the VLR-number is formatted as the incoming MSISDN.

  If atidlm value is not *none* and ASD digits are available, the delimiter is included even if SRFIMSI does not have any digits (resulting in delimiter + ASD).

asddlmsrfimsi

ASD, delimiter, SRFIMSI

Format the VLR-number as ASD (if provisioned) + delimiter (if atidlm is not none) + SRFIMSI.

- If the formatting results in 0 digits, the VLR-number is formatted as the incoming MSISDN.
- If the formatting results only in delimiter digits, the VLR-number is formatted as the incoming MSISDN.

  If the atidlm value is not *none* and ASD digits are available, the delimiter is included even if SRFIMSI does not have any digits (resulting in ASD + delimiter).

grndlmrnsp

GRN, delimiter, Routing number or signaling point

Format VLR-number as GRN (if provisioned) + delimiter (if atidlm is not *none*) + entity digits (RN or SP).

- If the formatting results in 0 digits, the VLR-number is formatted as the incoming MSISDN.
- If the formatting results only in delimiter digits, the VLR-number is formatted as the incoming MSISDN.

  If the atidlm value is not *none* and GRN digits are available, the delimiter is included even if RNSP does not have any digits (resulting in GRN + delimiter).

rnspdlmgrn

Routing number or signaling point, delimiter, GRN

Format VLR-number as entity digits (RN or SP) + delimiter (if atidlm is not *none*) + GRN (if provisioned).

- If the formatting results in 0 digits, the VLR-number is formatted as the incoming MSISDN.
- If the formatting results only in delimiter digits, the VLR-number is formatted as the incoming MSISDN.

If the atidlm is not *none* and GRN digits are available, the delimiter is included even if RNSP does not have any digits (resulting in delimiter + GRN).

srfimsidlmgrn

SRFIMSI, delimiter, GRN

Format VLR-number as SRFIMSI + delimiter (if atidlm is not *none*) + GRN (if provisioned).

- If the formatting results in 0 digits, the VLR-number is formatted as the incoming MSISDN.
- If the formatting results only in delimiter digits, the VLR-number is formatted as the incoming MSISDN.

  If the atidlm is not *none* and GRN digits are available, the delimiter is included even if SRFIMSI does not have any digits (resulting in delimiter + GRN).

grndlmsrfimsi

GRN, delimiter, SRFIMSI

Format VLR-number as GRN (if provisioned) + delimiter (if atidlm is not *none*) + SRFIMSI.

- If the formatting results in 0 digits, the VLR-number is formatted as the incoming MSISDN.
- If the formatting results only in delimiter digits, the VLR-number is formatted as the incoming MSISDN.

  If the atidlm value is not *none* and GRN digits are available, the delimiter is included even if SRFIMSI does not have any digits (resulting in GRN + delimiter).

rnmsisdn

- If an RN entity was found in RTDB lookup, the VLR-number is formatted as RN + incoming MSISDN.
- If an SP entity was found in RTDB lookup, and the atidfltrn value is not *none*, the VLR-number is formatted as atidfltrn + incoming MSISDN
- If MSISDN was found in RTDB lookup, but no entity was found and the atidfltrn value is not *none*, then VLR-number is formatted as atidfltrn value + incoming MSISDN.
- If MSISDN was not found in RTDB lookup, atinptype=always, and the atidfltrn value is not *none*, the VLR-number is formatted as atidfltrn value + incoming MSISDN.
- If RN/PT=0 is found in RTDB lookup, the S-Port feature is enabled or the IGM feature is on, and the atidfltrn value is not *none*, the VLR-number is formatted as atidfltrn + incoming MSISDN. RN/PT=0 is treated as an SP entity.

rnspmsisdn

- If an RN or SP entity was found in RTDB lookup, the VLR-number is formatted as entity digits + incoming MSISDN.

- If MSISDN was found in RTDB lookup, but no entity was found and the atidfltrn value is not *none*, the VLR-number is formatted as atidfltrn value + incoming MSISDN.
- If an entity was found in RTDB lookup, the entity type was not RN or SP, and the atidfltrn value is not *none*, then the VLR-number is formatted as the atidfltrn value + incoming MSISDN.
- If MSISDN was not found in RTDB lookup, atinptype=always, and the atidfltrn value is not *none*, then the VLR-number in the ATI ACK response is formatted as atidfltrn value + incoming MSISDN.

msisdn

Format the VLR-number as incoming MSISDN

asd

Format the VLR-number in the ATI ACK message as ASD (if provisioned).

If the formatting results in 0 digits, the VLR-number is formatted as incoming MSISDN.

asdmsisdn

Format the VLR-number in the ATI ACK message as ASD (if provisioned) + incoming MSISDN.

Default:

rnspmsisdn

atidfltrn (optional)

Default Routing Number. The routing number to be used in outgoing message formats while encoding outgoing digit formats in the ATI ACK response in cases where an RN is not returned from an RTDB lookup.

Range:

1-15 digits, *none*

Valid digits are *0-9, A-F, a-f*

Default:

none

atidlm (optional)

Outbound message digits delimiter. This delimiter is used in outgoing message formats while encoding outbound digits in the ATI ACK response.

Range:

1-15 digits, *none*

Valid digits are *0-9, A-F, a-f*

Default:

none

atinptype (optional)

Number Portability Type. The criteria for a successful RTDB lookup.

Range:

any

MSISDN lookup is considered successful if any match is found (RN, SP, PublicDN, PrivateDN, match with no entity, or entity type is GRN or VMS and portability type is *none* (*0xff*)).

always

Lookup is always considered successful whether an MSISDN was found or not found in the RTDB.

Default:

any

entitylen (optional)

Entity Length. The maximum number of digits to be used from entity data (SRFIMSI or entity ID) in the specified encoding format.

Range:

1 - 15, none

none -SRFIMSI or entity ID is used without modification in the specified atiackrn parameter format.

Default:

none

off

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

atisupplocinfo

on

Disables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

atisupplocinfo

snai (optional)

Service NAI. The number conditioning that is performed on the MSISDN digits in the incoming ATI query message before RTDB lookup is performed.

Range:

intl

Number conditioning is not performed.

nat

The default country code (defined in the `chg-stpopts:defcc=` command) is pre-pended to the MSISDN before RTDB lookup.

nai

The NAI from the MSISDN in the incoming ATI query is used to perform number conditioning.. If the message NAI is International (0x1) or Network Specific Number (0x3), then no conditioning is performed. In all other cases, the default country code (defined in the `chg-stpopts:defcc=` command) is pre-pended to the MSISDN before RTDB lookup.

Default:

nai

sporttype (optional)

Service Portability type. The application of Service Portability that is applied to the associated feature.

The S-Port feature must be enabled before this parameter can be specified. The S-Port feature must be turned on before any change to the parameter will impact the associated feature.

If Service Portability is performed, then the Service Portability prefix (RTDB 'GRN' entity id) is applied.

Range:

gsm

apply Service Portability prefix for own-network GSM subscribers

is41

apply Service Portability prefix for own-network IS41 subscribers

all

apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

none

Service Portability is not performed for the feature.

Default:

No change to the current value

System Default:

none

vlrnumlen

The maximum number of digits that can be encoded as the VLR-number in ATI ACK message.

Range:

1-40

Default:

40

Example

This example specifies that the outbound message delimiter will not be used in outgoing message formats:

```
chg-atinpqopts:atidlm=none
```

This example specifies that the NAI of the incoming MSISDN digits will be considered to be National, and that the IMSI parameter will not be included in the ATI ACK response message:

```
chg-atinpqopts:snai=nai:atiackimsi=none
```

This example specifies that the lookup is always considered to be successful and that the NAI of the incoming MSISDN digits will be considered to be National:

```
chg-atinpqopts:atinptype=always:snai=nat
```

This example specifies that the Routing Number field will not be included in the response, and that the MSISDN in the ATI ACK response will be encoded as the ASD.

```
chg-atinpqopts:atiackrn=none:atiackmsisdn=asd
```

The example specifies that the Routing Number field will not be included in the response:

```
chg-atinpqopts:atiackrn=none
```

This example specifies that the IMSI and MSISDN in the ATI ACK response will be encoded as GRN:

```
chg-atinpqopts:atiackimsi=grn:atiackmsisdn=grn
```

This example specifies that the Location information request in ATI query is supported and the VLR-number in the ATI ACK response will be encoded as *rnspmsisdn* :

```
chg-atinpqopts:atiackvlrnum=rnspmsisdn:on=atisupplocinfo
```

Dependencies

At least one optional parameter must be specified.

The ATINP feature must be enabled before this command can be entered.

The Service Portability feature must be enabled before the sporttype parameter can be specified.

The same value cannot be specified for the on and off parameters.

Notes

To process an ATINP query with LocationInformation request:

- The ATINP feature must be turned on
- The on=atisupplocinfo parameter must be specified.

Output

```
chg-atinpqopts:atiackimsi=grn:atiackmsisdn=grndlmmsisdn:atiackrn=grndlmrnsp

    tekelecstp 09-06-05 12:40:16 EST  EAGLE 41.1.0
    CHG-ATINPQOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-atinpqopts

chg-atm-lps

Change ATM Link Parameter Set

Use this command to configure a link parameter set with timers and other parameters used by the system to provide level 2 functions for each ATM high-speed signaling link and to copy values from lpset *20* and *30*, as well as any lpset to another.

Parameters

Note: Unless specified, the system default values are meant for both ANSI (T1) and ITU (E1) standards.

lpset (mandatory)

Link parameter set being changed.

Note: Sets 1 -19 and 21 -29 can be configured. Link parameter sets 20 and 30 are not configurable and are used to contain the recommended default values for a set.

Range:

1 - 19, 21 - 29

Default:

1 for ANSI

21 for ITU

action (optional)

This parameter copies a set of ATM signaling link parameters from one set to another.

Range:

copy

Default:

No change to the current value

maxcc (optional)

Maximum number of transmissions of BGN, END, ER, or RS PDU.

Range:

1 - 10

Default:

4

maxnrp (optional)

Maximum number of retransmitted PDUs during proving.

Range:

0 - 10

Default:

1 for ANSI

0 for ITU

maxpd (optional)

Maximum number of SD PDUs that can be sent before a POLL is sent.

Range:

5 - 2120

Default:

500

maxstat (optional)

Maximum number of list elements in a STAT PDU.

Range:

3 - 67

Default:

67

n1 (optional)

Number of PDUs sent during proving.

Range:

500 - 64552

Default:

64552 for ANSI

1000 for ITU

nblk (optional)

Number of monitoring intervals per block.

Range:

1 - 10

Default:

3

srclpset (optional)

Source LPSET for a copy action.

Range:

1 - 30

tmrcc (optional)

Timer value, in milliseconds, used during the connection phase to guard against unacknowledged BGN, END, ER or RS PDUs.

Range:

100 - 2000

Default:

200

tmrerm (optional)

Error rate monitor interval, in milliseconds.

Range:

25 - 500

Default:

100

tmridle (optional)

Timer value, in milliseconds, used during the idle phase when no SD PDUs are being sent to limit time in the idle phase.

Range:

25 - 1000

Default:

100

tmrkalive (optional)

Timer value, in milliseconds, used during the transient phase when no SD PDUs are being sent to keep connection up.

Range:

25 - 500

Default:

100

tmrnocred (optional)

The timer, in milliseconds, used when the no credit exists and PDUs are available to be sent.

Range:

1000 - 6000

Default:

1500

tmrnorsp (optional)

Timer value, in milliseconds, used to check that STAT PDUs are arriving often enough.

Range:

500 - 2000

Default:

1500

tmrpoll (optional)

Timer value, in milliseconds, used to guarantee that POLL PDUs are sent often enough.

Range:

25 - 500

Default:

100

tmrprov (optional)

The timer, in milliseconds, used to monitor the status of a link after it is placed into service.

Range:

60000 - 1200000

Default:

60000

tmrsrec (optional)

Timer value, in milliseconds, used to prohibit closely spaced SSCOP recoveries from occurring.

Range:

60000 - 10800000

Default:

3600000

tmrt1 (optional)

Time, in milliseconds, between link release action and the next link reestablish action during alignment.

Range:

1000 - 15000

Default:

5000

tmrt2 (optional)

Total time, in milliseconds, that SSCF will attempt alignment.

Range:

15000 - 180000

Default:

120000 for ANSI

30000 for ITU (E1)

tmrt3 (optional)

Time, in microseconds, between proving PDUs.

Range:

450 - 23000

Default:

925

Example

```
chg-atm-lps:lpset=5:tmrprov=1000:tmridle=55
chg-atm-lps:lpset=3:srclpset=5:action=copy
```

Dependencies

The values in link parameter sets 20 and 30 are the system default values. They cannot be changed but can be copied to another link parameter set.

The same value cannot be specified for the lpset and srclpset parameters.

The action and srclpset parameters must be specified together.

If action=copy parameter is specified, only the lpset and scrlpset parameters can be specified.

At least one optional parameter must be specified.

Notes

If no parameter value for the lpset parameter is included when the `ent-slk` command is entered, the system default value of *1* is assigned for ANSI links and the system default value of *21* is assigned for ITU links.

All timer values for link parameter sets are initialized to the system default values.

Output

```
chg-atm-lps:lpset=5:tmrprov=1000:tmridle=55
```

```
   rlghncxa03w 04-01-05 16:40:40 EST  EAGLE 31.3.0
   CHG-ATM-LPS:  MASP A - COMPLTD
;
```

Related Commands

ent-slk, *rtrv-atm-lps*

chg-attr-seculog — Change the Security Log Characteristics

Use this command to modify attributes that affect the operation of the security logging feature.

Parameters

upldalm (optional)

Enable or disable log alarms that pertain to uploading of the security log.

Range:

yes

Enables log alarms pertaining to uploading of the log, as follows:

- Upload required
- Log overflowed
- Standby log contains greater than 0 un-uploaded entries

no

Prevents log alarms from being raised. If the alarm is already raised when *no* is specified, the alarm is lowered.

Default:

No change to the current value

upslg (optional)

Percent full threshold. The percent full threshold for the security logs. If the upldalm=yes parameter is specified, an alarm is raised for the security log when the *%full* field (see the `rept-stat-seculog` command) in the log, on the active OAM, reaches or exceeds the value specified for *upslg*. This alarm indicates that the administrator must upload the log.

Range:

1 - 99

Default:

No change to the current value

Example

```
chg-attr-seculog:upslg=80:upldalm=yes
```

Dependencies

At least one optional parameter must be specified.

Notes

None

Output

```
chg-attr-seculog:upslg=80:upldalm=yes
```

```
    rlghncxa03w 04-01-05 16:40:40 EST  EAGLE 31.3.0
    CHG-ATTR-SECULOG:  MASP B - COMPLTD
;
```

Related Commands

rtrv-attr-seculog

chg-card

Change Card

Use this command to:

- Change the configuration of a card in the database from an IPLIMx configuration to an IPSG configuration and from an E5-ENET to an E5-ENET-B card.
- Configure the type of EPAP data (DN or IMSI) that is loaded to an E5-SM4G or E5-SM8G-B card.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

data (optional)

Type of RTDB data that can be loaded on an E5-SM4G or E5-SM8G-B card.

Range:

dn

only DN related data from EPAP is loaded on the card

epap

all RTDB data from EPAP are loaded on the card

Note: The epap value can be specified only by Oracle personnel in a debug mode when EPAP Data Split feature is ON.

elap

ELAP data are loaded on the card.

gtt

Only OAM data are loaded on the card. This card will not load any ELAP or EPAP data at all.

imsi

only IMSI related data from EPAP is loaded on the card

nappl (optional)

The new application for the card.

Range:

xyyyyyyy

1 alphabetic character followed by up to 6 alphanumeric characters.

ipsg

Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA

type (optional)

This parameter specifies whether an E5-ENET card or an E5-ENET-B card is used to support the IPSG configuration.

Range:

enet

the IPSG configuration is supported on an E5-ENET card

enetb

the IPSG configuration is supported on an E5-ENET-B card

Example

```
chg-card:loc=1105:nappl=ipsg
chg-card:loc=1305:type=enetb
chg-card:loc=1201:data=imsi
```

Dependencies

The card location specified by the loc parameter cannot be 1113-1118, *xy*09, or *xy*10 where *x* is the frame and *y* is the shelf.

The specified shelf location must be provisioned and present in the frame.

The E5-ENET card must be inhibited and in an Out-of Service-state before the card can be changed.

Only M2PA associations can be configured for the IP link host address for the card indicated by the loc parameter value. M3UA IP associations are not supported.

If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

The resulting total TPS of all signaling links configured for an E5-ENET card cannot exceed 5000 TPS. The resulting total TPS of all signaling links configured for an E5-ENET-B card when the type=enetb parameter is specified cannot exceed 6500 TPS.

An E5-ENET card must be installed at the location indicated by the loc parameter.

The E5-ENET card must have a card type of DCM and must be running an IPLIMx application.

A value of ipsg must be specified for the nappl parameter.

The card in the location indicated by the loc parameter must already be equipped.

The value specified by the loc parameter must be within the allowed range.

The loc parameter must be specified.

All links on the E5-ENET card must have a matching association configured. For IPLIM-hosted associations and links, a link and association are matched using the link parameter for the `ent-slk` and `ent-assoc` commands. For IPSG-hosted associations, a link and association are matched using the aname parameter for the `ent-slk` command.

The nappl or type parameter must be specified.

If the EPAP Data Split feature is ON, the data=epap parameter can be specified only by Oracle personnel.

The EPAP Data Split feature must be turned on before the data parameter can be specified.

If the EPAP Data Split feature is ON, or Dual ExAP Config feature is enabled, and the value specified for the loc parameter indicates an E5-SM4G or E5-SM8G-B card, then the data parameter must be specified. The data parameter can be specified only for an E5-SM4G or E5-SM8G-B card running the VSCCP or SIPHC application.

If ELAP or EPAP is specified for the data parameter, the Dual ExAP Config feature must be enabled.

When data=gtt is specified either Dual ExAP Config must be enabled or EPAP Data Split feature must be turned ON.

When data=epap is specified Dual ExAP Config feature must be enabled and EPAP Data Split feature must be OFF.

The data=gtt parameter cannot be specified if an IP link has been configured for the card.

To provision card type=ENETB, the shelf FAN bit must be turned ON for the card's shelf.

Output

```
chg-card:loc=1206:nappl=ipsg
```

```
   rlghncxa03w 10-03-01 11:11:28 EST  EAGLE 42.0.0
```

```
   CHG-CARD: MASP A - COMPLTD
;
```

Related Commands

dlt-card, *ent-card*, *init-card*, *rept-stat-card*, *rmv-card*, *rst-card*, *rtrv-card*

chg-clkopts

Change Clock Options

Use this command to perform a software update of the clock elements and settings.

Parameters

clock (mandatory)

Clock to be updated.

Range:

all

all clocks

primary

primary clock

secondary

secondary clock

E5-TDM cards must be installed before a value of *primary* or *secondary* can be specified.

force (optional)

The force=yes parameter is used to change the hsclksrc parameter value when the TDMs are reporting that the high speed system clocks are currently valid.

Range:

yes

hsclkll (optional)

High speed master clock line length.

Range:

longhaul

Gain is high for long haul

shorthaul

Gain is low for short haul

Default:

No change to the current value

System Default:

longhaul

hsclksrc (optional)

High speed master clock source. The force=yes parameter must be specified with this parameter to change the clock source when the TDMs are reporting that the high speed system clocks are currently valid.

Caution: Changing the high speed master clock source can result in clock outage and loss of traffic on all links, if the new source type does not match the provisioned source for the E1 or T1 cards (what is actually plugged into the backplane).

Range:

e1framed

E1 Framed clock source

e1unframed

E1 Unframed clock source

rs422

RS-422 clock source

t1framed

T1 Framed clock source

t1unframed

T1 Unframed clock source

Default:

No change to the current value

System Default:

rs422

Example

```
chg-clkopts:clock=primary:hsclksrc=t1framed
chg-clkopts:clock=all:hsclksrc=rs422:force=yes
chg-clkopts:hsclkll=shorthaul:clock=secondary
```

Dependencies

The parameters entered are not compatible with the card where the clock resides.

If the hsclksrc and clock=all parameters are specified, and the high speed clocks are reporting, then the force=yes parameter must be specified.

Notes

Eagle Clocks with TDM-GTI

Figure 4: EAGLE Input and Internal Clocks with TDM-GTI shows a general schematic of clocking, without any of the redundant backup features, in the EAGLE with the TDM-GTI card. Low and high speed reference clocks can be plugged into the control shelf backplane as input clocks. The TDM card uses these input clocks as timing references to generate the low and high speed clocks that are distributed to the cards in the EAGLE STP. These distributed clocks are used for various purposes depending on what types of links or features are provisioned.

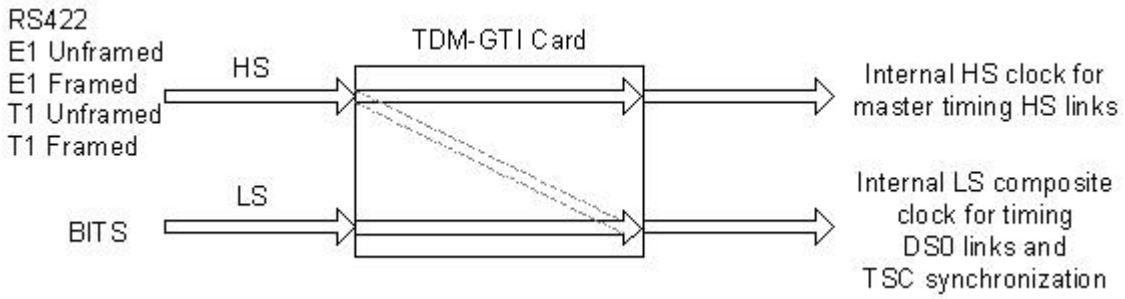

Figure 4: EAGLE Input and Internal Clocks with TDM-GTI

The high speed clock that is distributed to the cards in the EAGLE is used as the timing source only for high speed links that have been provisioned to use master timing. This clock can be derived only from the high speed input clock. Prior to TDM-GTI card, the high speed input clock could be only the RS422 type. The TDM-GTI card allows the clock to be recovered from a framed or unframed E1 or T1 signal interface.

The low speed composite clock that is distributed to the cards in the EAGLE is used for timing DS0 links and for the Time Slot Counter Synchronization (TSCSYNC) feature that is required for the Sentinel and IMF products. Prior to TDM-GTI this low speed clock could be generated only from a BITS clock source plugged into the control shelf backplane. TDM-GTI can generate this low speed internal clock from the high speed input clock source, with the following restriction:

- When DS0 cards are provisioned in the system, the internal low speed clock can be generated only from a BITS clock as it is without TDM-GTI.
- When no DS0 cards are present and the BITS clocks are present and valid, the internal low speed clock is generated from the BITS clocks.
- When no DS0 cards are present and the BITS clocks are not present or not valid, the internal low speed clock is generated from the high speed input clock.

Output

```
chg-clkopts:clock=primary:hsclksrc=t1framed
```

```
    e5oam 09-01-01 17:25:22 MST  EAGLE 40.1.0
    CHG-CLKOPTS: MASP B - COMPLTD
;
```

Related Commands

rtrv-clkopts

chg-cmd

Change Command Attributes

Use this command to change the attributes of a command.

Parameters

Note: All class(X) parameters consist of a configurable command class name (*ayy*), and indicator (*-yes* or-*no*) to specify whether the command class is allowed. A value of*ayy-yes* indicates that the value is allowed. A value of*ayy-no* indicates that the value is not allowed.

cmd (mandatory)

The command whose attributes are to be changed.

Range:

zzzzzzzzzzzzzzzzzzzz

One alphabetic character followed by up to 19 additional alphanumeric characters.

class1 (optional)

This parameter specifies a configurable command class name and indicator to indicate whether the command class is allowed.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters

Specify the parameter value in the format *ayy-no* or *ayy-yes*.

ayy-yes-command class is allowed

ayy-no-command class is not allowed

Default:

No change to current value

class2 (optional)

This parameter specifies a configurable command class name and indicator to indicate whether the command class is allowed.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters

Specify the parameter value in the format *ayy-no* or *ayy-yes*.

ayy-yes-command class is allowed

ayy-no-command class is not allowed

class3 (optional)

This parameter specifies a configurable command class name and indicator to indicate whether the command class is allowed.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters

Specify the parameter value in the format *ayy-no* or *ayy-yes*.

ayy-yes-command class is allowed

ayy-no-command class is not allowed

class4 (optional)

This parameter specifies a configurable command class name and indicator to indicate whether the command class is allowed.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters

Specify the parameter value in the format *ayy-no* or *ayy-yes*.

ayy-yes-command class is allowed

ayy-no-command class is not allowed

class5 (optional)

This parameter specifies a configurable command class name and indicator to indicate whether the command class is allowed.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters

Specify the parameter value in the format *ayy-no* or *ayy-yes*.

ayy-yes-command class is allowed

ayy-no-command class is not allowed

class6 (optional)

This parameter specifies a configurable command class name and indicator to indicate whether the command class is allowed.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters

Specify the parameter value in the format *ayy-no* or *ayy-yes*.

class7 (optional)

This parameter specifies a configurable command class name and indicator to indicate whether the command class is allowed.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters

Specify the parameter value in the format *ayy-no* or *ayy-yes*.

ayy-yes-command class is allowed

ayy-no-command class is not allowed

class8 (optional)

This parameter specifies a configurable command class name and indicator to indicate whether the command class is allowed.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters

Specify the parameter value in the format *ayy-no* or *ayy-yes*.

ayy-yes-command class is allowed

ayy-no-command class is not allowed

Example

```
chg-cmd:cmd=ent-rte:class1=u11-yes
chg-cmd:cmd=rept-stat-slk:class7=dab-no
```

Dependencies

At least one optional parameter must be specified.

The Command Class Management feature must be enabled before this command can be entered.

The cmd parameter value must be a valid system command.

The class1 - class8 parameter values must be valid default or provisioned configurable command class names.

The `login` command is available to all users and therefore cannot be assigned to a configurable class. If the `login` command is used as a parameter, it will be rejected.

Notes

Up to 8 configurable command class names can be specified in one command. More than 8 command classes can be updated by entering additional commands. To update all 32 available configurable command classes, you could enter 4 commands with 8 command classes specified in each command.

Output

```
chg-cmd:cmd=ent-rte:class1=u11-yes
```

```
    rlghncxa03w 04-01-05 16:40:40 EST  EAGLE 31.3.0
    CHG-CMD:  MASP B - COMPLTD
;
```

Related Commands

rtrv-cmd

chg-cmdclass

Change Command Class:

Use this command to change the name or description of a configurable command class.

Parameters

class (mandatory)

This parameter specifies the configurable command class name.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters (*ayy*)

descr (optional)

This parameter specifies the new configurable command class description.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

1 alphabetic character followed by up to 31 alphanumeric characters

Default:

No change to current value

nclass (optional)

This parameter specifies the new configurable command class name.

Range:

ayy

1 alphabetic character followed by 2 alphanumeric characters (*ayy*)

Default:

No change to current value

Example

```
chg-cmdclass:class=abc:descr=”my command class description”
chg-cmdclass:class=u23:nclass=dab:descr=”his command class description”
chg-cmdclass:class=dab:nclass=krb
```

Dependencies

At least one optional parameter must be specified.

The Command Class Management feature must be enabled and turned on before this command can be entered.

The class parameter value must be a valid configurable command class name (one of the default configurable command class names or a user-defined command class name).

The value specified for the nclass parameter cannot be the same as an existing configurable or non-configurable command class name.

Notes

None

Output

```
chg-cmdclass:class=abc:descr=”my command class description”
```

```
    rlghncxa03w 04-01-05 16:40:40 EST  EAGLE 31.3.0
    CHG-CMDCLASS:  MASP B - COMPLTD
;
```

Related Commands

rtrv-cmdclass

chg-csl

Change Common Screening List

Use this command to change an existing entry in the Common Screening List (CSL). The Common Screening List commands are used to tailor certain types of general screening information to specific features.

Parameters

ds (optional)

Digit string. A unique string of digits used by the specified screening feature

Range:

1 - 15 hexadecimal digits.

Valid digits are *0-9, a-f, A-F*

- 1-6 digits—Prepaid IDP Query Relay *ccnc* list
- 1-15 digits—Prepaid IDP Query Relay *gt* list
- 1-10 digits—Prepaid IDP Query Relay *skbcsm* list
- 4 digits—IDP Screening for Prepaid *skts* list
- 1-15 digits—IDP Screening for Prepaid *insl* list
- 1-15 digits—VFLEX *vmpfx* list
- 1-6 digits—Info Analyzed Relay Base *ccnc* list
- 1-15 digits—Info Analyzed Relay Base *gt* list
- 2 digits—Info Analyzed Relay Base *trig* list
- 1-15 digits — EIR *imsipfx* list

Table 27: TRIGTYPE Hexadecimal Codes lists valid hexadecimal values for the Info Analyzed Relay Base *trig* list *ds* entries.

feature (optional)

Feature name. The name of the enabled screening feature for which the command is entered.

Note: The pn or feature parameter must be specified to identify the feature.

Range:

*a*zzzzzzzzzzzzzzzzzzzzzzzz

1 alphabetic character followed by up to 24 optional alphanumeric characters, including spaces and special characters, enclosed in double quotation marks (" ").

Enter enough of the feature name to make the name unique if two features begin with the same word or acronym. The following feature names are valid for this command:

- EIR
- IDP Screening for Prepaid
- IDP Service Key Routing
- Info Analyzed Relay Base
- Prepaid IDP Query Relay
- SIP Number Portability
- VFLEX

list (optional)

Common Screening List associated with the feature.

Range:

ccnc

CC+NC List

delpfx

Delete Prefix List

gt

Global Title List

imsipfx

IMSI Screening Prefix List

insl

In Network Subscriber List

npbypass

SIP NPBYPASS list

skbcsm

SK+BCSM List

skts

SK+TS List

trig

Trigger List

vmpfx

Voice Mail Prefix LIst

The following screening lists are valid for the indicated features:

- *ccnc*, *gt*— Prepaid IDP Query Relay, Info Analyzed Relay Base
- *imsipfx*— EIR

  Note: If list argument is not specified in this command for EIR feature then list = imsipfx by default is taken.

- *npbypass*— SIP Number Portability
- *skbcsm*—Prepaid IDP Query Relay and IDP Service Key Routing
- *skts*, *insl*—IDP Screening for Prepaid
- *trig*—Info Analyzed Relay Base
- *vmpfx*—VFLEX

The *delpfx* list is not supported at this time. This list should only be used by Oracle personnel.

p1 (optional)

Parameter Value 1. This parameter is specific to the feature and list that use the parameter.

Range:

zzzzzzzzzz

Valid values for the IDP Service Key Routing feature are:

- *3* or *prepaid1*—Prepaid Portability Type 3 for the SKBCSM list
- *4* or *prepaid2*—Prepaid Portability Type 4 for the SKBCSM list
- *6-35* or *prepaid3-prepaid32*—Prepaid Portability Types 6 through 35 for the SKBCSM list

- *255* or *prepaidno*—No Prepaid Portability Type for the SKBCSM list

Valid values for EIR feature are:

- *1* or *range*— Check only range IMEI table for the IMSIPFX list
- *2* or individual — Check only individual IMEI table for the IMSIPFX list
- *3* or both --- Check individual IMEI table first and then range table for the IMSIPFX list
- *4* or none --- No check in either Individual IMEI Table or Range IMEI Table for the IMSIPFX list.

Valid values for the Prepaid IDP Query Relay feature are:

- *0, 1*—National or International for the DELPFX list, which is for Tekelec personnel use ONLY.

  Note: The p1 parameter is used by the IDP Service Key Routing feature or EIR feature.

Default:

No change to the current value

p2 (optional)

Parameter Value 2. The IDP Relay Service that is associated with an SKBCSM list DS entry. Multiple IDP Relay Services can be provisioned for use with NPP or Response Type for EIR feature that is associated with an imsipfx list DS Entry.

The parameter value can be entered as a number or as the corresponding mnemonic.

Range:

zzzzzzzzzz

Valid values for Prepaid IDP Query Relay features are:

- *1* or *idprcdpn*—IDPRCDPN Service for the SKBCSM list
- *2* or *idprcdpn2*—IDPRCDPN2 Service for the SKBCSM list
- *3* or *idprcdpn3*—IDPRCDPN3 Service for the SKBCSM list
- *4* or *idprcdpn4*—IDPRCDPN4 Service for the SKBCSM list

Valid values for EIR feature are:

- *1* or *whitelist* ---- Response Type as Whitelist for imsipfx list.
- *2* or *graylist* ---- Response Type as Graylist for imsipfx list.
- *3* or *blacklist* ---- Response Type as Blacklist for imsipfx list.
- *4* or *unknown* ---- Response Type as Unknown for imsipfx list.

Note: The p2 parameter is used by the Prepaid IDP Query Relay feature or EIR feature.

Default:

No change to the current value

p3 (optional)

Parameter Value 3. The parameter value is specific to the feature and list name that use this parameter. No feature currently uses this parameter.

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster me*mber (*ni-nc-ncm*).

Synonym:

pca

pc/pca/pci/pcn/pcn24 (optional)

Point code. The ds parameter or a point code parameter must be specified.

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and example.

pci (optional)

ITU international point code with subfields *zone-area-id*.

pcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

pfxstrip (optional)

This parameter in NPBYPASS list indicates whether matched prefix must be deleted or not.

Range:

yes

no

Default:

no

pn (optional)

Part Number. The 9-digit "893xxxxxx" part number of the feature for which the command is entered. The `rtrv-ctrl-feat` command description shows the part number in the command output example.

Note: The pn or feature parameter must be specified to identify the feature.

Range:

893000000 - 893999999

The first 3 digits are *893*. Do not separate the digits with dashes or spaces. The following part numbers are valid for this command:

- *893012301* --- EIR
- *893015501*—IDP Screening for Prepaid

- *893016001*—Prepaid IDP Query Relay
- *893016701*—VFLEX
- *893034201*—Info Analyzed Relay Base
- *893040601*— SIP Number Portability

scpgta (optional)

Signaling Control Point (SCP) Global Title Address (GTA). The value used by the SKGTARTG Service Action in IDP Relay IDPRCDPN(X) NPP Services to replace the SCCP CdPA GTA in the outgoing message.

Range:

1 - 21 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*.

none-Removes the provisioned digit string

Note: The scpgta parameter is used by the Prepaid IDP Query Relay feature.

Default:

No change to the current value

Example

```
chg-csl:feature="IDP Screening for Prepaid":list=insl:ds=123456789bcdEF
chg-csl:feature="VFLEX":list=vmpfx:ds=123456789abcdEF
chg-csl:feature="Prepaid IDP Query
Relay":list=skbcsm:ds=0000000056:p2=idprcdpn4:scpgta=abce9875
chg-csl:pn=893040601:list=npbypass:ds=0000046:pfxstrip=yes
chg-csl:feature="SIP NUMBER PORTABILITY":list=npbypass:ds=000036:pfxstrip=no
chg-csl:feature="EIR":list=imsipfx:ds=401134134:p1=range:p2=whitelist
```

Dependencies

An enabled feature must be specified using a valid part number (pn) or feature name (feature). The specified feature must use a Common Screening List.

The feature that is specified by the feature parameter must already be enabled.

The list parameter must be specified for features that use more than one type of screening list.

The value specified for the list parameter must be valid for the specified screening feature.

The specified screening list entry must exist in the screening list that is used by the feature.

The length of the digit string that is specified for the ds parameter must be valid for the screening feature and list type.

A valid ds parameter value is required for the specified feature and list type.

The following parameters are allowed with the indicated common screening list type:

- list=gt—ds parameter
- list=ccnc—ds parameter
- list=skbcsm—ds and scpgta parameters
- list=skts—ds parameter
- list=insl—ds parameter
- list=vmpfx—ds parameter
- list=trig—ds parameter
- list=imsipfx--- ds parameter

The leading digit pattern of the value specified for the ds parameter must be unique in the specified screening list for the indicated feature.

The pc or ds parameter must be specified. The parameters cannot be specified together in the command.

The value specified for the feature parameter must be valid feature name for a feature that uses a Common Screening List. The feature name must be specified as it appears in the `rtrv-ctrl-feat` command output. Enough of the name must be specified to make the name unique when two features begin with the same word or acronym.

The scpgta and pc parameters cannot be specified together in the command.

If the scpgta parameter is specified, then the ds parameter must be specified.

A valid p1 and p2 parameter value is required for the specified feature and list type.

The SIPNP feature must be enabled before changing NP prefix entries for the NPBYPASS list.

PFXSTRIP must be changed when the list specified is NPBYPASS with the SIPNP Feature.

The DS (Digit String) must be between 1 - 15 digits in length for SIPNP Feature

Notes

None

Output

```
chg-csl:pn="Prepaid IDP Query
Relay":list=skbcsm:ds=0000000056:p2=idprcdpn4:scpgta=abce9875
```

```
    tekelecstp 10-10-20 14:46:49 EST  EAGLE 43.0.0
    SK+BCSM List (   7 of 150) 5%
    CHG-CSL: MASP A - COMPLTD
;
```

```
chg-csl:feature="SIP Number
Portability":list=npbypass:ds=0000000034:pfxstrip=yes
```

```
tekelecstp 12-06-25 15:29:14 EST EAGLE 45.0.0
chg-csl:feature="SIP Number Portability":list=npbypass:ds=0000000034:pfxstrip=yes
Command entered at terminal #4.
PFX List ( 2 of 1000) 1%
CHG-CSL: MASP A- COMPLTD
;
```

```
chg-csl:pn=893040601:list=npbypass:ds=0000000056:pfxstrip=yes
```

```
tekelecstp 12-06-025 15:29:14 EST EAGLE 45.0.0
chg-csl:pn=893040601:list=npbypass:ds=0000000056:pfxstrip=yes
Command entered at terminal #4.
PFX List (3 or 1000) 1%
CHG-CSL: MASP A-COMPLTD
;
```

Related Commands

dlt-csl, *ent-csl*, *rtrv-csl*, *rtrv-ctrl-feat*

chg-ctrl-feat

Change Controlled Feature

Use this command for controlled features that have been enabled with the `enable-ctrl-feat` command to turn on or turn off On/Off features and to turn on Permanently On features (cannot be turned off after they have been turned on)

Use this command when the system station shows an expired temporary key and the administrator wants to clear the CRITICAL system alarm without enabling a permanent Feature Access Key.

Parameters

partnum (mandatory)

Part number. The part number for the feature.

Range:

893000000 - 893999999

Do not include dashes in the 9-digit number.

alarm (optional)

Clears alarms when temporary feature keys have expired.

Range:

clear

status (optional)

Changes the operational status of the feature.

Range:

on

off

Default:

No change in current status

Example

```
chg-ctrl-feat:partnum=893xxxxxx:status=on
chg-ctrl-feat:partnum=893xxxxxx:alarm=clear
```

Dependencies

The controlled feature specified by the partnum parameter must be enabled (see the `enable-ctrl-feat` command) before this command can be entered.

One of the optional parameters, but not both, must be specified in the command.

To use this command to turn off a feature, the Part Number specified in the command must be for one of the following On/Off features that is currently on. (A Permanently On feature is turned on with this command; after the feature has been turned on, it cannot be turned off with this command):

- 893018001 1100 TPS/DSM for ITU NP
- 893022101 ATI Number Portability Query (ATINP)
- 893017601 Circ Route Auto-Recovery
- 893005801 Command Class Management
- 893400001 EAGLE OA&M IP Security
- 893018101 Enhanced Far-End Loopback
- 893015401 Flexible GTT Load Sharing (FGTTLS)
- 893027401 GTT Load Sharing with Alternate Routing Indicator (GTT LS ARI)
- 893020101 HIPR2 High Rate Mode
- 893025701 IDPR ASD
- 893025601 IDPR GRN
- 893035001 Info Analyzed Relay ASD
- 893035101 Info Analyzed Relay GRN
- 893026101 Info Analyzed Relay NP
- 893038901 Integrated GLS
- 893006901 Intermediate GTT Load Sharing (IGTTLS)
- 893005701 IP User Interface (Telnet)
- 893018401 Large BICC MSU Support for IP Signaling
- 893006601 LNP Short Message Service (LNP SMS)
- 893007001 MNP Circular Route Prevention
- 893026701 MO SMS ASD
- 893024601 MO SMS B-Party Routing
- 893026601 MO SMS GRN
- 893026201 MO SMS IS41-to-GSM Migration
- 893013501 MTP Map Screening
- 893009101 Network Security Enhancement
- 893039301 NPP Unlimited SDWC Characters
- 893009301 Portability Check for Mobile Originated SMS
- 893006701 Prepaid SMS Intercept Phase 1 (PPSMS)
- 893018801 SEAS over IP
- 893034301 Service Portability

- 893024501 TIF ASD
- 893025501 TIF GRN
- 893022501 TIF Number Substitution
- 893037701 TIF Range CgPN Blacklist
- 893037601 TIF Subscriber CgPN Blacklist

Turning on a feature that is already on or turning off a feature that is already off has no effect.

The GTT feature must be turned on (see the `chg-feat` command) before the following features can be turned on:

- Intermediate Global Title Translation Load-Sharing (IGTTLS)
- LNP ELAP Configuration
- SCCP Loop Detection

All IPSM cards in the system must be inhibited before the IP User Interface (Telnet) feature can be turned on or off.

All IPSM cards in the system must be inhibited before the EAGLE OA&M IP Security Enhancements feature can be turned on or off.

Only one of the optional parameters, not both, can be specified in the command.

After a Permanently On feature is turned on, it cannot be turned off with this command. All controlled features with quantity feature access keys (like LNP ported TNs) and the following features are Permanently On features:

- 15 Minute Measurements
- Advanced GTT Modification (AMGTT)
- Advanced GTT Modification Called Party Only (AMGTT CdPA Only)
- Advanced GTT Modification Calling Party Upgrade (AMGTT CgPA Upgrade)
- ANSI-41 INP Query
- ANSI-41 Mobile Number Portability (A-Port)
- ANSI/ITU SCCP Conversion
- Diameter S13/S13' Interface for EIR
- E5-OAM Integrated Measurements (Integrated Measurements)
- Enhanced GSM MAP Screening (EGMS)
- Equipment Identity Register (EIR)
- Flexible Linkset Optional Based Routing (FLOBR)
- G-Flex MAP Layer Routing
- G-Port SRI Query for Prepaid
- GSM Flexible Numbering (G-Flex)
- GSM MAP Screening (GMS)
- GSM MAP SRI Redirect for Serving HLR
- GSM Mobile Number Portability (G-Port)
- GTT Action - DISCARD
- GTT Action - DUPLICATE
- GTT Action - FORWARD
- Hex Digit Support for GTT
- IDP A-Party Blacklist
- IDP A-Party Routing
- IDP Screening for Prepaid

- IDP Service Key Routing
- Info Analyzed Relay Base (IAR)
- INP
- IS41 GSM Migration (IGM)
- ISUP NP with EPAP
- ITU TCAP LRN Query (LRNQT)
- ITUN-ANSI SMS Conversion
- LNP ELAP Configuration
- LOCREQ Query Response
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- MT-Based GSM SMS NP
- MT-Based GSM MMS NP
- MT-Based IS41 SMS NP
- MTP Msgs for SCCP Apps
- Multiple Linkset to a Single Adjacent Point Code
- Origin-Based MTP Routing
- Origin-based SCCP Routing
- PC & CIC Translation (PCT)
- Prepaid IDP Query Relay
- SCCP Loop Detection
- Service Portability (S-Port) Subscriber Differentiation
- SIP Number Portability
- SLS Bit Rotation by Incoming Linkset (ISLSBR)
- Spare Point Code Support
- Support for 16 GTT Lengths in VGTT
- TCAP Opcode Based Routing (TOBR)
- TCAP Opcode Quantity
- TIF Number Portability
- TIF SCS Forwarding
- TIF Simple Number Substitution
- Transaction-based GTT Loadsharing (TBGTTLS)
- Voice Mail Router (V-Flex)
- Weighted GTT Loadsharing (WGTTLS)
- XUDT UDT Conversion

The value specified for the partnum parameter must be the correct part number for the feature.

The platformenable=on or the oamhcmeas=on parameter must be specified (see the `chg-measopts` command) before the 15 Minute Measurements feature can be turned on.

If the Measurements Platform feature is turned on (see the `chg-feat` command) as a precursor to turning on the 15 Minute Measurements feature, then at least one MCPM card must be available in the IS-NR state before the 15 Minute Measurements feature can be turned on. The platformenable=on parameter must be specified (see the `chg-measopts` command) before an MCPM card can be placed in the IS-NR state.

The 15 Minute Measurements feature cannot be turned on when 30 minute measurements collection is in progress.

The Global Title Translation (GTT) feature must be turned on (using the gtt=on parameter for the `chg-feat` command) before the Intelligent Network Application Part (INAP) Number-based Portability (INP) feature or the ANSI-41 INP Query (AINPQ) feature can be turned on.

The A-Port, G-Port, or IGM feature must be turned on before the MNP Circular Route Prevention feature can be turned on.

The SEASCLLI must be provisioned (see the `chg-seas-config` command) before the SEAS Over IP feature can be turned on.

At least one SEAS terminal must be configured (see the `chg-trm` command) before the SEAS Over IP feature can be turned on.

The IP address of at least one IPSM card associated with a SEAS terminal must be configured before the SEAS Over IP feature can be turned on.

The IP User Interface feature must be turned on before the SEAS Over IP feature can be turned on.

The login and hname parameters must be provisioned (see the `chg-seas-config` command) before the SEAS Over IP feature can be turned on.

If the SEAS Over IP feature is turned on, then the IP User Interface feature cannot be turned off.

All card locations that correspond to SEAS terminals must be provisioned with IPSM cards before the SEAS Over IP feature can be turned on.

The A-Port feature must be turned on before the MT-Based IS41 SMS NP feature can be turned on.

The G-Port feature must be turned on before the MT-Based GSM SMS NP feature can be turned on.

HIPR2 cards must be installed in all MUX locations before the HIPR2 High Rate Mode feature can be turned on.

The defcc system option (see the `chg-stpopts` command) must be provisioned before the IAR Base feature can be enabled and before the ATINP, MT-based GSM SMS NP, or MT-Based IS41 SMS NP feature can be turned on.

The defmcc GSM option (see the `chg-gsmopts` command) must be provisioned before the MT-Based GSM SMS NP feature can be turned on.

The MT-Based GSM SMS NP feature must be turned on before the MT-Based GSM MMS NP feature can be turned on.

An IDPRCDPN(X) NPP service must be ON before the Prepaid IDP Query Relay feature can be turned on.

The defcc and defndc system options (see the `chg-stpopts` command) must be provisioned before the V-Flex feature can be turned on.

The Prepaid IDP Query Relay feature must be turned on before the IDPR ASD or IDPR GRN feature can be turned on.

The matchseq=dn parameter must be specified (see the `chg-tifopts` command) before the TIF ASD feature can be turned on.

The GTT LS ARI feature must be turned off before the IGTTLS feature can be turned off.

The HIPR2 High Rate Mode feature cannot be turned on or off if an IMT Rate Change sequence is in progress.

If the provisioned System TPS (SIGTRAN TPS + ATM TPS) is greater than 500,000, then the HIPR2 High Rate Mode feature cannot be turned off.

The flashing process must be complete on all MUX cards before the HIPR2 High Rate Mode feature can be turned on or off.

The HIPR2 High Rate Mode feature cannot be turned on or off during an Extended Bit Error Rate Test (BERT).

The matchseq=dn parameter must be specified (see the `chg-tifopts` command) before the TIF Subscriber CgPN Blacklist feature can be turned on.

The crptt parameter must have a value of *none* (see the `chg-gsmopts` command) before the MNP CRP feature can be turned off.

The HIPR2 High Rate Mode feature cannot be turned on or off during upgrade.

The Default Country Code must be provisioned (see the defcc parameter in the `chg-stpopts` command) before the Prepaid IDP Query Relay feature can be turned on.

At least one terminal without a Thermal Alarm must exist before the SEAS Over IP feature can be turned on.

The INP and AINPQ features cannot be turned on if the LNP (an LNP ported TNs quantity), LNP 150,000 LRNs, or LNP 300,000 NPANXX feature is enabled and on.

The LNP ELAP Configuration feature and the WNP feature must be turned on before the LNP SMS feature can be turned on.

A temporary feature access key cannot be used to turn on features that do not allow a temporary feature access key. The following features allow a temporary feature access key:

- 15 Minute Measurements
- Command Class Management
- EAGLE OA&M IP Security
- IDP Screening for Prepaid
- Intermediate GTT Load Sharing (IGTTLS)
- LNP ELAP Configuration
- LNP Short Message Service (LNP SMS)
- MNP Circular Route Prevention
- Network Security Enhancements
- Portability Check for MO SMS
- Prepaid IDP Query Relay
- SCCP Conversion
- Telnet

If a `chg-ctrl-feat` command is already in progress, then another `chg-ctrl-feat` command cannot be entered.

If a single digit wildcard (*?*) is specified as a value for the fpfx parameter more than 25 times across all of the rules for an NPP service (see the `ent-npp-srs` command), then the NPP Unlimited SDWC Characters feature cannot be turned off.

If more than three single digit wildcard characters (*?*) are specified for the fpfx parameter in an NPP Service rule (see the `ent-npp-srs` command), then the NPP Unlimited SDWC Characters feature cannot be turned on.

If a single digit wildcard (*?*) is specified after the sixth digit of the value specified for the fpfx parameter for an NPP Service rule (see the `ent-npp-srs` command), then the NPP Unlimited SDWC Characters feature cannot be turned on.

The E5-ENET-B IPSG High Throughput feature cannot be turned off if an E5-ENET-B card running the IPSG application in the system has a configured card capacity above 6500 TPS.

The MFC feature must be ON before the 1M System TPS feature may be turned ON.

The HIPR2 High Rate Mode feature must be ON before the 1M System TPS feature may be turned ON. The HIPR2 High Rate Mode feature cannot be turned OFF if the 1M System TPS feature is turned ON.

If the System TPS is more than 750K then the 1M System TPS feature cannot be turned OFF.

Notes

SEAS Terminals

All terminals that are configured as SEAS are automatically allowed or inhibited when the SEAS Over IP feature is turned on or off, respectively.

Commands blocked during IMT Rate Change sequence:

If the HIPR2 High Rate Mode feature is turned on or off, then an IMT Rate Change sequence is carried out (if required). The `alw-imt`, `disc-imt`, `flash-card`, `inh-imt`, `init-flash`, `init-mux`, and `tst-imt` commands cannot be entered if an IMT Rate Change sequence is in progress.

Service Portability

If the Service Portability feature is turned on before a dependent feature is turned on, then a warning is issued:

WARNING: No Service Portability dependent feature is on.

If the Service Portability feature is turned off when more than one dependent feature is turned on, then a warning is issued:

WARNING: Service Portability is OFF.

Output

`chg-ctrl-feat:partnum=893xxxxxx:status=on`

```
    tekelecstp 06-07-26 14:47:49 EST  EAGLE 36.0.0
    chg-ctrl-feat:partnum=893xxxxxx:status=on
    Command entered at terminal #4.
    CHG-CTRL-FEAT: MASP A - COMPLTD
;
```

`chg-ctrl-feat:partnum=893xxxxxx:alarm=clear`

```
    tekelecstp 06-07-26 14:47:49 EST  EAGLE 36.0.0
    chg-ctrl-feat:partnum=893xxxxxx:alarm=clear
    Command entered at terminal #4.
    CHG-CTRL-FEAT: MASP A - COMPLTD
;
    tekelecstp 06-07-26 14:47:49 EST  EAGLE 36.0.0
    0367.0181  *  SYSTEM      Temp Key(s) expiration alarm cleared.
;
```

This example shows the output when the 1100 TPS/DSM for ITU NP feature is on, and the `chg-ctrl-feat` command is re-entered within 30 seconds for confirmation:

`chg-ctrl-feat:partnum=893018001:status=on`

```
    tekelecstp 06-07-26 14:47:49 EST  EAGLE 36.0.0
    chg-ctrl-feat:partnum=893018001:status=on
    Command entered at terminal #4.
    CAUTION:Rated TPS for this feature supports an engineered GTT
    traffic mix of no more than 70 percent EPAP-based traffic.
    Re-enter the command within 30 seconds to confirm change.
    CHG-CTRL-FEAT: MASP A - Command Aborted

Command is re-entered within 30 seconds
    chg-ctrl-feat:partnum=893018001:status=on

    tekelecstp 06-07-26 14:47:58 EST  EAGLE 36.0.0
    chg-ctrl-feat:partnum=893018001:status=on
    Command entered at terminal #4.
    CHG-CTRL-FEAT: MASP A - COMPLTD
```

This example shows the output when the 1100 TPS/DSM for ITU NP feature is on, and the `chg-ctrl-feat` command is not re-entered within 30 seconds:

`chg-ctrl-feat:partnum=893018001:status=on`

```
    tekelecstp 06-07-26 14:47:49 EST  EAGLE 36.0.0
    chg-ctrl-feat:partnum=893018001:status=on
    Command entered at terminal #4.
    CAUTION:Rated TPS for this feature supports an engineered GTT
    traffic mix of no more than 70 percent EPAP-based traffic.
    Re-enter the command within 30 seconds to confirm change.
    CHG-CTRL-FEAT: MASP A - Command Aborted

Command is not re-entered within 30 seconds.
    CHG-CTRL-FEAT command aborted due to confirmation timeout.
```

This example shows the output when the 1100 TPS/DSM for ITU NP feature is not on, and the `chg-ctrl-feat` command is re-entered within 30 seconds for confirmation:

`chg-ctrl-feat:partnum=893018001:status=off`

```
    tekelecstp 06-07-26 14:47:49 EST  EAGLE 36.0.0
    chg-ctrl-feat:partnum=893018001:status=off
    Command entered at terminal #4.
    CAUTION: This command decreases the total TPS of the
    SCCP system from 1100 to 850 TPS for each DSM.
    Re-enter the command within 30 seconds to confirm.
    CHG-CTRL-FEAT: MASP A - Command Aborted

Command is re-entered within 30 seconds
    chg-ctrl-feat:partnum=893018001:status=off

    tekelecstp 06-07-26 14:47:58 EST  EAGLE 36.0.0
    chg-ctrl-feat:partnum=893018001:status=off
    Command entered at terminal #4.
    CHG-CTRL-FEAT: MASP A - COMPLTD
```

Related Commands

enable-ctrl-feat, *rtrv-ctrl-feat*

chg-db

Change Database

Use this command to manipulate elements of the database.

Caution: When this command is entered, all other database operations are locked out while the command executes.

Caution: The cards that run both the active and standby OAM reboot whenever the restore operation completes successfully. When a database is repaired successfully, the card with the standby OAM reboots. This action purges old database data from memory and reloads the MASPs with the new data. When the card with the active OAM reboots, all terminals reinitialize, automatically logging off all users. Depending on the new database, the terminals may be initialized to a different configuration, and user IDs and passwords may change.

Parameters

action (mandatory)

The database management action.

Range:

backup

Copies the database from the current data partitions to the backup partitions on both fixed disks, the backup partition on the removable drive, or to a compressed tar file on a remote FTP server. If the destination is the server a database file with the following naming convention will be created: 'CLLI string' - 'Release number string' - 'yymmddhh'.tar.gz (tekelecstp-37.5.0-08012212.tar.gz)

repair

Copies the current and backup databases from the active to the standby fixed disk.

restore

Copies the backup partitions to the current data partitions on both fixed disks, or copies the database from the removable drive or the remote FTP server to the current data partitions on both fixed disks.

Caution: The action=restore parameter initiates an emergency recovery procedure and requires the `init-sys` command to download the restored database to all the cards in the system.

dest (optional)

Destination. The destination disk for the database backup.

Range:

remove

Back up the database to a removable drive

fixed

Back up the database to a fixed disk

server

Back up the database to a remote server

usb

Argument to be used by Oracle personnel only.

Default:

fixed

file (optional)

The name of the TAR file on the remote server that contains the database to be restored to the system.

The src=server parameter must be specified before this parameter can be specified.

Range:

yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

Up to 39 alphanumeric characters

sloc (optional)

Source location. The location of the removable drive.

This parameter can be used to specify a location in the active or standby E5-MASP.

Range:

1113, 1115

Default:

location in the active E5-MASP

src (optional)

Source. The source used to restore the database.

Range:

remove

Restore the database from a removable drive

fixed

Restore the database from the fixed disk

server

Restore the database from a remote server

usb

Argument to be used by Oracle personnel only.

Default:

fixed

Example

```
chg-db:action=backup:dest=server
chg-db:action=restore:src=remove
chg-db:action=repair
chg-db:action=restore:src=server:file="CLLI-37.5.0-08012212.tar.gz"
```

Dependencies

This command cannot be entered while the system is in upgrade mode.

The removable drive must be accessible and ready and must be formatted as a system removable disk, NOT as a measurement removable disk.

The dest parameter can be specified only when action=backup. If the dest=fixed parameter is specified, or the dest parameter is not specified, the database on the current partition of the fixed disk is copied to the backup partition of the fixed disk. This action is shown in *Figure 5: chg-db:action=backup:dest=fixed*.

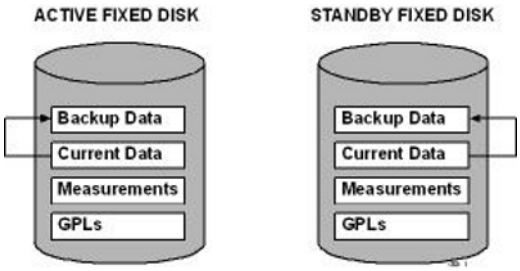

Figure 5: chg-db:action=backup:dest=fixed

The current database partition of both fixed disks must be free of integrity violations (for example, incoherency, inconsistency, and data corruption) when action=backup is specified.

The src parameter can be used only when action=restore. To restore the database, if the src=fixed parameter is specified or the src parameter is not specified, the backup partition of each fixed disk is copied to the current partition of the fixed disk. This action is shown in *Figure 6: chg-db:action=restore:src=fixed*.

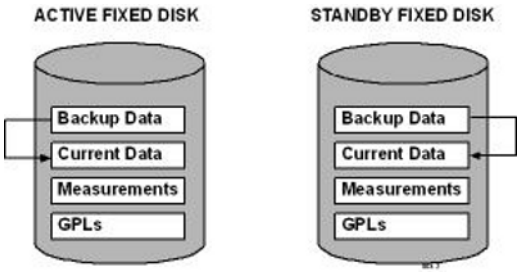

Figure 6: chg-db:action=restore:src=fixed

The backup database partition of both fixed disks must be coherent when `chg-db:action=restore:src=fixed` is specified.

The database on the removable drive must be coherent when `chg-db:action=restore:src=remove` is specified.

The current and backup database partitions of the active fixed disk must be free of integrity violations (for example, incoherency and data corruption) when action=repair is specified.

When the action=repair/restore parameter is specified, the database(s) serving as the source of data for the operation must be free of integrity violations (for example, incoherency and data corruption).

All databases involved in the operation must contain valid database version information.

The action=restore and src=server parameters must be specified before the file parameter can be specified. If the src=server parameter is specified, then the file parameter must be specified.

The action=restore and src=remove parameters must be specified before the sloc parameter can be specified.

The DB application server must be provisioned (see the `ent-ftp-serv` command) before the `chg-db:action=backup:dest=server` or `chg-db:action=restore:src=server` command can be entered.

An IPSM card must be provisioned before the `chg-db:action=restore:src=server` or `chg-db:action=backup:dest=server` commands can be entered.

The standby MASP must be in the Active state before this command can be entered.

An E5-MCAP card must be installed before the src=usb parameter can be specified.

An E5-MCAP card must be installed before the dest=usb parameter can be specified.

If the src=usb or dest=usb parameter is specified, then a flash drive must be inserted into the Active OAM's flush-mounted USB port.

If E5-MASP hardware is used for a restore procedure, and if the active and standby removable drives installed in the latched USB port have different DB levels, then the sloc parameter must be specified in the `chg-db:action=restore:src=remove` command to specify the removable drive to be used.

The value specified for the file parameter must have the correct extension.

A value of 1113 or 1115 must be specified for the sloc parameter.

If the OAM is in mixed mode, and the 10,000 Routesets or Integrated GLS feature is enabled or the Integrated Measurements feature is turned on, then the action=repair parameter cannot be specified.

Notes

When the action=backup parameter is specified, the following message appears when an audit is in progress:

```
Command In Progress: waiting for database audit to complete
```

The command executes when the audit is finished.

Performance

The performance time to execute this command varies depending on the number of records allocated for the database, system activity, and system setup. These operations should typically take no longer than 30 minutes. If one of these operations exceeds one hour, contact My Oracle Support. See the "My Oracle Support" section in Chapter 1 of this manual.

If the dest=remove parameter is specified, the database on the current partition of the active fixed disk is copied to the removable drive. This action is shown in *Figure 7: chg-db:action=backup:dest=remove*.

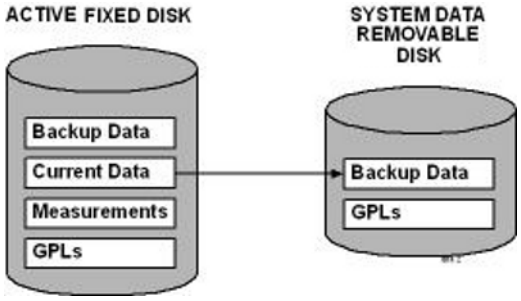

Figure 7: chg-db:action=backup:dest=remove

If the `chg-db:action=restore:src=server:filename=xxxxxx.tar` or `chg-db:action=backup:dest=server` command is entered, the database partitions are copied from or to the remote server application through an IPSM card. This action is shown in *Figure 8: Remote Backup or Restore*.

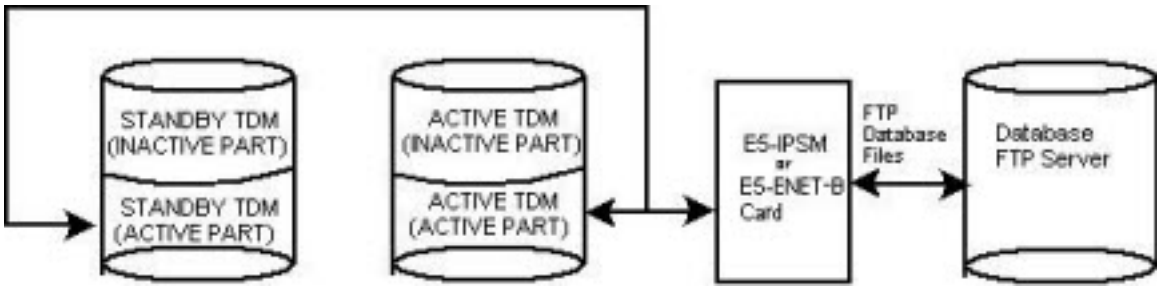

Figure 8: Remote Backup or Restore

If the action=repair parameter is specified, the current and backup database partitions are copied from the active fixed disk to the standby fixed disk. This action is shown in *Figure 9: chg-db:action=repair*.

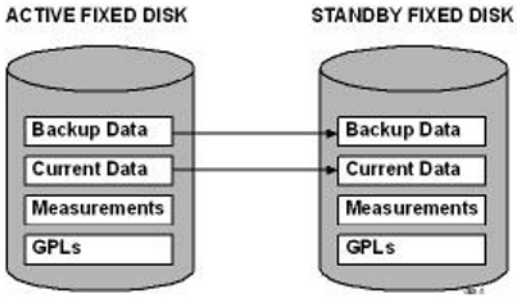

Figure 9: chg-db:action=repair

If the src=remove parameter is specified, the database on the removable drive is copied to the current partitions on both the active and standby fixed disks. This action is shown in *Figure 10: chg-db:action=restore:src=remove*.

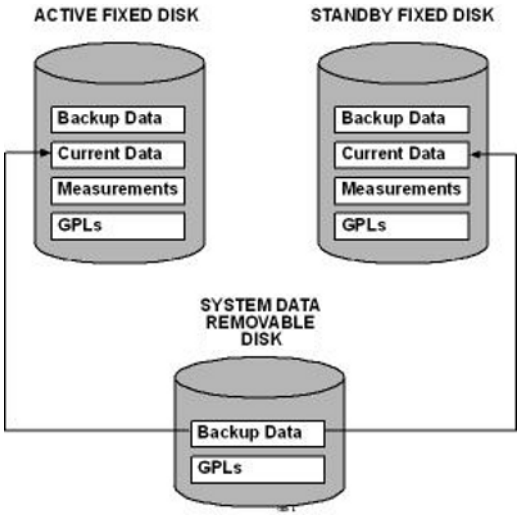

Figure 10: chg-db:action=restore:src=remove

If the action=restore and src=remove parameters are specified on the E5-MASP hardware, the database of the removable drive (in the latched USB port) is copied to the current partition of each fixed disk. The default is to use the removable drive in the active E5-MASP. The sloc parameter can be used to specify the removable drive in the active or standby E5-MASP.

If the dest=remove parameter is specified for an E5-MCAP card, the database on the current partition of each fixed disk is copied to the removable drive in both latched USB ports. If only the active OAM has a removable drive, then only the current partition on the active OAM is copied to the removable drive in the active OAM's latched USB port.

Output

Messages such as UIMs might appear at your terminal.

`chg-db:action=backup`

```
BACKUP (FIXED): MASP B - Backup starts on active MASP.
BACKUP (FIXED): MASP B - Backup on active MASP to fixed disk complete.
BACKUP (FIXED): MASP B - Backup starts on standby MASP.
BACKUP (FIXED): Backup on standby MASP to fixed disk complete.
```

`chg-db:action=restore`

```
RESTORE (FIXED): MASP A - Restore starts on active MASP.
RESTORE (FIXED): MASP A - Restore from fixed disk on active MASP complete.
RESTORE (FIXED): MASP A - Restore starts on standby MASP.
RESTORE (FIXED): MASP A - Restore from fixed disk on standby MASP complete.

RESTORE (FIXED): MASP A - MASP(s) will reboot to load data.
```

chg-db:action=backup:dest=remove

```
    BACKUP (REMOVABLE) : MASP A - Backup starts on active MASP.
    BACKUP (REMOVABLE) : MASP A - Backup to removable cartridge complete.
```

chg-db:action=backup:dest=fixed

```
    BACKUP (FIXED) : MASP A - Backup starts on active MASP.
    BACKUP (FIXED) : MASP A - Backup on active MASP to fixed disk complete.
    BACKUP (FIXED) : MASP A - Backup starts on standby MASP.
    BACKUP (FIXED) : MASP A - Backup on standby MASP to fixed disk complete.
```

chg-db:action=restore:src=remove

```
    RESTORE (REMOVABLE) : MASP A - Restore starts on active MASP.
    RESTORE (REMOVABLE) : MASP A - Restore starts on standby MASP.
    RESTORE (REMOVABLE) : MASP A - MASP(s) will reboot to load data.
    RESTORE (REMOVABLE) : MASP A - Restore from removable cartridge complete.
```

chg-db:action=restore:src=fixed

```
    RESTORE (FIXED) : MASP A - Restore starts on active MASP.
    RESTORE (FIXED) : MASP A - Restore from fixed disk on active MASP complete.

    RESTORE (FIXED) : MASP A - Restore starts on standby MASP.
    RESTORE (FIXED) : MASP A - MASP(s) will reboot to load data.
    RESTORE (FIXED) : MASP A - Restore from fixed disk on stdby MASP complete.
```

chg-db:action=repair

```
    REPAIR: MASP A - Repair starts on standby MASP.
    REPAIR: MASP A - Standby MASP will reboot to load data.
    REPAIR: MASP A - Repair from fixed disk complete.
```

chg-db:action=backup:dest=server

```
BACKUP (SERVER): MASP A - Backup starts on active MASP.
BACKUP (SERVER) : Copy Database to card memory for processing.
BACKUP (SERVER) : Compress Database before archiving.
BACKUP (SERVER) : Send database archive to server.
BACKUP (SERVER): MASP A - Backup to remote server complete.
```

chg-db:action=restore:src=server:file="CLLI-37.5.0-08011112.tar.gz"

```
RESTORE (SERVER) : Retrieve database archive from server.
RESTORE (SERVER) : Validate database archive.
RESTORE (SERVER) : Restore starts on active MASP.
RESTORE (SERVER) : Restore from server on active MASP complete.
RESTORE (SERVER) : Restore starts on standby MASP.
RESTORE (SERVER) : Restore from server on standby MASP complete.
RESTORE (SERVER) : MASP(s) will reboot to load data.
```

Related Commands

copy-meas, *rept-stat-db*

chg-dconn

Change Diameter Connection

Use this parameter to change the DEIR connection information. The DCONN table supports the provisioning information related to the Diameter connections.

Parameters

dcname (mandatory)

Diameter connection name. This parameter specifies the unique logical name assigned to each diameter connection.

Range:

azzzzzzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 15 characters in length. Valid values are *a..z, A..Z, 0..9*.

Default:

No change to the current value.

System Default:

null

maxtps (optional)

Maxmium TPS. This is the maximum TPS for a diameter connection. The unused card capacity will be allocated among the connections that have exceeded their RSVDTPS up to limit of MAXTPS value provisioned for the particular connection.

Range:

100 - 8000

Default:

No change to the current value

System Default:

8000

rsvdtps (optional)

Reserved TPS. This is the guaranteed TPS (Transactions per second) for a diameter connection. Total RSVDTPS on a card cannot exceed 8000.

Range:

100 - 8000

Default:

No change to the current value

System Default:

250

td (optional)

Diameter Peer Disconnect timer. This timer is used to control how long the DEIR process will wait for a DPA response (Diameter Peer Answer) to a send DPR (Diameter Peer Request). The value given to a timer is in seconds.

Range:

1 - 10

Default:

No change to the current value

System Default:

3

tw (optional)

Diameter Watchdog timer. This timer is used to control how long the DEIR (Diameter EIR) process will wait for a DWA (Diameter Watchdog Answer) response to a send DWR (Diameter Watchdog request). The value given to a timer is in seconds.

Range:

6-30

Default:

No change to the current value.

System Default:

6

Example

```
chg-dconn:dcname=conn1:rsvdtps=1000:maxtps=5000:td=5:tw=15
chg-dconn:dcname=conn2:td=6:maxtps=6000
```

Dependencies

S13/S13' EIR feature must be enabled before changing any parameter of diameter connection.

DCONN table should be accessible.

At least one optional parameter must be specified.

Diameter connection name is not present in DCONN table.

Sum of RSVDTPS of all the diameter connections on a particular card must not exceed the diameter card TPS (8000).

RSVDTPS of a diameter connection must be less than or equal to its MAXTPS.

Notes

None.

Output

```
chg-dconn:dcname=conn1:rsvdtps=1000:maxtps=5000:td=5:tw=15
```

```
tekelecstp 13-03-20 15:44:10 EST EAGLE 45.1.0
chg-dconn:dcname=conn1:rsvdtps=1000:maxtps=5000:td=5:tw=15
Command entered at terminal #4.
CHG-DCONN: MASP A - COMPLTD
;
```

Related Commands

dlt-dconn, *ent-dconn*, *rtrv-dconn*

chg-deiropts — Change Diameter EIR Options

Use this command to change the S13/S13' EIR configuration. This command updates the DEIROPTS (Diameter Options) table.

Parameters

applid (optional)

Authentication Application ID. The application id configured should match with the Auth-Application-Id (AVP Code 258) value in Vendor-Specific-Application-ID AVP. This value is fixed to 16777252 and cannot be changed.

Range:

0 - 2147483647

Default:

No change to the current value

System Default:

16777252

congerr (optional)

This parameter defines the diameter response to be sent by the DEIRHC card at the time of card congestion. If the card fails in processing the incoming messages, then it shall discard the message and respond with the error code.

Range:

3004 - DIAMETER_TOO_BUSY

5006 - DIAMETER_RESOURCES_EXCEEDED

Default:

No change to the current value

System Default:

3004

deirdfltimsilkup (optional)

Diameter Equipment Identity Register (EIR) default IMSI lookup status. This parameter specifies the order of IMEI table lookup for default IMSI screening. This parameter is analogous to the P1 parameter in the IMSIPFX CSL list but is used only when there is no matching IMSI prefix in the IMSIPFX CSL.

Range:

range

Perform lookup on Range IMEI table only.

individual

Perform lookup on Individual IMEI table only.

both

Perform lookup on Individual IMEI table first & if not found then lookup Range IMEI table.

none

Don't perform any lookup. Just return the default IMEI status.

Default:

No change to the current value.

System Default:

whitelist

deirdfltimsiresp (optional)

Diameter Equipment Identity Register (EIR) default IMSI response. This parameter specifies the default IMEI status for default IMSI screening. This parameter is analogous to the P2 parameter in the IMSIPFX CSL list but is used only when there is no matching IMSI prefix in the IMSIPFX CSL.

Range: ***(whitelist, graylist, blacklist, unknown)***

whitelist

The IMEI is "valid". Registration should be allowed for the handset.

graylist

The IMEI is "questionable".

blacklist

The IMEI is "invalid". Registration should not be allowed for this handset.

unknown

The IMEI is not in the White, Gray, or Black list. Registration should not be allowed for this handset.

Default:

No change to the current value.

System Default:

whitelist

deirgrsp (optional)

Diameter Equipment Identity Register (EIR) Global Response status.

Range:

off

EIR Global Response is not used

whitelst

The IMEI is "valid". Registration should be allowed for the handset.

graylst

The IMEI is "questionable." Registration should be allowed, but the event is logged in the DEIR log and a special measurement peg is incremented.

blklst

The IMEI is "invalid". Registration should not be allowed for this handset.

unknown

The IMEI is not in the White, Gray, or Black list. Registration should not be allowed for this handset.

Default:

No change to the current value

System Default:

off

deirrsptype (optional)

Diameter Equipment Identity Register (EIR) Response Type. The Response Type is used to determine how the lists are to be searched.

Range:

type 1

type 2

type 3

EIR Response Type Values contains information to help select the value for this parameter.

Presence in List			**EIR Response Type (Equipment Status)**		
White	**Gray**	**Black**	**Type 1**	**Type 2**	**Type 3**
X			in white list	in white list	in white list
X	X		in gray list	in gray list	in gray list
X	X	X	in black list	in black list	in black list
X		X	in black list	in black list	in black list
	X		in gray list	in gray list	unknown
	X	X	in black list	in black list	unknown
		X	in black list	in black list	unknown

Presence in List			EIR Response Type (Equipment Status)		
White	Gray	Black	Type 1	Type 2	Type 3
			in white list *	Unknown*	unknown *

*Indicates no match was found for the IMEI in an incoming message within the database.

Default:

No change to the current value.

System Default:

type 1

dprcause (optional)

Disconnect Cause in DPR (Disconnect Peer Request) message.

Range:

0 - REBOOTING

1 - BUSY

2 - DO_NOT_WANT_TO_TALK

Default:

No change to the current value

System Default:

Do not want to talk (2)

off (optional)

This parameter turns off the specified options. Up to 8 comma-separated unique options can be specified.

Range:

deirimsiscrn

deirlogwl

deirdfltimsiscrn

deirimsichk

on (optional)

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

Range:

deirimsiscrn

deirlogwl

deirdfltimsiscrn

deirimsichk

product (optional)

This parameter is the vendor assigned name for the product.

Range:

ayyyyyyyyyyyyyy

An alphanumeric string of 1 to 15 characters with the first character being alphabetic.

Default:

No change to the current value

System Default:

None

vendid (optional)

This parameter indicates the S13/S13' local Vendor ID.

Range:

0 - 2147483647

Default:

No change to the current value.

System Default:

0

Example

```
chg-deiropts:on=deirimsichk:deirrsptype=type2:product=abc123
chg-deiropts:deirgrsp=off:off=deirimsichk:dprcause=1
chg-deiropts:dprcause=0
chg-deiropts:on=deirimsiscrn,deirlogwl,deirdfltimsiscrn,deirimsichk
chg-deiropts:off=deirimsiscrn,deirlogwl,deirdfltimsiscrn,deirimsichk
chg-deiropts:deirdfltimsilkup=range
chg-deiropts:deirdfltimsiresp=whitelist
```

Dependencies

The S13 feature must be enabled before changing any DEIR configuration.

The DEIROPTS table should be accessible.

At least one optional parameter must be specified.

The product name must be alphanumeric.

The S13 Application ID cannot be changed.

The same value cannot be specified for the on and off parameters.

on/off options

- *deirimsiscrn* --- Specifies whether the IMSI Screening for Diameter Equipment Identity Register (EIR) shall be done before the IMEI check. This option has a default of OFF.
- *deirlogwl* --- Specifies whether the white list logging for Diameter Equipment Identity Register (EIR) shall be on. This option has a default of OFF.
- *deirdfltimsiscrn* --- Specifies whether the default IMSI Screening for Diameter Equipment Identity Register (EIR) shall be on. This option has a default of OFF.
- *deirimsichk* --- Specifies the use of Diameter Equipment Identity Register (EIR) IMSI Check status. It specifies whether IMSI lookup shall be performed along with IMEI for blklst numbers. This option has a default of OFF.

Output

```
chg-deiropts:on=deirimsichk:deirrsptype=type2
```

```
tekelecstp 13-04-13 17:25:00 EST  EAGLE 45.1
    chg-deiropts:on=deirimsichk:deirrsptype=type2
    Command entered at terminal #4.
    CHG-DEIROPTS: MASP A – COMPLTD
;
```

Related Commands

rtrv-deiropts

chg-dstn Change Destination

Use this command to change the characteristics of the point codes that are considered destinations from this signal transfer point (STP). A destination does not have to be an adjacent signaling point, but the system must be able to route traffic to this destination.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dpc (mandatory)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24 /dpcn16 (mandatory)

Destination point code.

dpci (mandatory)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (mandatory)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (mandatory)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn16 (mandatory)

16-bit ITU national point code with subfields *unit number*, *sub number area*, *main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p-, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

aliasa (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

000-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

aliasa/aliasi/aliasn/aliasn24/aliasn16 (optional)

Alias point code.

aliasi (optional)

ITU international alias point code list with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

If an ITU international destination (dpci) point code is entered, the *dpci* and *aliasi prefix* subfields cannot be the same, (both spare or both non-spare). Up to 2 comma-delimited entries can be entered in the point code list.

Range:

s-, 0-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

Enter *none* to delete the point code.

The point code *0-000-0* is not a valid point code.

aliasn (optional)

ITU national alias point code list in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

If an ITU national destination (*dpcn*) point code is entered, then the *dpcn* and *aliasn prefix* subfields cannot be the same (both spare or both non-spare). Up to 2 comma-delimited entries can be entered in the point code list.

Range:

s-, 0-16383, aa-zz, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

Enter *none* to delete the point code.

aliasn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000-255

ssa—000-255

sp—000-255

Enter *none* to delete the point code.

aliasn16 (optional)

16-bit ITU national destination point code with subfields *unit number*, *sub number area*, *main number area* (*un-sna-mna*).

Range:

000---127, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Enter none to delete the point code.

bei (optional)

Broadcast exception indicator. This parameter specifies whether the STP broadcasts network management messages to adjacent signaling points. The network management messages contain information about the indicated cluster and any of that cluster's member signaling points that are on its exception list. The messages whose broadcast is determined by this parameter are:

- TFP—Transfer Prohibited
- TCP—Transfer Cluster Prohibited
- TFA—Transfer Allowed
- TCA—Transfer Cluster Allowed

Range:

yes

Network management messages are not broadcast

no

Network management messages are broadcast

Default:

No change to the current value

clli (optional)

Common Language Location Identifier assigned to the destination.

Range:

ayyyyyyyyyy 1 alphabetic character followed by 10 alphanumeric characters

Default:

No change to the current value

elei (optional)

Exception-list exclusion indicator, for cluster destinations only. This parameter specifies whether the system *excludes* or *includes (maintains)* a dynamic status exception list (x-list) for each cluster route used to reach the member signaling points that make up the cluster.

Range:

yes

Do not maintain a dynamic status x-list

no

Maintain a dynamic status x-list

Default:

No change to current value.

homescp (optional)

This parameter specifies whether the destination point code is considered a Home SCP when performing SCCP processing for messages with no Global Title Address Digits (Global Title Indicator (GTI) is set to zero).

This parameter can only be set to "yes" for full DPCs.

Range:

yes

the DPC is considered a Home SCP

no

the DPC is not considered a Home SCP

Default:

No change to the current value

homesmsc (optional)

This parameter specifies whether the DPC is considered a Home SMSC when performing SCCP processing for messages with no Global Title Address Digits (GTI is set to zero).

This parameter can only be set to "yes" for full DPCs.

Range:

yes

the DPC is considered a Home SMSC

no

the DPC is not considered a Home SMSC

Default:

No change to the current value

ncai (optional)

Nested cluster allowed indicator. Specifies whether the route to the cluster point code can be different for provisioned members of the cluster. A point code is a member of a cluster point code if it has the same network identifier (NI) and network cluster (NC) values as the cluster point code. This parameter can only be specified for cluster point codes. Nested cluster routing is allowed if this parameter is set to *yes* and the CRMD and NCR features are turned on.

Range:

yes

The cluster point code is a nested cluster point code. Point codes that are members of this cluster point code can be assigned to route sets that are different from the route set assigned to the cluster point code.

no

The cluster point code is not a nested cluster point code. Point codes that are members of this cluster point code must be assigned to the same route set assigned to the cluster point code.

Default:

Current value.

nprst (optional)

NM bits reset. This parameter specifies whether the NM bits should be set to**00**.

This parameter applies only to ITU IAM messages. The nptype=nm parameter must be specified (see the `chg-tifopts` command) before this parameter can be specified.

Range:

off

Do not set NM Bits to 00 in ITU IAM message if the TIFOPTS *nptype* option value is *nm*

on

Set NM Bits to 00 in ITU IAM message if the TIFOPTS *nptype* option value is *nm*

Default:

No change to the current value

prx (optional)

Proxy point code indicator. This parameter specifies whether a destination point code is used as a proxy point code.

Range:

yes

The destination point code is used as a proxy point code.

no

The destination point code is not used as a proxy point code.

Default:

No change in current value.

rcause (optional)

Release cause. The value to be used as the release cause on REL messages.

If the TIFOPTS rlcopc parameter is specified (see the `chg-tifopts` command), and a value of *0 - 127* is specified for the rcause parameter, then the rcause parameter value overrides the values specified for the TIFOPTS rcausenp and rcausepfx parameters.

Range:

0 - 127, none

none -use the values specified for the TIFOPTS rcausenp and rcausepfx parameters

Default:

No change to the current value

sccpmsgcnv (optional)

SCCP UDT(S)/XUDT(S) Message Conversion Indicator. The type of conversion performed on messages for the specified destination.

Range:

none

conversion is not required on messages for the destination

udt2xudt

convert all UDT(S) messages for the destination to XUDT(S) messages

xudt2udt

convert all non-segmented XUDT(S) messages for the destination to UDT(S) messages

sxudt2udt

convert all segmented and non-segmented XUDT(S) messages for the destination to UDT(S) messages

Default:

No change to the current value

spc (optional)

ANSI secondary point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm)*.

Synonym:

spca

Range:

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

p-, 000-255, none

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid for *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

Default:

No change to current value

spc/spca/spci/spcn/spcn24/spcn16 (optional)

Secondary point code.

spci (optional)

ITU international secondary point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Enter *none* to delete the point code.

Default:

No change to current value

spcn (optional)

ITU national secondary point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

Enter *none* to delete the point code.

Default:

No change to current value

spcn24 (optional)

24-bit ITU national secondary point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

Enter *none* to delete the point code.

Default:

No change to current value

spcn16 (optional)

16-bit ITU national secondary point code with subfields *unit number*, *sub number area*, *main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p-, 000-127, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

Enter *none* to delete the point code.

Default:

No change to the current value.

splitiam (optional)

This parameter specifies when and how to split an ITU IAM message into 1 IAM message + 1 SAM message.

Note: This parameter applies only to ITU IAM messages.

Range:

15-31, none

15 - 31 -Maximum number of CdPN digits allowed in the IAM message before splitting occurs. The remaining digits, up to a total of 32, are encoded in the SAM message.

none -use the value specified for the TIFOPTS splitiam parameter to determine when to split the IAM message

Default:

No change to the current value

Example

To change the CLLI of destination 111-222-111 to RLGHNCXA01A:

```
chg-dstn:dpc=111-222-111:clli=rlghncxa01a
```

To change the exception-list exclusion indicator for cluster 20-2-* to *yes*:

```
chg-dstn:dpca=20-2-*:elei=yes
```

To change an existing destination to contain an SPC:

```
chg-dstn:dpc=20-2-2:spc=5-5-5
```

To change Nested Cluster Allowed Indicator for cluster 20-2-* to *yes*:

```
chg-dstn:dpc=20-2-*:ncai=yes
```

To change a network destination:

```
chg-dstn:dpc=25-*-*:clli=tklc
```

To change the BEI parameter value of ITU national destination 8111-aa to *yes*:

```
chg-dstn:dpcn=8111-aa:bei=yes
```

To change the BEI parameter value of 24-bit ITU-N destination 15-100-10 to *yes*:

```
chg-dstn:dpcn24=15-100-10:bei=yes
```

To change an existing 24-bit ITU-N destination to contain a 24-bit ITU-N SPC:

```
chg-dstn:dpcn24=12-12-12:spcn24=25-25-25
```

To change ITU-I spare destination point code *s-2-100-1* to contain an ITU-I spare secondary point code, ANSI alias, and ITU-N spare alias:

```
chg-dstn:dpci=s-2-100-1:spci=s-2-129-9:aliasa=121-120-120:aliasn=s-129
```

To prevent a destination point code from being used as a proxy point code:

```
chg-dstn:dpc=11-11-11:prx=no
```

To change ITU-N destination point code 10805-nz to delete its ANSI alias and add both ITU-I spare and non-spare aliases:

```
chg-dstn:dpcn=10805-nz:aliasa=none:aliasi=s-5-80-0,5-80-1
```

To change ITU-I spare destination point code s-5-60-3 to add ITU-N non-spare and spare aliases:

```
chg-dstn:dpci=s-5-60-3:aliasn=10723-gr,s-10723-gr
```

To change ITU-I spare destination point code s-5-60-5 to add ITU-N spare and ITU-I non-spare aliases:

```
chg-dstn:dpci=s-5-60-5:aliasn=s-10725-gr:aliasi=5-60-5
```

To change sccpmsgcnv type to udt2xudt for destination 11:

```
chg-dstn:dpc=11-11-11:sccpmsgcnv=udt2xudt
```

Dependencies

Note: A *full point code* contains numerical values for all three segments of the point code.

At least one optional parameter must be specified.

The specified destination point code value must already be defined in the Destination point code table.

The destination address must be a full point code, a network destination, or a cluster point code.

The ANSI self-ID destination point code for the STP must be defined before ANSI destinations can be changed.

The ITU-I self-ID destination point code for the STP must be defined before ITU-I destinations can be changed.

The ITU-N self-ID destination point code for the STP must be defined before ITU-N destinations can be changed.

The Spare Point Code Support feature must be enabled before the spare point code prefix s- can be specified for an ITU-I or ITU-N destination, secondary, or alias point code.

If the dpcn or aliasn parameter is specified, the format must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

If the 7000 Routesets or 8000 Routesets feature is enabled, then the total number of provisioned aliases in the system cannot exceed 8000. If the 10,000 Routesets feature is enabled, then the total number of provisioned aliases in the system cannot exceed 10000.

Alias point codes are allowed only for full point code destinations.

Alias point codes for destinations must be full point codes.

A specified alias type cannot already be defined as a destination address.

The aliasa and dpca parameters cannot be specified together in the command. The aliasi and dpci parameters and the aliasn and dpcn parameters cannot be specified together in the command if the *prefix* subfields are the same (both are spare or both are non-spare).

Alias ANSI point codes cannot be members of a cluster or network destination.

The specified alias network type must be different from the destination point code network type.

A 24-bit ITU-N point code cannot have a 14-bit ITU-N alias point code or an ANSI alias point code.

A 24-bit ITU-National point code can have an ITU-I point code alias. This allows conversion of 14-bit ITU-I routing label to 24-bit routing label and vice versa.

A 14-bit ITU-N point code cannot have a 24-bit ITU-N alias point code.

If an ITU-I point code is specified, either the aliasn or the aliasn24 parameter can be specified, but not both.

Cluster destinations are allowed only if the CRMD feature is turned on.

The ncai parameter can be specified only for cluster destinations.

The elei parameter can be specified only for cluster destinations (for example, dpc=ni-nc-*).

The NCR (Nested Cluster Routing) feature must be turned on before the ncai parameter can be specified.

Network routing is valid only if the Network Routing (NRT) feature is turned on.

When using network routing, if the destination point code has a value of * in the *nc* subfield, the *ncm* subfield must also be * (for example, dpc=21-*-*).

If a provisioned nested cluster point code is being changed to a non-nested cluster point code (ncai=no), previously provisioned members of the cluster must have the same route set.

If a provisioned non-nested cluster point code is being changed to a nested cluster point code (ncai=yes), the maximum number of provisioned nested clusters must be no greater than 500.

If specified, the spc parameter value must be already be configured as a secondary point code in the Secondary Point Code table.

The value specified for the spc parameter must be a full point code.

If the spc parameter is specified, the domain=ss7 parameter must be specified.

If the spc parameter is specified, then the value specified for the dpc parameter must be a full point code.

The network type of the value specified for the spc parameter must match the network type of the value specified for the dpc parameter.

If a new CLLI for the destination point code is specified, it cannot match the CLLI of the system.

If the corresponding destination for the specified destination point code is an adjacent signaling point (matched a Far End point code in its linkset entity set), the CLLI of the specified destination point code cannot be assigned to any other destination address.

A reserved word cannot be specified for the destination identifier (CLLI).

If the destination does *not* use an SPC, the group code of the destination must be the same as the group code of the ITU national true point code. If the destination uses an SPC, then the group code of the destination must match the group code of the SPC.

If an ITU national destination is being changed and the ITUDUPPC feature is turned on, this applies depending on whether the destination uses an SPC (secondary point code). For example, if the ITU national true point code has a group code of ee, then destinations with group codes of ee can be added without using an SPC. Destinations with a group code of ff must use an SPC with a group code of ff.

The ICNP feature must be enabled and turned on in order to specify the icnpxlat, cgpafmt, and cdpafmt parameters.

Alias point codes cannot already be defined as another destination.

The value specified for the spc parameter cannot already be specified as a secondary point code for the destination point code.

The Proxy Point Code feature must be enabled before the prx parameter can be specified.

If the prx=yes parameter is specified, then the value of the dpc parameter must be a full point code.

If the value of the dpc parameter is used as a proxy point code, then the prx=no parameter cannot be specified.

The number of proxy destinations cannot exceed the value allowed by the enabled Proxy Point Code quantity feature.

If the prx=yes parameter is specified, then the spc/spca/spci/spcn/spcn24 parameter cannot be specified.

The prx parameter must have a value of *yes* or *no*.

If the value specified for the dpc parameter is a private point code, then the prx=yes parameter cannot be specified.

The total number of proxy destinations cannot exceed the total capacity (100) of the Proxy Point Code feature.

If an IPGW linkset is used, then the prx=yes parameter cannot be specified.

The network type of the routeset must be the same as the network type of the destination point code. For example, a destination point code with an ANSI network type cannot use a routeset with an ITU network type.

If the specified destination point code is assigned a proxy point code (PPC) in the DSTN table, then the specified routeset must contain a linkset for the destination point code, and the PPC of the linkset must be equal to the PPC of the destination point code.

The value specified for the spc parameter must differ from the secondary point code of the destination/route entry specified by the dpc parameter.

The value specified for the ncai parameter cannot be same as the NCAI that is already assigned to the destination point code.

If the specified destination point code is a cluster or network destination point code, then the specified routeset cannot contain a route over proxy linksets.

If the destination point code and adjacent point code of the routes in the specified routeset are ITU point codes, then the following conditions must apply.

- If one point code is an ITUI point code, and the other is an ITUN or ITUN24 point code, then the network type of the secondary adjacent point code must match the network type of the destination point code.
- If both point codes have the same network type, then either both must be spare point codes or both must not be spare point codes.

- If the destination point code is an ITUN point code, and the ITUDUPC feature is turned on, then the group code of the destination point code must match the adjacent or the secondary adjacent point code.

A maximum of two aliases can be specified per destination.

If the dpci parameter is specified, then a combination of ITUI and ANSI aliases cannot be specified. If the dpcn parameter is specified, then a combination of ITUN and ANSI aliases cannot be specified.

Two ITUI or two ITUN aliases can be specified for the same destination point code only if the aliases have different prefixes. One alias must be spare and one non-spare.

The TIF Number Portability feature must be enabled before the rcause or nprst parameter can be specified.

A TIF feature must be enabled before the splitiam parameter can be specified.

The XUDT UDT Conversion feature must be turned on before the sccpmsgcnv parameter can be specified.

The J7 Support feature must be enabled before the `aliasn16` parameter can be specified.

If the J7 Support feature is enabled then `aliasa` and `aliasn24` cannot be specified.

Spare point codes for aliasn 1 and aliasn 2 must be different, and spare point codes for aliasi 1 and aliasi 2 must be different.

Notes

The domain parameter of a destination cannot be changed with this command. To change the domain parameter, the destination must be removed with the `dlt-dstn` command and re-entered with the `ent-dstn` command.

In this command, only ITU-international and ITU national point codes and aliases support the spare point code subtype prefix (s-). Only ITU-international and ITU national point codes support the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-). Aliases do not support the private (internal) point code prefix.

The value specified for the DPC parameter must be a full point code in order to be used as a proxy point code. Cluster point codes and private point codes cannot be used as proxy point codes.

Invalid usage of **none** with **aliasi** and **aliasn**:

- *alias=none,none*: parser code expects *none* to be the last argument
- *alias=none,pointcode*: parser code expects *none* to be the last argument
- *alias=,pointcode*: invalid usage of comma separator

Alias Combination Matrix

Table 9: Alias Combination Matrix

	specified			**result**	
Destination	aliasN/aliasN24	alias1	aliasA/aniasN16	alias1	alias2
ANSI		none		0	
		pci		pci	

	specified			result	
	none				0
	pcn				pcn
	pcn24				pcn24
	none	none		0	0
	none	pci		pci	0
	pcn	none		0	pcn
	pcn24	none		0	pcn24
	pcn	pci		pci	pcn
	pcn24	pci		pci	pcn24
ITUI			none	0a	
			pca	pca	
		none		0i	
		pci		pci	
		none	none	0a, i	
		none	pca	pca	
		pci	none	pci	
		pci	pca	E5074	
	none			0n	0
	pcn			0n	pcn
	pcn, none			0n	pcn
	pcn1, pcn2			pcn2	pcn1
	pcn24				pcn24
	none		none	0a, n	0
	none		pca	pca	0
	pcn		none	0a, n	pcn
	pcn		pca	pca	pcn
	pcn, none		none	0a, n	0
	pcn, none		pca	0a, n	pcn
	pc1, pcn2		none	pcn1	pcn2
	pcn1, pcn2		pca	E5001	
	pcn24		none	0a	pcn24

	specified			result	
	pcn24		pca	pca	pcn24
	none	none		0i, n	0
	none	pci		pci	0
	pcn	none		0i, n	pcn
	pcn	pci		pci	pcn
	pcn1, none	none		0i, n	pcn
	pcn1, none	pci		pci	pcn
	pcn1, pcn2	none		pcn2	pcn1
	pcn1, pcn2	pci		E5001	
	pcn24	none		0i	pcn24
	pcn24	pci		pci	pcn24
	none	none	none	0a, i, n	0
	none	none	pca	pca	0
	none	pci	none	pci	0
	none	pci	pca	E5074	
	pcn	none	none	0a,i,n	pcn
	pcn	none	pca	pca	pcn
	pcn	pci	none	pci	pcn
	pcn	pci	pca	E5001	
	pcn, none	none	none	0a,i,n	pcn
	pcn, none	none	pca	pca	pcn
	pcn, none	pci	none	pci	pcn
	pcn, none	pci	pca	E5001	
	pcn2, pcn1	none	none	pcn2	pcn1
	pcn2, pcn1	none	pca	E5001	
	pcn2, pcn1	pci	none	E5001	
	pcn2, pcn1	pci	pca	E5001	
	pcn24	none	none	0a,i	pcn24
	pcn24	none	pca	pca	pcn
	pcn24	pci	none	pca	pcn
	pcn24	pci	pca	E5001	

	specified			result	
			pcn16	pcn16	
		none	pcn16	pcn16	
		pci	pcn16	E2325	
	none	pci	pcn16	E2325	
	none		pcn16	pcn16	
	pcn		pcn16	pnc16	pcn
	pcn	none	pcn16	pcn16	pcn
	pcn, none		pcn16	pcn16	pcn
	pcn1,pcn2		pcn16	E5001	
	none	none	pcn16	E5074	
	pcn, none	none	pcn16	pcn16	pcn
	pcn2,pcn1	none	pcn16	E5001	
ITUN			none	0a	
			pca	pca	
		none			0
		pci			pci
		pci, none		0	pci
		pci1, pci2		pci2	pci1
		none	none	0a,i	0
		none	pca	pca	0
		pci	none	0,a	pci
		pci	pca	pca	pci
		pci, none	none	0,a,i	pci
		pci, none	pca	pca	pci
		pci1, pci2	none	pci2	pci1
		pci1, pci2	pca	E5001	
	none			0,n	
	pcn			pcn	
	pcn24			pcn24	
	none		none	0,a,n	
	none		pca	pca	

	specified			result	
	pcn		none	pcn	
	pcn		pca	E5074	
	pcn24		none	pcn24	
	pcn24		pca	E5074	
	none	none		0,i,n	0
	none	pci		0,i,n	pci
	none	pci, none		0,i,n	pci
	none	pci1, pci2		pci2	pci1
	pcn	none		pcn	0
	pcn	pci		pcn	pci
	pcn	pci, none		pcn	pci
	pcn	pci1, pci2		E5001	
	pcn24	none		pcn24	0
	pcn24	pci		pcn24	pci
	pcn24	pci	none	pcn24	pci
	pcn24 pci1, pci2		E5001		
	none	none	none	0a,i,n	0
	none	none	pca	pca	0
	none	pci	none	0a,i,n	pci
	none	pci	pca	pca	pci
	none	pci, none	none	0a,i,n	0
	none	pci, none	pca	pca	pci
	none	pci1, pci2	none	pci2	pci1
	none	pci1, pci2	pca	E5001	
	pcn	none	none	pcn	0
	pcn	none	pca	E5074	
	pcn	pci	none	pcn	pci
	pcn	pci	pca	E5001	
	pcn	pci, none	none	pcn	pci
	pcn	pci, none	pca	E5001	
	pcn	pci1, pci2	none	E5001	

	specified			result	
	pcn	pci1, pci2	pca	E5001	
	pcn24	none	none	pcn24	0
	pcn24	none	pca	E5074	
	pcn24	pci	none	pcn24	pci
	pcn24	pci	pca	E5001	
	pcn24	pci, none	none	pcn24	pci
	pcn24	pci, none	pca	E5001	
	pcn24	pci1, pci2	none	E5001	
	pcn24	pci1, pci2	pca	E5001	
			pcn16	pcn16	
		none	pcn16	pcn16	
		pci, none	pcn16	pcn16	
		pci	pcn16	pcn16	pci
		pci1,pci2	pcn16	E5001	
	none	none	pcn16	pcn16	0
	none	pci	pcn16	pcn16	pci
	none	pci, none	pcn16	pcn16	pci
	none	pci1,pci2	pcn16	E5001	
	pcn	pci	pcn16	E2325	
	pcn	none	pcn16	E5074	
	pcn	pci, none	pcn16	E5001	
ITUN24		none	0		
		pca	pca		
	none			none	
	pci			pci	
	none	none	0	0	
	none	pca	pca	0	
	pci	none	0	pci	
	pci	pca	pca	pci	
ITUN16	-	none	-	0	-
	-	pci	-	pci	-

	specified			result	
	none		-		0
	pcn		-	-	pcn
	none	pci	-	pci	0
	none	none	-	pci	0
	pcn	none	-	0	pcn
	pcn	pci	-	pci	pcn

Legend

0—clear alias if provisioned regardless of its point code type

0A—clear alias if provisioned and point code is ANSI

0I—clear alias if provisioned and point code is ITUI

0N—clear alias if provisioned and point code is ITUN

0A,I—clear alias if provisioned and point code is ANSI or ITUI

0A,N—clear alias if provisioned and point code is ANSI or ITUN

0I,N—clear alias if provisioned and point code is ITUI or ITUN

0A,I,N—clear alias if provisioned and point code is ANSI or ITUI or ITUN

Output

This example shows the output when the NCR, NRT, and CRMD features are off and all Routes and Routesets features are off:

```
chg-dstn:dpca=111-222-111:aliasn=321
```

```
    rlghncxa03w 04-08-17 15:35:05 EST  EAGLE 31.8.0
    Destination table is (10 of 2000) 1% full
    Destination table is (10 of 2000) 1% full
    Alias table is (8 of 12000) 1% full
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when the NCR, NRT, and CRMD features are off and the 5000 Routes feature is on:

```
chg-dstn:dpca=111-222-111:aliasn=321
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (10 of 5000) 1% full
    Alias table is (8 of 12000) 1% full
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when one or more of the NCR, NRT, or CRMD features and the DSTN5000 (5000 Routes) feature is on:

```
chg-dstn:dpca=111-222-111:aliasn=321
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   5000
        FULL DPC(s):                    9
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  10
        CAPACITY (% FULL):              1%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                   8
        CAPACITY (% FULL):              1%
    X-LIST ENTRIES ALLOCATED:         500
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when the NCR, NRT, and CRMD features are off and the 6000 Routesets feature is on:

```
chg-dstn:dpca=111-222-111:aliasn=321
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (60 of 6000) 1% full
    Alias table is (8 of 12000) 1% full
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when one or more of the NCR, NRT, or CRMD features and the 6000 Routesets feature is on:

```
chg-dstn:dpca=111-222-111:aliasn=321
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   6000
        FULL DPC(s):                   46
        NETWORK DPC(s):                 1
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  12
        CAPACITY (% FULL):              1%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                   8
        CAPACITY (% FULL):              1%
    X-LIST ENTRIES ALLOCATED:         500
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when the NCR, NRT, and CRMD features are off. When the 7000 Routesets quantity feature is on, the Destination table line shows "...of 7000". When the 8000 Routesets quantity feature is on, the Destination table line shows "...of 8000."

```
chg-dstn:dpca=111-222-111:aliasn=321
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (60 of 7000) 1% full
```

```
    Alias table is (8 of 8000) 1% full
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when one or more of the NCR, NRT, or CRMD features is on. When the 7000 Routesets quantity feature is on, the DESTINATION ENTRIES ALLOCATED line shows "8000". When the 7000 Routesets quantity feature is on, the DESTINATION ENTRIES ALLOCATED line shows "7000."

```
chg-dstn:dpca=111-222-111:aliasn=321
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   8000
        FULL DPC(s):                    9
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  10
        CAPACITY (% FULL):             1%
    ALIASES ALLOCATED:               8000
        ALIASES USED:                   8
        CAPACITY (% FULL):             1%
    X-LIST ENTRIES ALLOCATED:         500
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when one or more of the NCR, NRT, or CRMD features is on. In this example, a destination is defined as a proxy point code:

```
chg-dstn:dpc=1-1-1:prx=yes
```

```
    tekelecstp 07-03-05 17:34:18 EST  EAGLE 37.5.0
    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                   27
        EXCEPTION DPC(s):               0
        NETWORK DPC(s):                 1
        CLUSTER DPC(s):                 1
        PROXY DPC(s):                   1
        TOTAL DPC(s):                  30
        CAPACITY (% FULL):             2%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                   0
        CAPACITY (% FULL):             0%
    X-LIST ENTRIES ALLOCATED:         500
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when the secondary point code is changed:

```
chg-dstn:dpc=1-1-1:spc-144-23-48
```

```
    tekelecstp 07-03-05 17:34:18 EST  EAGLE 37.5.0
    CAUTION: Dstn's SPC has changed - verify remote node's route.
    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                   27
        EXCEPTION DPC(s):               0
        NETWORK DPC(s):                 1
        CLUSTER DPC(s):                 1
        PROXY DPC(s):                   1
```

```
        TOTAL DPC(s):                 30
        CAPACITY (% FULL):             2%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                    0
        CAPACITY (% FULL):               0%
    X-LIST ENTRIES ALLOCATED:         500
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when the NCR, NRT, and CRMD features are off and the 10,000 Routesets feature is on:

```
chg-dstn:dpca=11-22-11:aliasn=321
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0
    Destination table is (10 of 10000) 1% full
    Alias table is (8 of 10000) 1% full
    CHG-DSTN: MASP A - COMPLTD
;
```

This example shows the output when one or more of the NCR, NRT, or CRMD features and the 10,000 Routesets feature is on:

```
chg-dstn:dpca=11-22-11:aliasn=321
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0
    DESTINATION ENTRIES ALLOCATED:   10000
        FULL DPC(s):                     9
        NETWORK DPC(s):                  0
        CLUSTER DPC(s):                  1
        TOTAL DPC(s):                   10
        CAPACITY (% FULL):              1%
    ALIASES ALLOCATED:               10000
        ALIASES USED:                    8
        CAPACITY (% FULL):              1%
    X-LIST ENTRIES ALLOCATED:         500
    CHG-DSTN: MASP A - COMPLTD
;
```

This command shows the output when J7 Support feature is enabled.

```
chg-dstn:dpcn16=1-1-1:aliasi=2-2-4
```

```
    tekelecstp 13-02-27 14:39:25 EST  45.0.0-64.56.0
    chg-dstn:dpcn16=1-1-1:aliasi=2-2-4
    Command entered at terminal #4.
    Destination table is (2 of 2000) 1% full
    Alias table is (1 of 12000) 1% full

    CHG-DSTN: MASP A - COMPLTD
;
```

Related Commands

chg-rte, *dlt-dstn*, *dlt-rte*, *ent-dstn*, *ent-rte*, *rept-stat-dstn*, *rept-stat-rte*, *rtrv-dstn*, *rtrv-rte*

chg-e1 Change E1 Interface

Use this command to change an interface for an E1 card in the system. An E1 card can consist of an HC-MIM or E5-E1T1/E5-E1T1-B card used as an E1 or SE-HSL card.

E1 ports 1, 3, 5, and 7 (master ports) can be independently channel bridged with their adjacent even-numbered E1 ports 2, 4, 6, and 8 (slave ports) to allow non-signaling data pass-through.

Parameters

e1port (mandatory)

E1 port number. The value must be an E1 port that has already been configured with an E1 interface on the specified E1 card.

Range:

1 - 8

Any 2 of the 8 ports on an HC-MIM or E5-E1T1-B card can be specified when the card is used as an SE-HSL card.

Any 1 of the 8 ports on an E5-E1T1 card can be specified when the card is used as an SE-HSL card.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

cas (optional)

CAS (*on*) or CCS (*off*) indicator.

Range:

on

off

Note: CAS cannot be specified for HC-MIM or E5-E1T1 cards.

Default:

No change to the current value

chanbrdg (optional)

Port bridging status. This parameter specifies whether an odd-numbered E1 port is channel bridged with its adjacent even-numbered E1 port for non-signaling data pass through.

Range:

on

off

Default:

No change to the current value

crc4 (optional)

CRC4 enable or disable indicator.

Range:

on

off

Default:

No change in current value

e1tsel (optional)

Timing source.

Range:

line

slave timing source

external

master timing source

recovered

timing source recovered from the paired master port for channel bridged slave ports

Default:

No change to the current value

encode (optional)

Indicator for use of HDB3 or AMI encoding/decoding.

Range:

hdb3

ami

AMI encoding is supported for cards used as E1 cards (not as SE-HSL cards).

Default:

No change to the current value

force (optional)

This parameter specifies to provision an odd-numbered E1 port to channel bridging mode if the adjacent next higher even-numbered port is already provisioned with an E1 interface.

Range:

yes

no

minsurate (optional)

Minimum signal unit rate. The minimum number of SUs present on a link that are uniformly distributed.

Range:

500 - 2000

Default:

No change to the current value

si (optional)

Value of two Spare International bits of NFAS data.

Range:

0 - 3

Default:

No change in current value

sn (optional)

Value of five Spare International bits of NFAS data.

Range:

0 - 31

Default:

No change in current value

Example

```
chg-e1:loc=1205:e1port=1:crc4=off:cas=on:encode=hdb3:e1tsel=external:si=2:sn=12
chg-e1:loc=1205:e1port=2:cas=off:encode=ami
chg-e1:loc=1205:e1port=3:chanbrdg=on:e1tsel=recovered
chg-e1:loc=1205:e1port=1:minsurate=1000
```

Dependencies

At least one optional parameter must be specified.

The specified card location (loc parameter) must be equipped.

The card specified by the loc parameter must be a LIME1 card type.

The port specified by the e1port parameter must already be equipped with an E1 interface.

If the value specified for the loc parameter indicates an E1 card, then all signaling links that are serviced by the card must be deactivated (see the `dlt-slk` command) before the values for the crc4, cas, encode, and e1tsel parameters can be changed.

The cas=on parameter cannot be specified when timeslot 16 on the E1 card is being used by a signaling link.

The cas=on parameter cannot be specified if:

- A value of 3 - 8 is specified for the e1port parameter
- The chanbrdg=on parameter is specified
- The value specified for the loc parameter indicates an HC-MIM or E5-E1T1 card

The encode=ami parameter is supported only for cards used as E1 cards (not as SE-HSL cards).

The chanbrdg parameter can be specified only for cards used as E1 cards (not as SE-HSL cards).

The chanbrdg=on parameter cannot be specified for even-numbered E1 ports.

The timing source parameter e1tsel must be specified if chanbrdg=on is specified.

If the chanbrdg=on parameter is specified for an E1 port, then the e1tsel=line parameter cannot be specified.

The chanbrdg=on parameter must be specified before the e1tsel=recovered parameter can be specified.

If the e1tsel=recovered parameter was specified previously, then the e1tsel=line parameter must be specified before the chanbrdg=off parameter can be specified.

The force=yes parameter must be specified before the chanbrdg=on parameter can be specified for an odd-numbered E1 port if the adjacent next higher even-numbered port is already provisioned with an E1 interface.

The linkclass=unchan parameter must be specified before the minsurate parameter can be specified.

If the linkclass=unchan parameter is specified, then the chanbrdg=on and the cas=on parameters cannot be specified.

Before the chanbrdg=on parameter can be specified for an odd-numbered E1 port, all signaling links assigned to its next higher even-numbered adjacent E1 port must be deleted (see the `dlt-slk` command).

Parameter values cannot be changed for the even-numbered E1 port interface (e1port parameter) in a channel bridged pair. The values must be changed in the odd-numbered port interface.

HIPR2 cards must be equipped in card locations *xy*09 and *xy*10 (*x* is the frame, *y* is the shelf) on each EAGLE shelf that contains one or more HC-MIM or E5-E1T1/E5-E1T1-B cards.

The Shelf FAN bit must be turned ON for the shelf on which an HC-MIM or E5-E1T1-B card is being used as an E1 or SE-HSL card.

If the value specified by the loc parameter refers to a Channel card, then the chanbrdg=on parameter cannot be specified.

Card locations 1113 - 1118 (E5-MASP and E5-MDAL cards) cannot be specified as values for the loc parameter.

Locations *xy*09 and *xy*10, where *x* is the frame and *y* is the shelf, cannot be specified as values for the loc parameter.

Notes

When e1tsel=external is specified, a user-supplied BITS clock is required.

External timing is derived from the EAGLE High-Speed Master Clock (1.544 MHz for T1 or 2.048 MHz for E1): therefore, the Master Timing feature is required. Line timing is derived from its received data stream, if present.

Output

`chg-e1:loc=1205:e1port=2:cas=off:encode=ami`

```
    rlghncxa03w 04-01-20 09:07:58 EST  EAGLE 31.3.0
    CHG-E1: MASP A - COMPLTD
;
```

Related Commands

dlt-e1, *ent-e1*, *rtrv-e1*, *tst-e1*

chg-eisopts — Change Eagle Support for Integrated Sentinel Options

Use this command to enable and disable the copy functions that are associated with the EAGLE 5 Integrated Monitoring Support (E5IS) feature.

Parameters

eiscopy (optional)

System-wide control for MSU, alarm, and event copy to the ESP.

Range:

on

off

Default:

No change to the current value

System Default:

off

fcgpl (optional)

This parameter applies the functionality specified by the fcmode parameter to cards running the specified Fast Copy GPL.

Range:

all

apply functionality to cards running the IPSG or IPGHC GPL

ipghc

apply functionality to cards running the IPGHC GPL

ipsg

apply functionality to cards running the IPSG GPL

Default:

No change to the current value

System Default:

all

fcmode (optional)

This parameter specifies a system-wide control to enable or disable monitoring on FC-capable cards.

Range:

fcopy

FC monitoring is performed on FC-capable cards

off

Monitoring is not performed on FC-capable cards

stc

STC monitoring is performed on FC-capable cards

Default:

No change to the current value

System Default:

stc

If Integrated Monitoring is turned on for the first time, and the eiscopy=on parameter has been specified, then the system default for the fcmode parameter is *stc* . If the eiscopy=off parameter has been specified, then the system default value is *off* .

Example

```
chg-eisopts:eiscopy=on
```

```
chg-eisopts:fcmode=fcopy:fcgpl=all
```

Dependencies

At least one parameter must be specified.

The E5IS feature must be turned on before this command can be entered

Before the E5IS copy function can be enabled, at least 2 STC cards must be installed and in the IS-NR state in the system.

The eiscopy=on parameter must be specified before a value of *stc* or *fcopy* can be specified for the fcmode parameter.

The fcmode=off parameter must be specified before the eiscopy=off parameter can be specified and before the value of the fcmode parameter can be changed between *stc* and *fcopy* .

At least one card must be running the IPSG GPL and must be in the IS-NR state before a value of *ipsg* or *all* can be specified for the fcgpl parameter.

At least one card must be running the IPGHC GPL and must be in the IS-NR state before a value of *ipghc* or *all* can be specified for the fcgpl parameter.

If the fcgpl parameter is specified, then the fcmode parameter must be specified.

The host portion of the PVN network address must be 0 based on the PVN subnet mask (see the `chg-netopts` command) before the eiscopy=on parameter can be specified.

The destination of a static IP route (see the `ent-ip-rte` command) and the local interface network address of an IP card (see the `ent-ip-host` command) must be different from the PVN, FCNA, and FCNB network addresses (see the `chg-ip-lnk` command) before the eiscopy=on parameter can be specified.

If the same value is specified for the PVN, FCNA, or FCNB network addresses (see the `chg-netopts` command), then the eiscopy=on parameter cannot be specified.

Notes

Fast Copy Cards

E5-ENET or E5-ENET-B cards running the IPSG or IPGHC GPL are considered to be *FC- capable*. A card running the IPGHC GPL must be in the IS-NR State before the card can be considered *FC- capable*. This restriction does not apply to cards running the IPSG GPL. An *FC- capable* card is considered *FC-enabled* when Fast Copy monitoring is enabled for the respective GPL.

Output

`chg-eisopts:fcmode=fcopy:fcgpl=all`

```
rlghncxa03w 10-02-02 09:08:58 EST  EAGLE 42.0.0
CHG-EISOPTS: MASP A - COMPLTD
```

Related Commands

rtrv-eisopts

chg-enumopts

Change ENUM Application Options

Use this command to provision ENUM-specific data. This command updates the ENUMOPTS table.

Parameters

cngntfy (optional)

Congestion Notification Flag

Range:

Yes

Notify congestion to the sender

No

Silently discard the message

System Default:

no

cngrcode (optional)

RCODE values in ENUM error response message to be sent due to congestion on ENUM card.

Range:

6

ENUM_TOO_BUSY

7

ENUM_RESOURCES_EXCEEDED

System Default:

6

ENUM_TOO_BUSY

conglvl1 (optional)

ENUM application card congestion threshold level 1.

Range:

0-100

System Default:

40

conglvl2 (optional)

ENUM application card congestion threshold level 2.

Range:

0-100

System Default:

80

maxdndigs (optional)

Max number of DN digits from an incoming ENUM query.

Range:

5-15

System Default:

15

Example

```
chg-enumopts:maxdndigs=10
chg-enumopts:conglvl1=50
chg-enumopts:conglvl2=10
chg-enumopts:cngntfy=yes
chg-enumopts:cngrcode=6
```

Dependencies

The ENUMOPTS table should be accessible.

Congestion level 1 must be less than congestion level 2.

Output

This example displays output when maxdndigs is specified:

```
>chg-enumopts:maxdndigs=10

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    chg-enumopts:maxdndigs=10
    Command entered at terminal #4.
    CHG-ENUMOPTS: MASP A - COMPLTD
;
```

This example displays output when conglvl1 is specified:

```
>chg-enumopts:conglvl1=50

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    chg-enumopts:conglvl1=50
    Command entered at terminal #4.
    CHG-ENUMOPTS: MASP A - COMPLTD
;
```

This example displays output when conglvl2 is specified:

```
>chg-enumopts:conglvl2=90

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    chg-enumopts:conglvl2=90
    Command entered at terminal #4.
```

```
    CHG-ENUMOPTS: MASP A - COMPLTD
;
```

This example displays output when cngntfy is specified:

```
>chg-enumopts:cngntfy=yes

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    chg-enumopts:cngntfy=yes
    Command entered at terminal #4.
    CHG-ENUMOPTS: MASP A - COMPLTD
;
```

This example displays output when cngrcode is specified:

```
>chg-enumopts:cngrcode=6

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    chg-enumopts:cngrcode=6
    Command entered at terminal #4.
    CHG-ENUMOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-enumopts

chg-enum-prof

Change ENUM Profile Table Entry

Use this command to change the existing profile entry which has data to generate the ENUM response for three supported resource record formats such as NAPTR, NS and CNAME. The ENUMPROF table stores the profile entry.

Parameters

prn (mandatory)

Profile name. This parameter specifies the unique logical name assigned to the profile entry used to generate the ENUM response.

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 10 characters in length. Valid values are a..z, A..Z, 0..9.

pref (optional)

Preferred Response. This parameter will decide the values for the Order and Preference fields to be encoded for each NAPTR resource record. The values of these fields are only applicable when there are two NAPTR resource records in the ENUM response. This parameter is only valid for the NAPTR response type.

Range:

yes

no

Default:

No change to the current value

System Default:

No

rpdomain (optional)

Replacement domain name. This parameter specifies the domain name of the name server in the NS record and the Canonical Name of the domain server in the CNAME record. This parameter is valid for NS and CNAME response types.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 32 characters in length. Valid values are *(0-9, A-Z, a-z), .(period), -(hyphen)*.

rrdomain (optional)

Domain name present in regular expression. This parameter specifies the domain name used in SIP URI for both ported and non-ported numbers. This parameter is only valid for NAPTR response type.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 32 characters in length. Valid values are *(0-9, A-Z, a-z), .(period), -(hyphen)*.

rtype (optional)

Response type. This parameter specifies the response type for the profile. Response type can only be modified for the "default" profile.

Range:

cname

naptr

ns

Default:

No change to the current value

System Default:

naptr

sparm (optional)

Service parameter. This parameter specifies the supported ENUM services. ENUM application shall only support two ENUM Services.

Range:

tel

sip

Default:

No change to the current value

System Default:

tel

Example

```
chg-enum-prof:prn=pr1:rrdomain=abc.oracle.com
chg-enum-prof:prn=pr2:rrdomain=abc1.oracle.com:pref=yes
chg-enum-prof:prn=pr3:rpdomain=def.oracle.com
chg-enum-prof:prn=pr4:rpdomain=cname.123
```

Dependencies

The ENUM Profile Table should be accessible.

The SPARM, PREF and RRDOMAIN parameters cannot be specified with a profile name having a response type of NAPTR.

The RRDOMAIN parameter is valid only for the SPARM=SIP value.

The profile name must be present in the ENUM Profile Table.

RRDOMAIN must be specified for the NAPTR response type.

For the RTYPE=NS or RTYPE=CNAME parameter, the replacement domain name (RPDOMAIN) must be specified.

RTYPE can only be changed for the default profile.

SPARM=SIP is not supported for the default profile.

Output

```
> chg-enum-prof:prn=pr1:rrdomain=abc.oracle.com
    tekelecstp 18-05-29 03:35:20 MST  EST EAGLE 46.1.0
    chg-enum-prof:prn=pr1:rrdomain=abc.oracle.com
    Command entered at terminal #19.
;

Command Accepted - Processing
    tekelecstp 18-05-29 03:35:20 MST  EST EAGLE 46.1.0
    CHG-ENUM-PROF: MASP B - COMPLTD
;
> chg-enum-prof:prn=pr2:rrdomain=abc.oracle.com:pref=yes
    tekelecstp 18-05-29 03:38:20 MST  EST EAGLE 46.1.0
    chg-enum-prof:prn=pr2:rrdomain=abc.oracle.com:pref=yes
    Command entered at terminal #19.
```

```
;

Command Accepted - Processing
    tekelecstp 18-05-29 03:38:20 MST  EST EAGLE 46.1.0
    CHG-ENUM-PROF: MASP B - COMPLTD
;
> chg-enum-prof:prn=pr3:rpdomain=def.oracle.com
    tekelecstp 18-05-29 03:40:20 MST  EST EAGLE 46.1.0
    chg-enum-prof:prn=pr3:rpdomain=def.oracle.com
    Command entered at terminal #19.
;

Command Accepted - Processing
    tekelecstp 18-05-29 03:40:20 MST  EST EAGLE 46.1.0
    CHG-ENUM-PROF: MASP B - COMPLTD
;
```

Related Commands

dlt-enum-prof, *ent-enum-prof*, *rtrv-enum-prof*

chg-enum-profsel

Change ENUM Profile Selection Table or DN Block Table Entry

Use this command to change an entry in the ENUM Profile Selection Table or the ENUM DN Block Table. The ENUM Profile Selection Table supports the provisioning information related to mapping of Entity Id to Profile Id. The ENUM DN Block Table supports the provisioning information related to mapping of DN Block to Profile Id.

Parameters

edn (optional)

End Dialed Number

Range:

5-15 digits

entityid (optional)

Network Entity

Range:

1-15 hex-digits (0-9, a-f)

prn1 (optional)

Profile Name

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 10 characters in length. Valid values are a..z, A..Z, 0..9.

none--- deletes the current value of the parameter

Note: Response type of specified profile must be NS

prn2 (optional)

Profile Name

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 10 characters in length. Valid values are a..z, A..Z, 0..9.

none--- deletes the current value of the parameter

Note: Response type of specified profile must be CNAME

prn3 (optional)

Profile Name

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 10 characters in length. Valid values are a..z, A..Z, 0..9.

none--- deletes the current value of the parameter

Note: Response type of specified profile must be NAPTR

prn4 (optional)

Profile Name

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 10 characters in length. Valid values are a..z, A..Z, 0..9.

none--- deletes the current value of the parameter

Note: Response type of specified profile must be NAPTR

sdn (optional)

Start Dialed Number

Range:

5-15 digits

Example

```
chg-enum-profsel:entityid=12345:prn1=ns2:prn2=cname1
chg-enum-profsel:sdn=12345:edn=12400:prn3=naptr1:prn4=none
```

Dependencies

The ENUM Profile Selection Table should be accessible.

The ENUM DN Block Table should be accessible.

The ENUM Profile Table should be accessible.

ENTITY ID or SDN or EDN must be specified.

At least one profile must be specified.

The profile name specified by the prnX (x=1, 2, 3, 4) parameter must be provisioned in the ENUM Profile Table.

The response type specified by profile name prn1, prn2, prn3 and prn4 should be NS, CNAME, NAPTR and NAPTR respectively.

The last profile name for a particular entry cannot be none.

NAPTR profile names must be unique.

The default profile cannot be associated with any profile selection entry.

Entity Id cannot be specified with SDN or EDN.

Notes

Response type specified by profile name prn1, prn2, prn3 and prn4 should be NS, CNAME, NAPTR and NAPTR respectively.

Output

This example displays output when ENTITYID is specified:

```
chg-enum-profsel:entityid=1234:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    chg-enum-profsel:entityid=1234:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2

    Command entered at terminal #4.
    CHG-ENUM-PROFSEL: MASP A - COMPLTD
;
```

This example displays output when SDN is specified:

```
chg-enum-profsel:sdn=1234:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    chg-enum-profsel:sdn=1234:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2
    Command entered at terminal #4.
    CHG-ENUM-PROFSEL: MASP A - COMPLTD
;
```

This example displays output when EDN is specified:

```
chg-enum-prosel:edn=2345:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    chg-enum-profsel:edn=1234:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2
    Command entered at terminal #4.
```

```
    CHG-ENUM-PROFSEL: MASP A - COMPLTD
;
```

Related Commands

dlt-enum-profsel, *ent-enum-profsel*, *rtrv-enum-profsel*

chg-feat

Change Feature

Use this command to activate the optional features available on the system.

Some optional features must be purchased before you turn the feature on. If you are not sure whether you are entitled to turn a feature on, contact your Oracle Sales Representative or Account Representative.

Caution: The features are off when the system is installed. A feature that is turned on with this command cannot be turned off.

Parameters

cncf (optional)

This parameter turns on the Calling Name Conversion Facility (CNCF) feature.

Range:

on

System Default:

off

crmd (optional)

This parameter turns on the Cluster Routing and Management Diversity (CRMD) feature.

Range:

on

System Default:

off

dstn5000 (optional)

This parameter turns on the 5000 Routes feature.

Range:

on

System Default:

off

e5is (optional)

This parameter turns on the EAGLE 5 Integrated Monitoring Support (E5IS) feature.

Range:

on

System Default:

off

egtt (optional)

This parameter turns on the Enhanced Global Title Translation (EGTT) feature.

Range:

on

System Default:

off

fan (optional)

This parameter turns on the cooling fan feature.

Range:

on

System Default:

off

gtt (optional)

This parameter turns on the Global Title Translation (GTT) feature.

Range:

on

System Default:

off

gws (optional)

This parameter turns on the Gateway Screening (GWS) feature.

Range:

on

System Default:

off

ipisup (optional)

This parameter turns on the ISUP Routing Over IP (IPISUP) feature.

Range:

on

System Default:

off

ituduppc (optional)

This parameter turns on the ITU National Duplicate Point Code (ITUDUPPC) feature.

Range:

on

System Default:

off

itumtprs (optional)

This parameter turns on the ITU MTP Restart feature.

Range:

on

System Default:

off

lan (optional)

This parameter turns on the STP LAN feature.

Range:

on

System Default:

off

lfs (optional)

This parameter turns on the Link Fault Sectionalization (LFS) feature.

Range:

on

System Default:

off

measplat (optional)

This parameter turns on the Measurements Platform feature. The `chg-measopts:platformenable=on` command must be entered to enable the Measurement Platform collection function (which cannot be disabled after it is enabled in the system).

Range:

on

System Default:

off

mpc (optional)

This parameter turns on the Multiple Point Code (MPC) feature.

Range:

on

System Default:

off

mtprs (optional)

This parameter turns on the ANSI MTP Restart feature.

Range:

on

System Default:

off

ncr (optional)

This parameter turns on the Nested Cluster Routing (NCR) feature.

Range:

on

System Default:

off

nrt (optional)

This parameter turns on the Network Routing feature.

Caution: When using this feature, limited network management is provided for point codes not covered by full point code routing, Cluster Routing, or Nested Cluster Routing.

Range:

on

System Default:

off

plnp (optional)

This parameter turns on the PCS (Personal Communication Service) 1900 Number Portability feature.

Range:

on

System Default:

off

sccpcnv (optional)

This parameter turns on the SCCP Conversion feature.

Range:

on

System Default:

off

slsocb (optional)

This parameter turns on the Other CIC (Circuit Identification Code) Bit Used feature.

Range:

on

System Default:

off

tcapcnv (optional)

This parameter turns on the TCAP Conversion feature.

Range:

on

System Default:

off

tlnp (optional)

This parameter turns on the Triggerless Local Number Portability (TLNP) feature.

Range:

on

System Default:

off

tscsync (optional)

This parameter turns on the Time Slot Counter Synchronization (TSC) feature that is used with GPSM-II cards. This feature is required, along with use of STC cards, for the EAGLE 5 Integrated Monitoring Support feature (*e5is=on*).

Range:

on

System Default:

off

vgtt (optional)

This parameter turns on the Variable Length GTT (VGTT) feature.

Range:

on

System Default:

off

wnp (optional)

This parameter turns on the Wireless Number Portability (WNP) feature.

Range:

on

System Default:

off

Example

```
chg-feat:gtt=on
chg-feat:gws=on:cncf=on
chg-feat:sccpcnv=on:tcapcnv=on
chg-feat:tscsync=on:e5is=on
```

Dependencies

Note: The "LNP feature" is turned on when the LNP ported TNs quantity appears in the `rtrv-ctrl-feat` command output. An LNP quantity feature access key has been enabled and turned on. See the `enable-ctrl-feat` and `chg-ctrl-feat` commands for more information about turning on the LNP feature.

At least one optional parameter must be specified.

The Gateway Screening feature must be turned on before the STP LAN or CNCF feature can be turned on.

The SCCP Conversion feature must be turned on before the TCAP Conversion feature can be turned on.

The LNP feature must be turned on before the Wireless Number Portability or PCS 1900 LNP features can be turned on.

The LNP and Gateway Screening features must be turned on before the Triggerless LNP feature can be turned on.

The Cluster Routing and Management Diversity feature must be turned on before the Nested Cluster Routing feature can be turned on.

The Global Title Translation feature must be turned on before the Enhanced Global Title Translation feature can be turned on.

The Multiple Point Code feature must be turned on before the ITU National Duplicate Point Code feature can be turned on.

The Global Title Translation feature must be turned on before the Variable Length GTT feature can be turned on.

The Time Slot Counter Synchronization feature must be turned on before the EAGLE 5 Integrated Monitoring Support feature can be turned on. These parameters can be specified together in the command to turn them both on at the same time.

If the ANSI/ITU SCCP Conversion feature is enabled, then the SCCP and TCAP conversion features cannot be turned on.

The Gateway Screening feature must be turned on before the Calling Number Conversion Facility feature can be turned on.

The Global Title Translation feature must be turned on before the Padded Variable Length Global Title Translation feature can be turned on.

The Global Title Translation feature must be turned on before the Prefix Deletion of GT feature can be turned on.

The Global Title Translation feature must be turned on before Global System for Mobile Screening feature can be enabled.

Notes

This command is not allowed in upgrade mode.

After a feature bit is turned on, it cannot be turned off. Take care in turning on features that are not used in the network configuration.

The Calling Name Conversion Facility (CNCF) feature provides a conversion of ISUP IAM messages. The facility uses the following two versions of calling name identification presentation (CNIP) for calling name information delivery:

- The nonstandard, proprietary ISUP party information (PIP) parameter.
- The ANSI standard ISUP generic name (GN) parameter.

The conversion either replaces the PIP parameter with the GN parameter or the GN parameter with the PIP parameter in the ISUP IAM message. The user can set up GWS screens to apply the CNCF feature on a per-point-code or range-of-point-code basis.

The CRMD feature allows the system to configure one route set to an entire cluster of destinations, thus enabling the system to manage and switch traffic to more end nodes.

The GTT feature allows the system to provide translation of the global title digits located in the called party address of an SCCP message. The translation consists of a point code and subsystem number. This feature requires Service Module cards loaded with the VSCCP application.

The EGTT feature provides enhancements to the way the system performs GTT for both ITU and ANSI messages. The feature allows the combination of domain (ANSI or ITU), global title indicator (GTI), translation type (TT), numbering plan (NP), and nature of address indicator (NAI) selectors to be used to select a translation table when the system receives a message requiring EGTT. The feature also allows inclusion of the translated subsystem number (SSN) in the called party address (CDPA) and inclusion of the originating point code (OPC) in the calling party address (CGPA). The feature also provides deletion capability of the GT (global title) in the CDPA.

The GWS feature allows the system to screen specific message types with selected parameters from entering the network through this STP. This feature requires E5-OAM cards.

The STP LAN feature allows selected SS7 messages to be copied and sent to a remote host over an Ethernet LAN using the TCP/IP protocol. This feature requires up to 32 cards running the STPLAN application, and requires the GWS feature.

The TLNP feature gives service providers a method to route calls to ported numbers without having to upgrade their signaling switch (end office or mobile switching center) software. This feature uses the gateway screening stop action TLNP to intercept through-switched ISUP messages on the LIM.

The LFS feature allows the system to perform a series of far end loopback tests that identify faulty segments of an SS7 transmission path up to and including the remote network element.

The MTPRS feature provides an orderly process for bringing signaling links back into service after the system has been isolated and restarted. A greater preference is given to restoring the STP to network service in an orderly fashion than to the speed of recovery. The time required is system dependent as shown:

- Up to 64 LIMs—62 seconds (Link Alignment Delay)
- 64 - 127 LIMs—97 seconds
- 128-191 LIMs—132 seconds
- More than 191 LIMs—167 seconds

The ITUMTPRS feature provides MTP restart support for ITU networks and extends the system's ANSI MTP restart support to mixed ITU and ANSI networks. The performance of ITU MTP Restart is comparable to the performance of ANSI MTP Restart.

The SCCPCNV and TCAPCNV features allow the system to convert MTP-routed SCCP and TCAP messages from ANSI to ITU format and to convert ITU formatted messages to ANSI.

The PLNP feature provides for LNP query/response in a PCS wireless environment using the LRN method to support Service Provider Number Portability.

The NCR feature allows the system to support full point code entries on different routes within a cluster.

The Other CIC Bit Used feature is one of two methods provided as ITU SLS enhancements for distributing the load across links in a combined and single linkset. The Other CIC Bit Used feature lets the system derive the LSB (Least Significant Bit) from bits 2 through 4 of the CIC to serve as the three lower bits of the SLS (Signaling Link Selection) and one other bit of the CIC to serve as the MSB (Most Significant Bit) of the SLS. The SLSOCB feature applies only to ITU-ISUP messages. The other method of distributing the load is rotation of the four bits of the SLS to change the LSB of the SLS. For additional information on bit rotation, see the `ent-ls` command.

The NR feature allows provisioning of a single routeset to be used for all MSUs destined to members of that network.

The DSTN5000 feature provides the ability to administer up 5000 routes on the system. If dstn5000=on, the values of the mtpdpcq (destination point code) and mtpxlq (exception list entries) parameters of the `chg-stpopts` command can total 5500. Otherwise, the sum total for mtpdpcq and mtpxlq cannot exceed 2500. The Cluster Routing and Management Diversity (CRMD) feature must be turned on before the mtpxlq parameter can be specified.

The MPC feature enables the user to use SPCs (secondary point codes) in addition to the true point codes that the EAGLE uses. The SPCs are used for provisioning and routing as if they were the true point code of the EAGLE. SPCs can be provisioned in any of the three domains (ANSI, ITU-N, and ITU-I). SPCs are supported for any type of link.

The ITUDUPPC feature allows an EAGLE mated pair to route traffic for two or more countries that may have overlapping point code values.

The VGTT feature provides the ability to provision global title entries of varying lengths to a single translation type or GTT set. Users are able to assign global title entries of up to 10 different lengths to a single translation type or GTT set.

The TSCSYNC feature allows the system's A (Active) and B (Standby) internal clocks to be synchronized by the GPSM-II card that is running the standby OAM .

The E5IS feature provides an Ethernet interface between the EAGLE and the Integrated Message Feeder (IMF), to eliminate the need for cabling between each SS7 link and IMF to monitor SS7 traffic.

The Measurements Platform feature provides a dedicated processor for collecting and reporting STP, LNP, INP, G-Flex, and G-Port Measurements data, with support for EAGLE growth to more than 700 links.

Output

`chg-feat:gtt=on`

```
    rlghncxa03w 04-01-11 11:34:04 EST  EAGLE 31.3.0
    CHG-FEAT: MASP A - COMPLD
;
```

Related Commands

rtrv-feat

chg-frm-pwr

Change Frame Power Threshold

Use this command to change the power threshold value in the Frame Power Threshold table for a specified frame.

The entries in the Frame Power Threshold table contain a Frame ID and the corresponding power threshold value.

Use the following commands to display the threshold and calculated maximum power consumption for the frames in the system.

- The `rtrv-frm-pwr` command displays the current provisioned frame power threshold for each provisioned frame.
- The `rtrv-stp:display=power` command displays the provisioned frame power threshold for each provisioned frame, and displays the maximum calculated power consumption for each frame, based on card population.
- The `rtrv-stp:display=power:frm=xxxx` command displays the provisioned frame power threshold for the specified frame, the maximum calculated power consumption for the frame based on card population, and the maximum power consumption for each card in the frame and for a fan assembly for each shelf.

Note: The frame-level power threshold value needs to be determined from the capacity in Amps of the fuse alarm panel (FAP) for the frame. Contact your site engineer to determine the FAP capacity.

Parameters

frm (mandatory)

Frame ID

Range:

cf00

Control frame

ef00

First extension frame

ef01

Second extension frame

ef02

Third extension frame

ef03

Fourth extension frame

ef04

Fifth extension frame

thrshld (mandatory)

Threshold. This parameter specifies the frame-level power threshold, in Amps. This value is compared with the current calculated maximum power consumption for the frame (use the `rtrv-stp:display=power:frm=` command to obtain the maximum power consumption value), and the appropriate alarms are raised if that power comsumption exceeds the threshold limit.

The value of the *thrshld* parameter needs to be determined from the capacity of the fuse alarm panel (FAP) for the frame. Contact your site engineer to determine the frame FAP capacity.

Range:

30 - 65

Default:

30

Example

Change the frame power threshold value for the first extension frame.

```
chg-frm-pwr:frm=ef00:thrshld=58
```

Dependencies

The following values are valid for the frm parameter: *cf00, ef00, ef01, ef02, ef03, ef04*.

The valid range of values for the thrshld parameter is 30-65 Amps.

A power threshold value must already be provisioned for the specified frame.

Notes

The maximum calculated power for a frame is based on the cards that are populated in the system, and includes a fan tray assembly for every shelf (the system cannot detect the presence or absence of a fan tray, and assumes presence for the calculation). These values are typically much higher than the actual power being drawn; the values cannot be used as a gauge of the actual power consumption of the EAGLE.

Output

```
chg-frm-pwr:frm=ef00:thrshld=58
```

```
    tekelecstp 06-06-01 15:18:41 EST  EAGLE 35.0.0
    FRAME POWER THRESHOLD table is (4 of 10) 40% full
    CHG-FRM-PWR: MASP A – COMPLTD
;
```

Related Commands

dlt-frm-pwr, *ent-frm-pwr*, *rtrv-frm-pwr*, *rtrv-stp*

chg-ftp-serv

Change FTP Server Entry

Use this command to change an entry for an FTP server in the FTP Server table.

Caution: Contact the Customer Care Center before specifying the user parameter value. The FTP-based Table Retrieve Application (FTRA) sends the necessary FTP Server information to the system, and the system overwrites any entry that is already in the FTP Server table for that server.

Parameters

app (mandatory)

Application. This parameter specifies the FTP Client application that interfaces with the FTP server.

Range:

db

Database Backup\Restore application

dist

EAGLE Software Release Distribution application

meas

Measurements Platform application

user

FTP-based Table Retrieve Application (FTRA)

ipaddr (mandatory)

IP Address of the FTP Server.

meas

Measurements Platform application

Range:

login (optional)

FTP Server Username (A prompt for entering a password appears on a separate line.)

Range:

zzzzzzzzzzzzzzz

1 to 15 alphanumeric characters; mixed-case is allowed

path (optional)

FTP path used to locate the file that will be sent.

Range:

zzzzzzzzzzzzzz

At least one optional parameter must be specified.

The app parameter must specify an application that uses the FTP Support feature.

The ipaddr parameter must specify a valid IP address for the FTP server.

The path parameter value must be in a valid FTP path format.

The prio parameter specifies a priority for use of an FTP server by an application when the application has more than one FTP server defined in the table. Each FTP server defined for use by the application must have a priority from 1 to 10 assigned. The available FTP server with the highest priority (smallest number) will be used first by the application.

If the login parameter is specified, a separate prompt appears for entry of the FTP server password. You must enter a password that is at least 1 and not more than 15 characters long. If an invalid password is entered or the Return key is pressed without entering a password, the entire command must be entered again to cause the password prompt to appear again. The password is not displayed as it is entered.

An entry for the specified application ID at the specified priority cannot already exist.

The FTP server entry to be changed with this command must already exist in the FTP Server table for the specified IP address and application.

The parameter SECURITY cannot be set to ON if the OAM IP security feature is not activated.

Notes

The same FTP server can be defined more than once, but the specified application must be different for each entry.

The FTP connection will be secure when the OAM IP Security feature is activated and the paramter SECURITY is ON. The secure FTP connection (SFTP) uses port 22, which must be opened in the customer's network.

Output

```
chg-ftp-serv:app=meas:ipaddr=1.255.0.102:path="-ftpmeas1"
```

```
    rlghncxa03w 04-01-20 09:07:58 EST  EAGLE 31.3.0
    CHG-FTP-SERV: MASP A - COMPLTD
;
```

```
chg-ftp-serv:app=meas:ipaddr=1.255.0.102:login=ftpmeas1
```

```
    rlghncxa03w 04-01-20 09:07:58 EST  EAGLE 31.3.0
Enter Password:*****
    CHG-FTP-SERV: MASP A - COMPLTD
;
```

```
chg-ftp-serv:app=user:ipaddr=1.22.10.2:prio=3
```

```
    rlghncxa03w 04-01-20 09:07:58 EST  EAGLE 31.3.0
```

```
    CHG-FTP-SERV: MASP A - COMPLTD
;
```

```
chg-ftp-serv:security=on:ipaddr=10.248.13.9:app=meas
```

```
tekelecstp 12-09-19 14:43:37 EST 45.0.0-64.42.0
chg-ftp-serv:security=on:ipaddr=10.248.13.9:app=meas
Command entered at terminal #4.
E2680 Cmd Rej: OAM IP Security Feature must be activated

CHG-FTP-SERV: MASP A- Command Aborted
;
```

```
chg-ftp-serv:ipaddr=10.248.13.9:app=meas:security=on
```

```
tekelecstp 12-09-19 15:12:54 EST 45.0.0-64.42.0
chg-ftp-serv:ipaddr=10.248.13.9:app=meas:security=on
Command entered at terminal #4.
CHG-FTP-SERV: MASP A-COMPLTD.
;
```

Related Commands

dlt-ftp-serv, *ent-ftp-serv*, *rtrv-ftp-serv*

chg-gpl

Change Generic Program Load

Use this command to copy a generic program load from the system removable drive to the destination active and standby system disks as a "trial" version. The system release identification file is uploaded from the system removable drive to the active and standby fixed drives along with each GPL. This command also provides a parameter to turn GPL auditing “on” and “off”.

Parameters

Note: As of Release 43.0, the BLBEPM, BLBIOS, BLBSMG, BLCPLD, BLDIAG6, BLROM1, BLVXW6, IMTPCI, and PLDPMC1 GPLs are replaced with the BLIXP GPL. The replaced GPLs are used only during upgrade to Release 43 and hardware replacement.

audit (optional)

This parameter specifies whether the active MASP system release running version is to be audited every 90 seconds. The audit state is preserved through a system restart or power up.

Note: When audit is turned off, the system release audit process is stopped. The detection, marking, and reporting of corrupt GPLs is continuous and not affected by turning audit off.

Range:

on

off

Default:

on

gpl (optional)

Generic program load. The name of the GPL identifier to be copied from the system removable drive to the active and standby system disks.

Range:

xyyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters. Valid GPLs are:

atmansi--- Used by LIM cards to support the high-speed ATM signaling link feature

atmhc—Used by E5-ATM and E5-ATM-B cards to allow the card to support up to 3 signaling links

atmitu---Used by E1 ATM cards to support the high-speed E1 ATM signaling link feature

blbepm—Flash GPL containing the BIOS ROM image on E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards

blbios—Flash GPL containing the BIOS ROM image on HC-MIM cards that are used for E1 or T1 signaling links

blbsmg—Flash GPL containing the BIOS ROM image on E5-SM4G and E5-SM8G-B cards

blcpld—Flash GPL containing the bit files for the CPLD on HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards that are used for E1 or T1 signaling links

bldiag6—Flash GPL containing the diagnostic code on E5-E1T1, E5-E1T1-B, HC-MIM, E5-ENET, and E5-ENET-B cards

blixp—Flash GPL containing a tar image with all code required on E5-E1T1, HC-MIM, E5-ATM, E5-IPSM, E5-TSM, E5-ENET, and E5-SM4G cards

blmcap—Flash GPL containing a tar image with all code required on E5-MCAP, E5-E1T1-B, E5-MCPM-B, E5-ATM-B, E5-ENET-B, and E5-SM8G-B cards

blrom1—Flash GPL containing the bootloader code for VxWorks operating system on HC-MIM cards

blvxw6 —Flash GPL containing the VxWorks operating system on HC-MIM, E5-ATM/E5-ATM-B, E5-E1T1/E5-E1T1-B, E5-ENET/E5-ENET-B, E5-IPSM, E5-MCPM-B, E5-SM4G/E5-SM8G-B, and E5-TSM cards.

bpdcm ---Used to support the flash memory Board PROM for DCM, DSM, and GPSM boards, original design

bpdcm2 ---Used to support the flash memory Board PROM for DCM and GPSM boards, revised design

bphcap---Used to support Board PROM for HCAP flash memory

bphcapt---Supports Board PROM for HCAP-T flash memory

bphmux---Supports Board PROM for HMUX flash memory

bpmpl--- Supports Board PROM for MPL flash memory

bpmplt-Supports Board PROM for E1/T1 flash memory

cdu—Used in the card manufacturing process.

deirhc — Used by E5-SM8G-B cards to support the Diameter S13/S13' Interface for EIR feature

enumhc---Used by E5-SM8G-B cards to support the ENUM Mobile Number Portability and Tier One Address Resolution application

eoam---Used by the GPSM-II card for enhanced OAM functions

eroute---Used by STC cards for EAGLE 5 Integrated Monitoring Support functions

erthc—Used by E5-ENET and E5-ENET-B cards when the card acts as an STC card (E5-STC card) for EAGLE 5 Integrated Monitoring Support functions

glshc—Used by E5-TSM cards to download gateway screening to LIM and SCCP cards

hipr2—Communication software used on the High Speed IMT Packet Router (HIPR2) card

imtpci—Communication software that operates the IMT bus on HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards

ipghc—Used by E5-ENET and E5-ENET-B cards to support point-to-multipoint IP connectivity for ANSI and ITU point codes

iplhc—Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ANSI and ITU point codes

ipsg—Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA

ipshc—Used by E5-IPSM and E5-ENET-B cards to support the IPS application

mcp---Used by MCPM cards for the Measurements Platform feature

mcphc—Used by E5-MCPM-B cards for the Measurements Platform feature

oamhc—Used by E5-MCAP cards for enhanced OAM functions

pldpmc1—Flash GPL used on HC-MIM and E5-E1T1 cards for E1 and T1 signaling links

sccphc—Used by E5-SM4G and E5-SM8G-B cards to support EPAP-based features and the LNP ELAP Configuration feature. If no EPAP-based or LNP ELAP Configuration feature is turned on, and an E5-SM4G or E5-SM8G-B card is present, then the GPL processes normal GTT traffic.

siphc— Used by E5-SM8G-B Cards to support the SIP application.

slanhc—Used by E5-ENET and E5-ENET-B cards to support the STPLAN application

ss7hc—Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards. Allows the card to support up to 32 (E5-E1T1) or 64 (HC-MIM and E5-E1T1-B) signaling links for E1 and T1 functions.

ss7ml---Used by MPL and E1/T1 MIM cards. The GPL allows MPL cards to support 8 signaling links. MPL cards support only the DS0 interface. The GPL allows the E1/T1 MIM card to support 8 signaling links for E1 and T1 functions.

utility—Used by the factory for testing, and when directed by the Customer Care Center

vcdu—Used in the card manufacturing process

vsccp---Used by DSM cards to support EPAP-based features and the LNP ELAP Configuration feature. If no EPAP-based or LNP ELAP Configuration feature is turned on, and a DSM card is present, then the GPL processes normal GTT traffic.

vxwslan---Used by SSEDCM cards to support the STPLAN application

src (optional)

Source drive. The identification of the disk containing the GPL to be copied

Range:

remove

Removable drive

usb

Argument to be used by Oracle personnel only.

ver (optional)

Version number of the GPL, in the form of *major-minor-fix*.

Range:

major-minor-fix—Specify a valid value for each component of the version number, in the range *0-255*

Example

```
chg-gpl:audit=on
chg-gpl:gpl=atmitu:ver=114-1-0
chg-gpl:gpl=siphc:ver=134-35-0
chg-gpl:gpl=enumhc:ver=135-20-0
```

Dependencies

No other activate, change, copy, or retrieve GPL command can be in progress when this command is entered.

If the ver or gpl parameter is specified, then both parameters must be specified.

The audit parameter, the ver and gpl parameters, or the audit and ver and gpl parameters must be specified.

An E5-MCAP card must be installed before the src=usb parameter can be specified.

A system removable drive must be inserted in the Active OAM.

A valid value must be specified for the gpl parameter.

Notes

If there is a failure changing the active system, the operation is stopped. If there is a failure changing the standby system, the active system is still updated.

A system removable drive must be inserted into the latched USB port, initialized, and formatted as a system disk.

Use the `rtrv-gpl` command to determine the version number and audit state of a GPL.

The ver and gpl parameters are mandatory if a generic program load is being uploaded from a system removable drive.

The audit parameter is required only when turning GPL auditing on or off and the ver and gpl parameters are optional.

When the audit=off parameter is specified, the system release audit process is stopped. The detection, marking, and reporting of corrupt GPLs is continuous and not affected by turning audit off.

Output

This example shows the output for a successful command execution:

```
chg-gpl:gpl=ss7hc:ver=125-1-0
```

```
   rlghncxa03w 09-03-01 11:43:04 EST  EAGLE 40.1.0
   SS7HC upload to 1114 completed
   SS7HC upload to 1116 completed
   System Release ID table upload to 1116 completed
   System Release ID table upload to 1114 completed
;
```

```
chg-gpl:gpl=siphc:ver=134-35-0
```

```
tekelecstp 12-07-09 19:08:39 EST EAGLE 45.0.0
SIPHC upload to 1114 completed
SIPHC upload to 1116 completed
System Release ID table upload to 1116 completed
System Release ID table upload to 1114 completed
;
```

```
chg-gpl:gpl=enumhc:ver=135-20-0
```

```
tekelecstp 14-05-20 15:19:30 EST EAGLE 46.1.0
ENUMHC upload to 1114 completed
ENUMHC upload to 1116 completed
```

```
System Release ID table upload to 1116 completed
System Release ID table upload to 1114 completed
;
```

This example shows an error in the upload:

```
chg-gpl:gpl=bphcap:ver=101-014-000
```

```
   rlghncxa03w 06-06-01 11:43:04 EST  EAGLE 35.0.0
   BPHCAP corrupted on 1117 removable: mismatched checksums
;
```

Related Commands

act-gpl, *alw-card*, *copy-gpl*, *init-card*, *init-sys*, *rept-stat-gpl*, *rtrv-gpl*

chg-gsm-msg

Change GSM test message

Use this command to provision GSM test messages. These messages are used by the MO SMS NPP Test Tool to test MO-based GSM SMS message processing by the NPP.

Parameters

msgn (mandatory)

Message number. The GSM message number to be changed.

Range:

1 - 10

active (optional)

This parameter specifies whether the GSM test message is sent to the network card for processing.

Range:

yes

The message is sent to the network card.

no

The message is not sent to the network card.

Default:

No change to the current value

System Default:

no

cdpadgts (optional)

Called party address digits. The SCCP CdPA digits for the GSM test message.

Range:

1-15 digits

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

Default:

No change to the current value

System Default:

0123456789abcde

cdpagti (optional)

Called party address global title indicator. The SCCP CdPA GT for the GSM test message.

Range:

0 - 15

Default:

No change to the current value

System Default:

4

cdpagtnai (optional)

Called party address global title nature of address indicator. The SCCP CdPA GT NAI for the GSM test message.

Range:

0 - 127

Default:

No change to the current value

System Default:

4

cdpndgts (optional)

Called party number digits. The TCAP CdPN (*SM-RP-UI TP-DA*) digits for the GSM test message.

Range:

1 - 20 digits

Default:

No change to the current value

System Default:

01234567890abcde

cdpnnai (optional)

Called party number nature of address indicator. The TCAP CdPN (*SM-RP-UI TP-DA*) NAI for the GSM test message.

Range:

0 - 7

Default:

No change to the current value

System Default:

1

cdpnnp (optional)

Called party numbering plan. The TCAP CdPN (*SM-RP-UI TP-DA*) NP for the GSM test message.

Range:

0 - 15

Default:

No change to the current value

System Default:

1

cgpadgts (optional)

Calling party address digits. The SCCP CgPA digits for the GSM test message.

Range:

1 -15 digits

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

Default:

No change to the current value

System Default:

0123456789abcde

cgpagti (optional)

Calling party address global title indicator. The SCCP CgPA GT for the GSM test message.

Range:

0 - 15

Default:

No change to the current value.

System Default:

4

cgpagtnai (optional)

Calling party address global title nature of address indicator. The SCCP CgPA GT NAI for the GSM test message.

Range:

0 - 127

Default:

No change to the current value

System Default:

4

cgpndgts (optional)

Calling party number digits. The TCAP CgPN (*SM-RP-OA MSISDN*) for the GSM test message.

Range:

1 - 21 digits, *none*

none -deletes the current digits

Default:

No change to the current value

System Default:

01234567890abcde

cgpnnai (optional)

Calling party number nature of address indicator. The TCAP CgPN (*SM-RP-OA MSISDN*) NAI for the GSM test message.

Range:

0 - 7

Default:

No change to the current value

System Default:

1

cgpnnp (optional)

Calling party numbering plan. The TCAP CgPN (*SM-RP-OA MSISDN*) NP for the GSM test message.

Range:

0 - 15

Default:

No change to the current value

System Default:

1

reset (optional)

This parameter resets all of the parameters to their system default values.

Range:

yes

Message parameters are reset to their default values

Example

```
chg-gsm-msg:msgn=1:cdpnnai=4:cdpadgts=12457896abcd:cgpnnai=2:cgpndgts=919818541560
chg-gsm-msg:msgn=1:reset=yes
```

Dependencies

If the reset parameter is specified, then no other parameter can be specified.

At least one optional parameter must be specified.

Output

```
chg-gsm-msg:msgn=1:cdpnnai=4:cdpndgts=987654321:cgpnnai=4
```

```
    tekelecstp 09-03-02 10:46:51 EST  EAGLE 40.1.0
    CHG-GSM-MSG: MASP A - COMPLTD
;
```

Related Commands

rtrv-gsm-msg, *tst-msg*

chg-gsmmap-scrn Change GSM MAP Screening Entry

Use this command to change the attributes of GSM Map Screening CgPA and CdPA entries that are used to filter out or allow SCCP messages containing Map Op-Codes, CgPA GTA+NPV+NAIV, CdPA GTA+NPV+NAIV, and forbidden parameters.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

cgsr (mandatory)

CgPA Screening Reference.

Range:

ayyy

1 alphabetic character followed by up to 3 optional alphanumeric characters

opname (mandatory)

The user-defined name for the operation code. The opname value references the operation code (opcode) defined with the `ent-gsms-opcode` command. GSM MAP Screening is performed on the specified address or addresses for the referenced operation code.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

cdsr (optional)

CdPA Screening Reference.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

force (optional)

Check Mated Application Override. This parameter must be used to complete command execution if the npc/npca/npci/npcn and nssn parameter combination specified in the command is not already defined in the SCCP Application entity set (Remote Point Code/Mated Application Table).

Range:

yes

no

Default:

no

naction (optional)

The new screening action to take if a message is forbidden as defined by the forbid parameter.

Range:

atierr

Do not route the MSU. An ATI (Any Time Interrogation) reject message is generated to the originator. This value is valid only for ATI MAP operation codes.

discard

Do not route the MSU. The MSU is discarded (thrown away) and an appropriate UIM is issued.

dupdisc

Route the original message to the duplicate node. The original message will not be sent to the original node. If, however, the duplicate node is not available for routing, the MSU is discarded.

duplicate

Route the message as normal to the original destination and route a copy of the original message to the duplicate node. If the MSU fails to route to the duplicate node, a UIM is generated indicating the duplicate routing failure.

forward

Route the original message to the forward node. The original message will not be sent to the original node. If, however, the forward node is not available for routing, the MSU is routed to the original node.

pass

Route the message as normal to the destination; a UIM will be issued. This is intended to be a test mode and is recommended when setting up GSM Map Screening during the initial phase to assure that no MSUs will be inadvertently thrown away.

route

Route the message as normal to the original destination node; no UIM will be generated. The original destination is the node to which normal GTT would be sent if no GSM MAP actions are taken.

Default:

No change to current value

ncdsr (optional)

The new CDPA Screening Reference.

Range:

ayyy

1 alphabetic character followed by up to 3 optional alphanumeric characters

ncgsr (optional)

The new CGPA Screening Reference.

Range:

ayyy

1 alphabetic character followed by up to 3 optional alphanumeric characters

nforbid (optional)

The new forbidden parameter value. Indicates a forbidden parameter for the specified entry. If a forbidden parameter is detected, the message is handled with the action defined by the action/naction parameter.

Range:

all

All parameters are forbidden. Take the specified screening action defined by the *naction* parameter for messages arriving at the system.

none

None of the parameters are forbidden. Route the message to its destination.

state

Take the specified screening action defined by the naction parameter for messages arriving at the system that contain state as the forbidden parameter for the entered address/operation code combination.

Note: The state parameter is valid only for GSM ATI messages.

location

Take the specified screening action defined by the naction parameter for messages arriving at the system that contain location as the forbidden parameter for the entered address/operation code combination.

Note: This value is valid only for GSM ATI messages.

Default:

No change to current value

nmapset (optional)

The new MAP set ID.

Range:

1 - 36000, dflt

dflt—Default MAP set

Default:

No change to the MAP set value.

npc (optional)

New ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

npca

Range:

npc/npca/npci/npcn/npcn24 (optional)

New point code. The npc/npca/ npci/npcn /npcn24 and nssn parameters are used when the new screening action (naction) is *forward*, *duplicate*, or *dupdisc* (duplicate and discard). These parameters allow the user to change the defined node to which the input message will be routed.

npci (optional)

New ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

npcn (optional)

New ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

npcn24 (optional)

New 24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

nri (optional)

New routing indicator. This parameter specifies whether a subsequent global title translation is required.

Range:

gt

ssn

nssn (optional)

New Subsystem Number.

Range:

002 - 255, none

Default:

No change to the existing value

ntt (optional)

New translation type. The value the CdPA TT is set to as the result of Enhanced GSM Map Screening.

Range:

0 - 255

Default:

No change to the existing value

Example

```
chg-gsmmap-scrn:opname=xyz:cgsr=fela:naction=pass
chg-gsmmap-scrn:opname=xyz:cgsr=fela:cdsr=fall:naction=discard
chg-gsmmap-scrn:opname=test2:cgsr=pcn1:npcn=s-333:nssn=254
chg-gsmmap-scrn:opname=test1:naction=forward:npc=2-2-2:nssn=20:nmapset=12
chg-gsmmap-scrn:opname=test2:naction=duplicate:npc=1-1-2:nssn=20:cgsr=cg1:nmapset=dflt
chg-gsmmap-scrn:opname=test3:cgsr=ad:nri=ssn
chg-gsmmap-scrn:opname=test4:cgsr=ksl:ntt=12
```

Dependencies

At least one optional parameter must be specified.

If the cdsr parameter is specified, at least one additional optional parameter must be specified.

If the ncdsr parameter is specified, then the cdsr parameter must be specified.

If the cdsr parameter is specified, then the ncgsr parameter cannot be specified.

The ncgsr parameter and the ncdsr parameter cannot be specified together in the same command.

The specified cgsr parameter value must exist in the database.

The specified cdsr parameter value must exist in the database.

The specified ncgsr parameter value cannot already exist in the database.

The specified ncdsr parameter value cannot already exist in the database.

The GSM Map Screening feature must be turned on before this command can be entered.

The Enhanced GSM Map Screening (EGMS) feature must be turned on before the cdsr, ncdsr, pc, and pca parameters can be specified.

The specified opname parameter value must exist in the GSM Map Op-Code table.

A value of *state* or *location* cannot be specified for the nforbid parameter unless the operation code (opcode) referenced by the opname parameter is 71. The opcode=71 parameter signifies an ATI MAP operation code.

A value of *atierr* cannot be specified for the naction parameter unless the operation code (OPCODE) referenced by opname is 71.

If specified, the npc/npca/npci/ npcn/npcn24 parameter must be a full point code.

If the naction parameter is specified, and its value is forward, duplicate, or dupdisc, then the npc/npca/npci/npcn/npcn24 parameter and the nssn parameter must be specified.

The npc/npca/npci/npcn/npcn24 and nssn parameters must be specified before the force parameter can be specified.

If the npc/npca/npci/npcn/npcn24 parameter and the nssn parameter are specified, and the force parameter is not specified as *yes*, the PC-SSN must be populated in the SCCP Application entity set (Remote Point Code / Mated Application Table).

If specified, the npc/npca/npci/npcn/npcn24 parameter value must exist as a destination in the Ordered Route entity set (ANSI only), or must reside in a cluster that exists as a destination in the Ordered Route entity set (for global title routing).

The npc/npca/npci/npcn/npcn24 and nssn parameters can be specified only if the naction parameter is specified and its value is *forward*, *duplicate*, or *dupdisc*.

The opname parameter must be entered.

The cgsr parameter must be entered.

The opname parameter must be alphanumeric.

The (n)cgsr and (n)cdsr parameters must begin with an alphabetic character.

The (n)cgsr and (n)cdsr parameters must have 1-4 alphanumeric characters each.

If the value of the naction parameter is *forward*, *duplicate*, or *dupdisc*, then the nmapset parameter must be specified.

The naction parameter must have a value of *forward*, *duplicate*, or *dupdisc* before the npc/npca/npci/npcn/npcn24, nssn,nri, ntt, or naction parameters can be specified.

If the naction parameter has a value of *forward*, *duplicate*, or *dupdisc*, then the npc/npca/npci/npcn/npcn24 parameter and the nssn parameter must be specified.

The Flexible GTT Load Sharing feature must be enabled before the nmapset parameter can be specified.

The specified new MAP set must exist in the MAP table.

If the value of the nmapset parameter is not *dflt*, or if the nmapset=dflt parameter is specified, but the value of the force parameter is not *yes*, then the values for the npc and nssn parameters must exist in the new MAP set.

If the nmapset, nri, or ntt parameter is specified, and the naction parameter is not specified, then the action parameter (see the `ent-gsmmap-scrn` command) must have a value of *forward*, *duplicate*, or *dupdisc*.

The force parameter can be specified only if the nmapset parameter is specified.

If the value of the naction parameter is *forward*, *duplicate*, or *dupdisc*, then the value specified for the npc/npca/npci/npcn/npcn24 parameter cannot be associated with a proxy point code.

If the nri=ssn parameter is specified, then the nssn=none parameter cannot be specified.

If the nforbid=none parameter is specified, then the naction parameter must have a value of *pass*.

If the Flexible GTT Load Sharing feature is enabled, and the new or previously provisioned subsystem number has a value of *none*, then MAP set and point code combination must already exist in the MAP table.

If the Flexible GTT Load Sharing feature is not enabled, and the new or previously provisioned subsystem number has a value of *none*, then the point code must already exist in the MAP table.

Notes

Unlike GTT (Global Title Translation) entries, the GSM MAP Screening commands do not support splits of ranges during deletion or changes of entries.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (*s-*).

Output

`chg-gsmmap-scrn:opname=test4:cgsr=ksl:ntt=12`

```
    tekelecstp 08-08-20 19:13:01 EST  EAGLE 39.2.0
    GSM MAP Screening Table (1 of 4000) is 1% full
    CHG-GSMMAP-SCRN: MASP A - COMPLTD
;
```

Related Commands

dlt-gsmmap-scrn, *ent-gsmmap-scrn*, *rtrv-gsmmap-scrn*

chg-gsmopts

Change GSM System Options

Use this command to enter GSM (Global System for Mobile Telecommunications) system options in the database. This command updates the GSMOPTS Table.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Note: The options for the on, off, maplyrrtgon, and maplyrrtgoff parameters are described in the Notes section.

ccnc (optional)

E214 country code and network code.

Range:

2-8 digits

Default:

No change to the current value

crptt (optional)

Circular Route Prevention Translation Type.

Range:

0 - 255, none

System Default:

none

defmapvr (optional)

Default MAP version.

Range:

1 - 3

Default:

No change to the current value

System Default:

1

defmcc (optional)

E212 default mobile country code.

Range:

3 digits, *none*

Valid digits are *0-9, a-f, A-F*

none —Deletes the current value for the defmcc parameter

Default:

No change to the current value

System Default:

none

defmnc (optional)

E212 default mobile network code.

Range:

1-4 digits, *none*

Valid digits are *0-9, a-f, A-F*.

none —Deletes the current value for the defmnc parameter

Default:

No change to the current value

System Default:

none

dfltrn (optional)

Default routing number. The digits to use as the routing number portion of the msrndig parameter when an SRI is processed by the SRI Query for Prepaid feature, an RTDB match is found for an own-network subscriber, and Service Portability is not applied.

Range:

1-15 digits, *none*

Default:

No change to the current value

System Default:

none

eirdfltimsilkup (optional)

Equipment Identity Register (EIR) default IMSI lookup status. This parameter specifies the order of the IMEI table lookup for default IMSI screening. This parameter is analogous to the P1 parameter in the IMSIPFX CSL list but is used only when there is no matching IMSI prefix in the IMSIPFX CSL.

Range:

both

Perform lookup on Individual IMEI table first & if not found then lookup Range IMEI table

individual

Perform lookup on Individual IMEI table only

none

Don't perform any lookup. Just return the default IMEI status.

range

Perform lookup on Range IMEI table only

Default:

No change to the current value.

System Default:

range

eirdfltimsiresp (optional)

Equipment Identity Register (EIR) default IMSI response. This parameter specifies the default IMEI status for default IMSI screening. This parameter is analogous to the P2

parameter in the IMSIPFX CSL list but is used only when there is no matching IMSI prefix in the IMSIPFX CSL.

Range:

blacklist

The IMEI is "invalid". Registration should not be allowed for this handset

graylist

The IMEI is "questionable."

unknown

The IMEI is not in the White, Gray, or Black list. Registration should not be allowed for this handset.+

whitelist

The IMEI is "valid". Registration should be allowed for the handset.

Default:

No change to the current value.

System Default:

whitelist

eirgrsp (optional)

Equipment Identity Register (EIR) Global Response status.

Range:

off

EIR Global Response is not used

whitelst

The IMEI is “valid”. Registration should be allowed for the handset.

graylst

The IMEI is “questionable.” Registration should be allowed, but the event is logged in the EIR log and a special measurement peg is incremented.

blklst

The IMEI is “invalid”. Registration should not be allowed for this handset.

unknown

The IMEI is not in the White, Gray, or Black list. Registration should not be allowed for this handset.

Default:

No change to the current value

System Default:

off

eirimsichk (optional)

Equipment Identity Register (EIR) IMSI Check status. This parameter is not valid for IMEI ranges.

Range:

on

off

Default:

No change to the current value

System Default:

off

eirrsptype (optional)

Equipment Identity Register (EIR) Response Type.

Range:

type1

type2

type3

Table 10: EIR Response Type Values contains information to help select the value for this parameter.

Table 10: EIR Response Type Values

Presence in List			EIR Response Type		
White	Gray	Black	Type 1	Type 2	Type 3
X			white list	white list	white list
X	X		gray list	gray list	gray list
X	X	X	black list	black list	black list
X		X	black list	black list	black list
	X		gray list	gray list	unknown
	X	X	black list	black list	unknown
		X	black list	black list	unknown
			white list*	unknown*	unknown*

*Indicates no match was found for the IMEI in an incoming message within the database.

Default:

No change to the current value

System Default:

type1

gflexmaplayerrtg (optional)

G-Flex MAP layer routing. The message parameter used in the database lookup performed during G-Flex MAP layer routing.

The gflexmaplayerrtg parameter applies G-Flex MLR to the following MAP operations:

- updateLocation
- sendParameters
- sendAuthenticationInfo
- updateGPRSLocation
- AnyTimeInterrogation

Use the maplyrrtgon and maplyrrtgoff parameters to apply G-Flex MLR to additional MAP operations.

Range:

imsi

use the IMSI parameter for database lookup

none

MLR is not performed

msisdn

use the MSISDN parameter for database lookup

all

use the IMSI or MSISDN parameter for database lookup based on the operation code of the message

Default:

No change to the current value

System Default:

none

gsm2is41 (optional)

GSM to IS41 migration prefix.

Range:

1-15 digits, *none*

Valid digits are *0-9, a-f, A-F*

none —Deletes the current value of the gsm2is41 parameter.

Default:

No change to the current value

System Default:

none

is412gsm (optional)

IS41 to GSM migration prefix.

Range:

1-15 digits, *none*

Valid digits are *0-9, a-f, A-F*

none —Deletes the current value of the is412gsm parameter.

Default:

No change to the current value

System Default:

none

maplyrrtgoff (optional)

MAP Layer Routing Off. This parameter turns off G-Flex MLR for a comma-separated list of MAP operations. Up to 10 operations can be specified in the list.

Range:

regss, actss, dactss, intss, authfailrpt, rstdata, procunstrqt, rdyforsm, purgmobss, sriloc, all

all —Turns off G-Flex MLR for all MAP operations supported by the maplyrrtgoff parameter.

Note: If the*all*MAP operation is specified, then no other MAP operations can be specified in the same command.

Default:

No change to the current value

maplyrrtgon (optional)

MAP Layer Routing On. This parameter turns on G-Flex MLR for a comma-separated list of MAP operations. Up to 10 operations can be specified in the list.

Range:

regss, actss, dactss, intss, authfailrpt, rstdata, procunstrqt, rdyforsm, purgmobss, sriloc, all

all —Turns on G-Flex MLR for all MAP operations supported by the maplyrrtgon parameter.

Note: If the*all*MAP operation is specified, then no other MAP operations can be specified in the same command.

Default:

No change to the current value

mccmnc (optional)

E212 mobile country code and mobile network code.

Range:

4-7 digits, *none*

Valid digits are *0-9, a-f, A-F*.

none —Deletes the current mccmnc and ccnc parameter combination entry.

Default:

No change to current value

migrpfx (optional)

Migration prefix. This parameter specifies whether the database routing number (RN) or the GSM to IS-41 Migration prefix is used as the source for the prefix in the SRI Ack response message for a migrated subscriber.

Range:

single

The RN from the RTDB lookup is not used as the prefix in the SRI Ack. If the gsm2is41 parameter has a value other than *none*, then that value is used as the prefix in the SRI Ack Response.

multiple

The RN from the database lookup is used as the prefix in the SRI Ack response.

Default:

No change to the current value

System Default:

single

A value of *single* is the system default value for a new system, or for a system that upgraded to 36.0 without the IGM feature being turned on. If the IGM feature was turned on before upgrade to 36.0, then a value of *multiple* is hardcoded as the system default value.

msisdntrunc (optional)

MS ISDN truncation digits. The number of digits to delete from the beginning of the National MSISDN (MSISDN without Country Code) before formulating the MSRN parameter of the SRI Ack response.

Range:

0 - 5

Default:

No change to current value

System Default:

0

msrndig (optional)

The routing number to be used as is or concatenated with the MSISDN.

Range:

rn

Routing number

rndn

Routing number prefix and the international DN (dialed/directory number)

ccrndn

Country code, routing number, and national directory number

rnccdn

Routing number, country code and directory number

rnasd

Routing number and additional subscriber data

asdrn

Additional subscriber data and routing number

rnasddn

Routing number, additional subscriber data, and directory number

asdrndn

Additional subscriber data, routing number, and directory number

ccrnasddn

Country code, routing number, additional subscriber data, and directory number

ccasdrndn

Country code, additional subscriber data, routing number and directory number

rnasdccdn

Routing number, additional subscriber data, country code, and directory number

asdrnccdn

Additional subscriber data, routing number, country code, and directory number

rngrn

Routing number and generic routing number

grnrn

Generic routing number and routing number

rngrndn

Routing number, generic routing number, and directory number

grnrndn

Generic routing number, routing number, and directory number

ccrngrndn

Country code, routing number, generic routing number, and directory number

ccgrnrndn

Country code, generic routing number, routing number, and directory number

rngrnccdn

Routing number, generic routing number, country code, and directory number

grnrnccdn

Generic routing number, routing number, country code, and directory number

Default:

No change to the current value

System Default:

rn

msrnlen (optional)

The number of digits in the MAP Routing Info portion of the returned SRI_ACK message.

Range:

1 - 30

Default:

No change to the current value

System Default:

30

msrnnai (optional)

The nature of address indicator value for the MSRN.

Range:

0 - 7

0

Unknown Nature of Address

1

International Number

2

National Significant Number

3

Network Specific Number

4

Subscriber Number

5

Reserved for national use

6

Abbreviated Number

7

Reserved for extension

Default:

No change to current value

msrnnp (optional)

The numbering plan value for the MSRN.

Note: This parameter is mandatory if themsrnnaiparameter is specified.

Range:

0 - 15

Default:

No change to current value

multcc (optional)

Multiple country code.

Range:

1-3 digits

Valid digits are *0-9, a-f, A-F*

Default:

No change to current value

nmultcc (optional)

New multiple country code.

Range:

1-3 digits, *none*

Valid digits are *0-9, a-f, A-F*.

none —Deletes the specified multcc value from the multiple country code list.

Default:

No change to current value

off (optional)

This parameter turns off the specified options. Up to 8 comma-separated unique options can be specified.

Range:

eirdfltimsiscrn

eirimsichk

eirimsiscrn

eirlogwl

encdnpsdnnotfound

encdnpsptnone

encodecug

encodenps

srismgttrtg

on (optional)

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

Range:

eirdfltimsiscrn

eirimsichk

eirimsiscrn

eirlogwl

encdnpsdnnotfound

encdnpsptnone

encodecug

encodenps

srismgttrtg

serverpfx (optional)

Server SRI prefix.

Range:

1-4 digits, *none*

Valid digits are *0-9, a-f, A-F*

none —No Server SRI prefix is provisioned

Default:

No change to current value

System Default:

none

sporttype (optional)

Service Portability type. This parameter specifies whether Service Portability applies to SRI Query for Prepaid messages for own-network subscribers.

Note: If Service Portability is performed, then the Service Portability prefix (RTDB 'GRN'entity id) is applied.

Note: The S-Port feature must be turned on before any change to the parameter will impact the G-Port SRI Query for Prepaid feature.

Range:

gsm

Apply Service Portability prefix for own-network GSM subscribers

is41

Apply Service Portability prefix for own-network IS41 subscribers

all

Apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

none

Service Portability is not performed for this feature

Default:

No change to the current value

System Default:

none

srfaddr (optional)

Entity address of the MNP_SRF node.

Range:

1-15 digits, *none*

Valid digits are *0-9, a-f, A-F*

none —Deletes the current value for the srfaddr parameter.

Default:

No change to current value

System Default:

none

srfnai (optional)

The nature of address indicator value of the MNP_SRF.

Range:

0 - 127

Default:

No change to current value

srfnp (optional)

The numbering plan value of the MNP_SRF.

Range:

0 - 15

Default:

No change to current value

sridn (optional)

The Send Routing Information Dialed Number location.

Range:

tcap

sccp

Default:

No change to current value

System Default:

tcap

sridnnotfound (optional)

The processing used when G-Port encounters an RTDB query result that indicates that the specified directory number is not known.

Range:

gtt

GTT is performed on the message for routing to an HLR

srinack

an SRI negative acknowledgement is generated and returned to the calling party

Default:

No change to the current value

System Default:

gtt

srirdctent (optional)

This indicates whether existing SRI REDIRECT feature (SP) or Intra Network Number Portability feature (GRN) is to be used.

Range:

grn

Vendor type of GRN should be considered to be matched against Vendor type of CGPA GTA.

sp

Vendor type of SP should be considered to be matched against Vendor type of CGPA GTA.

Default:

No change to the current value

System Default:

sp

Example

```
chg-gsmopts:msisdntrunc=1:srfaddr=123456789abcdef:srfnai=0:srfnp=0
chg-gsmopts:msrnnai=1:msrnnp=1:msrndig=ccrndn:defmapvr=2
chg-gsmopts:sridn=sccp
chg-gsmopts:is412gsm=1234:gsm2is41=1234
chg-gsmopts:serverpfx=1000
chg-gsmopts:multcc=011
chg-gsmopts:multcc=011:nmultcc=11
chg-gsmopts:ccnc=33322123:mccmnc=21434
chg-gsmopts:eirimsichk=on:eirrsptype=type2:eirgrsp=blklst
chg-gsmopts:migrpfx=multiple
chg-gsmopts:sridnnotfound=srinack
chg-gsmopts:defmcc=214:defmnc=34
chg-gsmopts:msrndig=rnasd
chg-gsmopts:on=eirimsichk,eirimsiscrn,eirlogwl,eirdfltimsiscrn:eirrsptype=type2:
eirgrsp=blklst
chg-gsmopts:on=encodecug,encodenps,srismgrnrtg:off=eirimsichk,eirimsiscrn,eirlogwl,
eirdfltimsiscrn:crptt=50
chg-gsmopts:on=encdnpsptnone,encdnpsdnnotfound
chg-gsmopts:maplyrrtgon=regss,actss,sriloc:maplyrrtgoff=dactss,rstdata
chg-gsmopts:eirdfltimsilkup=range
chg-gsmopts:eirdfltimsiresp=whitelist
chg-gsmopts:srirdctent=grn
```

Dependencies

At least one parameter must be specified.

The G-Flex feature must be turned on before the defmnc, ccnc, or mccmnc parameter can be specified.

The G-Port or IGM feature must be enabled before the srfaddr, msrndig, msrnnai, sridn, msisdntrunc, migrpfx, gsm2is41, or serverpfx parameter can be specified and before a value of *encodecug, encodenps, srismgttrtg, encdnpsptnone,* or *encdnpsdnnotfound* can be specified for the on or off parameter.

An is412gsm parameter value must exist in the database before the serverpfx parameter can be specified.

The serverpfx=none parameter must be specified before the is412gsm=none parameter can be specified.

The EIR feature must be turned on before the *eirgrsp*, *eirrstype*, *eirimsichk*, *eirdfltimsilkup*, or *eirdfltimsiresp* parameters can be specified and before the *eirimsichk*, *eirimsiscrn*, *eirlogwl* or *eirdfltimsiscrn* options can be specified for the on or off parameter.

The ccnc and mccmnc parameter values must be specified together in the command.

A maximum of 10 ccnc records can exist in the database.

The value specified for the ccnc parameter cannot already exist in the database unless the mccmnc=none parameter is specified.

The srfaddr, srfnai, and srfnp parameters must be specified together in the command.

The msrnnai and msrnnp parameters must be specified together in the command.

The value specified for the ccnc parameter must already exist in the database if the mccmnc=none parameter is specified.

A maximum of 10 entries can be defined in the multiple country code list (in addition to the STP options defcc value).

A multiple country code cannot be entered when the STP options defcc value is none. A defcc value must first be defined before the first multiple country code can be entered. See the `chg-stpopts` command.

The value specified for the nmultcc parameter cannot already exist in the multiple country code list.

If the multcc and nmultcc parameters are specified to change the multcc value to the nmultcc value, then the multcc value must already exist in the multiple country code list.

The specified multcc and nmultcc values cannot already be defined as the STP options defcc parameter value.

The IGM feature must be enabled before the is412gsm, gsm2is41, or migrpfx parameter can be specified.

The G-Port, IGM, MO SMS ASD, MO SMS B-Party Routing, MO SMS GRN, MO SMS IS41-to-GSM Migration, MO-based GSM SMS NP, or Prepaid SMS Intercept Ph1 feature must be enabled, or the G-Flex, EIR, or V-Flex feature must be turned on before this command can be entered.

The G-Port or IGM feature must be enabled or the V-Flex feature must be turned on before the multcc and nmultcc parameters can be specified.

The G-Flex MAP Layer Routing feature must be enabled and turned on before the gflexmaplayerrtg, maplyrrtgon, or maplyrrtgoff parameter can be specified.

The G-Flex or G-Port feature must be turned on or the MT-Based GSM SMS NP or IGM feature must be enabled before the defm or cc parameter can be specified.

If the MT-Based GSM SMS NP feature is turned on, then the defmcc=none parameter cannot be specified.

The nmultcc and multcc parameters must be specified together in the command.

If the multcc parameter is specified to enter a new value in the multiple country list, then the specified value cannot already exist in the list.

The IGM or MO SMS IS41-to-GSM Migration feature must be enabled before the is412gsm parameter can be specified.

The G-Port feature must be enabled before the sridnnotfound parameter can be specified.

The G-Port feature must be turned on before the migrpfx=multiple parameter can be specified.

The G-Port, IGM, MO SMS ASD, MO SMS B-Party Routing, MO SMS GRN, MO-based GSM SMS NP, or Prepaid SMS Intercept Ph1 feature must be enabled before the defmapvr parameter can be specified.

The G-Port SRI Query for Prepaid feature must be enabled before the dfltrn parameter can be specified.

The S-Port and G-Port SRI Query for Prepaid features must be enabled before the sporttype parameter can be specified.

The G-Flex feature must be turned on or the G-Port or IGM feature must be enabled before the ccnc and mccmnc parameters can be specified.

The G-Flex feature must be turned on or the G-Port or IGM feature must be enabled before the ccnc and mccmnc parameters can be specified.

The MNP Circular Route Prevention feature must be turned on before the crptt parameter can be specified.

The eirimsichk parameter and the on or off parameter cannot be specified together in the command.

The same value cannot be specified for the on and off parameters.

The same MAP operation cannot be specified by the maplyrrtgon and maplyrrtgoff parameters in the same command.

If the all MAP operation is specified for the maplyrrtgon or maplyrrtgoff parameter, then no other operation can be specified for these parameters in the same command.

If the maplyrrtgon=all parameter is specified, then the maplyrrtgoff parameter cannot be specified in the same command.

If the maplyrrtgoff=all parameter is specified, then the maplyrrtgon parameter cannot be specified in the same command.

The GSM MAP SRI Redirect feature must be enabled before the srirdctent parameter can be set to *grn* or *sp*.

Notes

The sridn parameter can be used with the G-Port feature only or with the G-Port feature and the MNP Circular Route Prevention feature. Refer to *G-Port User's Guide* for more information.

If the IGM feature was turned on prior to upgrade to Release 36.0, then the migration prefix is hard-coded to a value of *multiple*. After upgrade, if the `chg-gsmopts:migrpfx=single` command is used to change the migration prefix to *single*, then the G-Port feature must be turned on before the migration prefix can be changed back to *multiple* (`chg-gsmopts:migrpfx=multiple`).

SRIRDCTENT is a system-wide option that can be set to use either the Intra Network Number Portability feature or the GSM MAP SRI Redirect feature.

on/off options

- *eirimsichk* —Specifies the use of the Equipment Identity Register (EIR) IMSI Check status. This option is not valid for IMEI ranges. This option has a default of OFF.
- *encodecug* —Specifies whether the Closed User Group (CUG) Checkinfo from the SRI message is included in the SRI Ack message. This option has a default of OFF.

- *enodenps* — Specifies whether the Number Portability Status Indicator (NPSI) is included in SRI Ack messages when the portability type (PT) has a value of 0, 1, 2 or 36. This option has a default of ON.
- *srismgttrtg* —Specifies whether the SRI_SM routing feature is on. This option has a default of OFF.
- *encdnpsptnone* —Specifies whether the NPSI is included in SRI Ack messages when the PT has a value of *none* (*255*). This option has a default of OFF.
- *encdnpsdnnotfound* —Specifies whether the NPSI is included in SRI Ack messages when the DN is not found. This option has a default of OFF.
- *eirimsiscrn* ---- Specifies the use of Equipment Identity Register (EIR) IMSI screening status. This option specifies whether the IMSI Screening shall be done before the IMEI check. This option has a default of OFF.
- *eirlogwl* ---- Specifies the use of Equipment Identity Register (EIR) white list logging status. This option specifies whether the white list logging for EIR shall be on. This option has a default of OFF.
- *eirdfltimsiscrn* ---- Specifies the use of Equipment Identity Register (EIR) default IMSI screening status. This option specifies whether the default IMSI screening shall be on. This option has a default of OFF.

MAP Operations Supported by the maplyrrtgon and maplyrrtgoff Parameters

The maplyrrtgon and maplrrtgoff parameters are used to turn G-Flex MLR on and off, respectively, for the following MAP operations:

- *regss : registerSS* —Register Supplementary Service
- *actss : activateSS* —Activate Supplementary Service
- *dactss : deactivateSS* —Deactivate Supplementary Service
- *intss : interrogateSS* —Interrogate Supplementary Service
- *authfailrpt : authenticationFailureReport* —Authentication Failure Report
- *rstdata : restoreData* —Restore Data
- *procunstrqt : processUnstructuredSS-Request* —Process Unstructured SS Request
- *rdyforsm : readyForSM* —Ready For Short Message
- *purgmobss : purgeMS* —Purge Mobile Subscriber
- *sriloc : sendRoutingInfoForLCS* —Send Routing Information for Location Service

Output

```
chg-gsmopts:msrnnai=1:msrnnp=1:msrndig=ccrngrndn:defmapvr=2
```

```
    tekelecstp 09-05-05 12:28:07 EST  EAGLE 41.1.0
    CHG-GSMOPTS: MASP A – COMPLTD
;
```

```
chg-gsmopts:srirdctent=grn
```

```
    tekelecstp 14-05-30 16:39:41 EST  EAGLE 46.1.0
    CHG-GSMOPTS: MASP A - COMPLTD
;
```

Related Commands

chg-gsmsmsopts, *rtrv-gsmopts*, *rtrv-gsmsmsopts*

chg-gsms-opcode

Change GSM MAP Screening Operation Code

Use this command to change the attributes of the GSM (Global System for Mobile Telecommunication) MAP (mobile application part) screening operation codes. The command allows you to change the default screening action and the operation-code name for a specific operation code.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

opname (mandatory)

Operation code name. The user-defined name for the operation code.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

force (optional)

Check Mated Application Override. This parameter is used to complete command execution if the npc/npca/npci/npcn/npcn24 and nssn parameter combination specified in the command is not already defined in the SCCP Application entity set (Remote Point Code/Mated Application Table).

Range:

yes

no

Default:

no

ndfltact (optional)

New default screening action.

Range:

pass

Route the message as normal to the destination; a UIM will be issued. This is intended to be a test mode and is recommended when setting up GSM Map Screening during the initial phase to assure that no MSUs will be inadvertently thrown away.

discard

Do not route the MSU. The MSU is discarded (thrown away) and an appropriate UIM is issued.

atierr

Do not route the MSU. An ATI (Any Time Interrogation) reject message is generated to the originator. This value is valid only for ATI MAP operation codes.

route

Route the message as normal to the original destination node; no UIM will be generated. The original destination is the node to which normal GTT would be sent if no GSM MAP actions are taken.

forward

Route the original message to the forward node. The original message will not be sent to the original node. If, however, the forward node is not available for routing, the MSU is routed to the original node.

duplicate

Route the message as normal to the original destination and route a copy of the original message to the duplicate node. If the MSU fails to route to the duplicate node, a UIM is generated indicating the duplicate routing failure.

dupdisc

Route the original message to the duplicate node. The original message will not be sent to the original node. If, however, the duplicate node is not available for routing, the MSU is discarded.

Default:

No change to the current value

nmapset (optional)

New MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

nopname (optional)

New operation code name.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

Default:

No change to current value

npc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

npca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

npc/npca/npci/npcn/npcn24 (optional)

New point code. The npc/npca/npci /npcn/npcn24 and nssn parameters are used when the default screening action (dfltact) is *forward*, *duplicate*, or *dupdisc* (duplicate and discard). These parameters allow the user to change the defined node to which the input message will be routed.

npci (optional)

New ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

npcn (optional)

New ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

npcn24 (optional)

New 24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

nri (optional)

New routing indicator. This parameter specifies whether a subsequent global title translation is required.

Range:

gt

ssn

nssn (optional)

New Subsystem Number.

Range:

2 - 255

Default:

No change to the existing value

ntt (optional)

New translation type. This parameter specifies the value that the CdPA TT is set to as the result of Enhanced GSM Map Screening.

Range:

0 - 255

Default:

No change to the existing value

Example

```
chg-gsms-opcode:opname=ati:ndfltact=atierr
```

```
chg-gsms-opcode:opname=ati:ndfltact=forward:npci=1-1-1:nssn=5:force=yes
chg-gsms-opcode:opname=xyz:npca=9-9-9:nssn=3
chg-gsms-opcode:opname=test2:npci=s-1-1-1
chg-gsms-opcode:opname=test2:ndfltact=dupdisc:npci=1-1-1:nssn=5:nmapset=8
chg-gsms-opcode:opname=ts4:ndfltact=forward:npc=1-1-2:nssn=5:nmapset=dflt
chg-gsms-opcode:opname=test:nri=ssn
chg-gsms-opcode:opname=test4:ntt=12
```

Dependencies

At least one optional parameter must be specified.

If the ndfltact parameter is specified, one of the following values must be specified: *pass*, *discard*, *atierr*, *route*, *forward*, *duplicate*, or *dupdisc*.

If the ndfltact parameter is specified and its value is *forward*, *duplicate*, or *dupdisc*, the npc/npca/npci /npcn/npcn24 and nssn parameters must be specified.

The word *none* cannot be specified as a value for the opname or nopname parameter.

If the npc/npca/npcinpcn/npcn24 and nssn parameters are specified with the ndfltact parameter, the ndflact parameter must have a value of *forward*, *duplicate*, or *dupdisc*.

The npc/npca/npci/npcn/npcn24 and nssn parameters must be specified before the force parameter can be specified.

The value specified for the opname parameter must already exist in the GSM Map Op-Code table.

The GSM Map Screening feature must be turned on before this command can be entered.

The EGMS feature must be enabled and turned on before the npc or npca parameters can be specified.

The ndfltact=atierr parameter cannot be specified unless the value of the operation code referenced by the opcode parameter is 71 . The *atierr* option is valid only for ATI MAP operation codes, and the opcode=71 parameter signifies an ATI MAP operation code.

The value specified for the npc/npca/npci/npcn /npcn24 parameter must be a full point code.

If the npc/npca/npci/npcn/npcn24 parameter and the nssn parameter are specified, and the force parameter is not specified as *yes*, the PC-SSN must be populated in the SCCP Application entity set (Remote Point Code / Mated Application Table).

If specified, the npc/npca/npci/npcn/npcn24 parameter value must exist as a destination in the Ordered Route entity set or reside in a cluster (ANSI only) that exists as a destination in the Ordered Route entity set (for global title routing).

If the opname parameter is specified, the value must be alphanumeric.

The opname parameter value and the nopname parameter value must be no more than 8 characters long.

The nmapset parameter must be specified if the value of the ndfltact parameter is *forward*, *duplicate*, or *dupdisc*.

If the ndfltact parameter is specified with the nmapset, nri, ntt, pc, or ssn parameter, then the ndfltact parameter must have a value of *forward*, *duplicate*, or *dupdisc*.

The nmapset parameter must be specified before the force parameter can be specified.

The Flexible GTT Load Sharing feature must be enabled before the nmapset parameter can be specified.

The specified new MAP set must exist.

If the nmapset=dflt parameter is not specified, or the nmapset=dflt parameter is specified, but the force=yes parameter is not specified, then the new PC and new SSN must exist in the new MAP set.

If the nmapset, nri, or ntt parameter is specified, and the ndfltact parameter is not specified, then the dfltact parameter must have a previously provisioned value of *forward*, *duplicate*, or *dupdisc* .

If the value of the ndfltact parameter is *forward*, *duplicate*, or *dupdisc*, then the value specified for the npc/npca/npci/npcn/npcn24 parameter cannot be associated with a proxy point code.

If the nri=ssn parameter is specified, then the ssn=none parameter cannot be specified.

If the Flexible GTT Load Sharing feature is enabled, and the new or previously provisioned subsystem number has a value of *none*, then the new or previously provisioned MAP set and point code combination must already exist in the MAP table.

If the Flexible GTT Load Sharing feature is not enabled, and the new or previously provisioned subsystem number has a value of *none* (the nssn=none parameter is specified in this command, or the ssn=none parameter was specified in the `ent-gsms-opcode` command), then the point code must already exist in the MAP table.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

`chg-gsms-opcode:opname=test4:ntt=12`

```
    tekelecstp 08-08-20 19:13:01 EST  EAGLE 39.2.0
    CHG-GSM-OPCODE: MASP A - COMPLTD
;
```

Related Commands

dlt-gsms-opcode, *ent-gsms-opcode*, *rtrv-gsms-opcode*

chg-gsmsmsopts

Change GSM SMS System Options

Use this command to enter GSM SMS system options in the database. This command updates the GSMSMSOPTS table.

Parameters

bpartygttsn (optional)

MO SMS B-Party Routing GTT Set name. The GTT set where Global Title Translation lookup on B-Party digits is performed.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters.

Default:

No change to the current value

System Default:

none

defis41smsc (optional)

Default IS41 short message service center. The default SMSC where an SRI_SM message received for an own network IS41 subscriber is relayed.

Range:

1-15 digits, *none*

Default:

No change to the current value

System Default:

none

defrn (optional)

Default routing number. A default routing number used for own-network subscribers.

Range:

1-15 digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

System Default:

none

igmsmsrelay (optional)

IGM - based SMS relay. This parameter specifies whether IGM relays an SRI_SM message that is received for an own network IS41 subscriber to a default SMSC or sends an SRI_SM-NACK error message.

Range:

yes

IGM relays the message to the default SMSC

no

IGM sends an SRI_SM-NACK

Default:

No change to the current value

System Default:

no

is41smscgttsn (optional)

IS41 SMSC GTT Set name. The GTT set where Global Title Translation lookup on default IS41 SMSC digits is performed.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

Default:

No change to the current value

mosmsaclen (optional)

The number of the digits that are taken from the MO SMS CgPA and used as the Area Code in the MO SMS CdPA.

Range:

0 - 8

Default:

No change to the current value

System Default:

0

mosmsdigmat (optional)

MO-based SMS Home SMSC match. The method used by the Portability Check for MO SMS or the MO-based GSM SMS NP feature to find a Home SMSC match.

Range:

exact

The system searches for an exact match of digits in the HomeSMSC Table.

bestfit

The system searches for a match on the leading digits of an incoming message with any provisioned entry in HomeSMSC table if an exact match is not found.

Default:

No change to the current value

System Default:

exact

mosmsfwd (optional)

MO-based SMS forward. This parameter specifies whether the value of the SCCP CDPA in the MO-based SMS message is modified to the GTA value that is specified by the mosmsgta parameter.

Range:

yes

The SCCP CDPA value is modified.

no

The SCCP CDPA value is not modified.

This parameter must be specified before the mosmsfwd=yes parameter can be specified.

Default:

No change to the current value

System Default:

no

mosmsgta (optional)

MO-based SMS GTA. The GTA value that is used to replace the SCCP CDPA value in the MO-based SMS message.

Range:

5-21 digits, *none*

Default:

No change to the current value

System Default:

none

mosmsgttdig (optional)

MO SMS B-Party Routing GTT digits. The digits used for Global Title Translation.

Range:

sccpcdpa

The SCCP CdPA is used for GTT

mapbparty

The MAP B-Party number is used for GTT

Default:

No change to the current value

System Default:

sccpcdpa

mosmsnai (optional)

MO-based SMS NAI. The number conditioning performed on the SMS message destination address before lookup in the number portability database is performed.

Range:

intl

Number is treated as INTL (1) for number conditioning

nai

The NAI from the SMS message is used to perform number conditioning

nat

Number is treated as NATL (2) for number conditioning

unknown

Number is treated as UNKNOWN (0) for number conditioning

A value of *nai* must be specified before the intl, natl, nai1, nai2, nai3, and unkn parameters in the `chg-npp-serv` command can be changed to non-default values for the MOSMSGCDPN service.

Default:

No change to the current value

System Default:

intl

mosmssa (optional)

MO-based SMS sub-address. This parameter specifies whether the sub-address is searched in the SMS called party (destination address).

Range:

yes

Sub-address is searched in the SMS called party.

no

Sub-address is not searched in the SMS called party.

Default:

No change to the current value

System Default:

no

mosmstcapseg (optional)

MO-based SMS TCAP Segmentation for GSM. This parameter specifies whether Mobile-Originated segmented TCAP messages are supported.

Range:

on

Segmented messages are supported.

off

Segmented messages are not supported.

Default:

No change to the current value

System Default:

off

mosmstype (optional)

MO-based SMS type. The value of the entity type that indicates that a successful lookup occurred in the number portability database.

Range:

sp

signaling point

rn

routing number

sprn

Lookup is successful if the value of the entity type is *sp* or *rn*.

all

Lookup is successful if the value of the entity type is *sp* or *rn*, or if no entity type is found.

Default:

No change to the current value

System Default:

sprn

mtmmsackn (optional)

MT-Based MMS acknowledgement. The message that is generated in response to a successful number portability database lookup for an SRI_SM message from a Home MMSC.

Range:

ack

SRI_SM_ACK message

nack

SRI_SM_NACK (Return Error) message

Default:

No change to the current value

System Default:

ack

mtmmsentylen (optional)

MT-Based MMS Entity length. The maximum number of digits used from the entity value of a returned RN, SP, or SRFIMSI entity for Multimedia Service (MMS) processing.

Range:

1 - 15, none

none —all digits from the entity value are used

Default:

No change to the current value

System Default:

none

mtmmsgta (optional)

MT-Based MMS GTA. The GTA that is compared with the SCCP CgPA GTA of an SRI_SM message to determine whether the originator of the message is a Home MMSC.

Range:

5-21 digits, *none*

Valid digits are *0-9, a-f, A-F*

none —Deletes the current value of the mtmmsgta parameter.

Default:

No change to the current value

System Default:

none

mtmmslen (optional)

MT-Based MMS Length. The maximum number of digits used in the returned IMSI and/or NNI fields for MMS processing.

Range:

1 - 24, none

none —all digits from the fields are used

Default:

No change to the current value

System Default:

none

mtmmstype (optional)

MT-Based MMS type. The value of the entity type that indicates that a successful lookup occurred in the number portability database.

Range:

sp

signaling point

rn

routing number

sprn

spor**rn**

all

sp, rn,or DN with no entity

nonsp

rnor DN with no entity

Default:

No change to the current value

System Default:

rn

mtsmsackn (optional)

MT-Based SMS acknowledgement. The message generated in response to a successful number portability database lookup for an SRI_SM message from a Home SMSC.

Range:

ack

SRI_SM_ACK message

nack

SRI_SM_NACK (Return Error) message

Default:

No change to the current value

System Default:

ack

mtsmschksrc (optional)

MT-Based SMS check source. This parameter specifies whether the SCCP CgPA GTA of a SRI_SM message is validated to determine if the source of the message is a Home SMSC.

Range:

yes

The SCCP CgPA GTA of an SRI_SM message is validated

no

The SCCP CgPA GTA of an SRI_SM message is not validated

If the mtsmschksrc=yes parameter is specified, and if the incoming SRI_SM message has SCCP CgPA GTA, then the SCCP CgPA GTA must be found in the Home SMSC list for the source of the message to be considered a Home SMSC. If the message is not found in the Home SMSC list, then the MT-Based GSM SMS NP feature does not process the message.

If the mtsmschksrc=no parameter is specified, or if SCCP CgPA GTA does not exist in the incoming message, then the source of the message is considered to

be a Home SMSC, and the MT-Based GSM SMS NP feature considers the message for processing.

Default:

No change to the current value

System Default:

no

mtsmsdltr (optional)

MT-Based SMS delimiter. This parameter specifies whether to insert a delimiter digit string before or after the routing number (RN) if the RN is used in the outbound digit format.

Note: The delimiter string that is inserted is determined by the mtsmsdltrv parameter.

Range:

no

A delimiter digit string is not inserted

prern

A delimiter digit string is inserted before the RN

postrn

A delimiter digit string is inserted after the RN

Default:

No change to the current value

System Default:

no

mtsmsdltrv (optional)

MT-Based SMS delimiter value. The delimiter digit string that is inserted before or after the RN when the RN is used in the outbound digit format.

Range:

1-5 digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

System Default:

none

mtsmsimsi (optional)

MT-Based SMS IMSI. The required format of digits that are encoded in the "IMSI" parameter of the SRI_SM response message.

Range:

rn

routing number

rndn

routing number and the international dialed or directory number

ccrndn

country code, routing number, and national directory or dialed number

dn

directory or dialed number

srfimsi

IMSI is encoded as the "SRFIMSI" parameter from the number portability database

mccrndn

mobile country code, routing number, and directory or dialed number

Default:

No change to the current value

System Default:

mccrndn

mtsmsnakerr (optional)

MT-Based SMS negative acknowledgement error. The TCAP error choice code used in the NACK response message generated for SRI_SM messages.

Range:

0 - 255

Default:

No change to the current value

System Default:

1

mtsmsnni (optional)

MT-Based SMS network node indicator. The required format of digits that are encoded in the "Network Node Number" parameter of the SRI_SM response message.

Range:

rn

routing number

rndn

routing number and the international dialed or directory number

ccrndn

country code, routing number, and national directory or dialed number

dn

Directory or Dialed Number

srfimsi

IMSI is encoded as the "SRFIMSI" parameter from the number portability database

mccrndn

mobile country code, routing number, and directory or dialed number

none

The Network Node Number parameter is not encoded in the response message

Default:

No change to the current value

System Default:

rn

mtsmstype (optional)

MT-Based SMS type. The value of the entity type that indicates that a successful lookup occurred in the number portability database for messages that are modified by the MT-Based GSM SMS NP feature.

Range:

sp

signaling point

rn

routing number

sprn

spor**rn**

all

sp,**rn**, or DN with no entity

nonsp

rnor DN with no entity

Default:

No change to the current value

System Default:

rn

spfill (optional)

This parameter specifies whether the Numbering Plan Processor (NPP) can populate SP and RN entities for own network subscribers at the same time.

Range:

off

Do not populate the RN and SP entities at the same time

on

Allow population of the RN and SP entities at the same time

Default:

No change to the current value

System Default:

off

sporttype (optional)

Service Portability type. This parameter specifies whether Service Portability is performed for the associated feature.

The S-Port feature must be enabled before this parameter can be specified. The S-Port feature must be turned on before any change to the parameter will impact the associated feature.

If Service Portability is performed, then the Service Portability prefix (RTDB 'GRN'entity id) is applied.

Range:

gsm

apply Service Portability prefix for own-network GSM subscribers

is41

apply Service Portability prefix for own-network IS41 subscribers

all

apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

none

Service Portability is not performed

Default:

No change to the current value

System Default:

none

srismdn (optional)

SRI_SM DN location. This parameter specifies whether the MT-Based GSM SMS NP feature selects the MSISDN from the TCAP or SCCP CdPA section of the SRI_SM message.

Range:

sccp

select the MSISDN from the SCCP CDPA section

tcap

select the MSISDN from the TCAP section

Default:

sccp

Example

```
chg-gsmsmsopts:mosmsnai=intl:mosmstype=sp:mosmssa=no
chg-gsmsmsopts:mosmsfwd=no:mosmsgta=987654321
chg-gsmsmsopts:srismdn=tcap
chg-gsmsmsopts:mtsmsackn=nack:mtsmsdltr=no:mtsmsdltrv=125:mtsmschksrc=no
chg-gsmsmsopts:mtmmsgta=51111:mtmmstype=sp:mtmmsackn=nack:mtmmsentylen=7:mtmmslen=10
chg-gsmsmsopts:mosmsdigmat=bestfit
chg-gsmsmsopts:bpartygttsn=setint001:mosmsgttdig=mapbparty
chg-gsmsmsopts:mosmsaclen=4
chg-gsmsmsopts:mosmstcapseg=on
```

Dependencies

At least one parameter must be specified.

The Hex Digit Support for GTT feature must be enabled before a hexadecimal value for the mosmsgta parameter can be specified.

The mosmsgta parameter must be specified before the mosmsfwd=yes parameter can be specified.

The mtsmsdltrv parameter must be provisioned before a value of prern or postrn can be specified for the mtsmsdltr parameter.

The value specified for the bpartygttsn or is41smscgttsn parameter must match the name of an existing GTT Set.

The mosmsgttdig=sccpcdpa parameter must be specified before the bpartygttsn=none parameter can be specified.

The GTT set specified for the bpartygttsn or is41smscgttsn parameter must have settype=cdgta (see the `ent-gttset` command).

If the bpartygttsn=none parameter is specified, then the mosmsgttdig=mapbparty parameter cannot be specified.

The MO-based GSM SMS NP, MO SMS ASD, or MO SMS GRN feature must be enabled before the mosmsfwd or mosmsgta parameter can be specified.

The Portability Check for MO SMS feature or the MO-based GSM SMS NP feature must be turned on before the mosmsdigmat or mosmstcapseg parameter can be specified.

The MT-Based GSM SMS NP feature must be enabled before the mtsmsimsi, mtsmsnni, mtsmstype, mtsmsackn, mtsmsdltr, mtsmsdltrv, mtsmsnakerr, mtsmschksrc, or srismdn parameter can be specified.

The MT-Based GSM MMS NP feature must be enabled before the mtmmsgta, mtmmstype, mtmmsackn, mtmmsentylen, or mtmmslen parameter can be specified.

The MO SMS B-Party Routing feature must be enabled before the bpartygttsn or mosmsgttdig parameter can be specified.

The MO-based GSM SMS NP feature must be enabled before the mosmstype, defrn, or spfill parameter can be specified.

The MO SMS ASD, MO SMS GRN, MO-based GSM SMS NP, or Prepaid SMS Intercept Phase 1 feature must be enabled before the mosmsaclen, mosmsnai, or mosmssa parameter can be specified.

If a digit string value has already been specified for the mosmsgta or mtsmsdltrv parameter, then a value of *none* cannot be specified subsequently for that parameter.

The IS41 GSM Migration feature must be turned on before the igmsmsrelay, is41smscgttsn, or defis41smsc parameter can be specified.

If the defis41smsc=none parameter is specified, then the igmsmsrelay=yes parameter cannot be specified.

If the defis41smsc parameter has a value other than *none*, then the is41smscgttsn=none parameter cannot be specified.

The S-Port feature must be enabled before the sporttype parameter can be specified.

The EGTT feature must be turned on before the is41smscgttsn parameter can be specified.

Notes

The mosmstcapseg parameter is turned off automatically if the Portability Check for MO SMS feature is turned off or the temporary FAK for the feature expires, and the MO-based GSM SMS NP feature is not enabled.

Output

```
chg-gsmsmsopts:is41smscgttsn=set1:defis41smsc=1234:igmsmsrelay=yes

    tekelecstp 09-06-08 18:52:54 EST  EAGLE 41.1.0
    CHG-GSMSMSOPTS: MASP A - COMPLTD
;
```

Related Commands

chg-gsmopts, *rtrv-gsmopts*, *rtrv-gsmsmsopts*

chg-gta

Change Global Title Address Information

Use this command to change the global title address information (GTA) for applicable global title selectors required to specify a global title entry.

This command changes the routing objects for messages requiring global title translations. The specified point code, subsystem number, MRN set ID, and routing indicator overwrite the existing data values.

When the Intermediate GTT Load Sharing feature and the Flexible GTT Load Sharing feature are both on, multiple relationships can be defined among a set of destination point codes in the existing MRN table. The relationship used in a particular translation is based on the GTA digits used for translation.

The MRN Set ID and the post-translation PC create a key that is used to perform a lookup in the MRN table. This lookup results in a set of alternate PCs from which a PC is selected, based on relative cost, to route the MSU in most cost-effective way.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

gttsn (mandatory)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 following alphanumeric characters

acn (optional)

Application context name. The ITU TCAP *ACN*field in the incoming MSU.

Range:

*0 - 255, *, none*

The ACN supports up to 7 subfields separated by a dash (e.g., *1-202-33-104-54-26-007*).

* —any valid value in the ITU TCAP *ACN* field in the incoming MSU

none —there is no ITU TCAP *ACN* field in the incoming MSU

Default:

No change to the current value

actsn (optional)

GTT Action Set Name.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

none -Action set name does not point to any action set

ccgt (optional)

Cancel called global title indicator.

Range:

yes

no

Default:

No change to the current value

cdselid (optional)

CdPA selector ID.

Range:

0 - 65534, none

none —deletes the current value of the *CDSELID* field

Default:

No change to the current value

cdssn (optional)

Starting CdPA subsystem number.

Range:

0 - 255

cgcnvsn (optional)

Calling party conversion set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

none —deletes the current value of the parameter

cggtmod (optional)

Calling party GT modification indicator. This parameter specifies whether calling party global title modification is required.

Range:

yes

no

Default:

no

cgpc (optional)

ANSI CgPA point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

cgpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

cgpcaction (optional)

This parameter is used to provide the required abilities, indicating what any particular translation needs to do with CgPA PC.

Range:

dflt

protocol will be allowed to perform all the required processing/conversion with CGPC.

ignore

CGPC will be left as it was in incoming MSU.

remove

CGPC will be removed from outgoing MSU.

Default:

dflt

cgpci (optional)

ITU international CgPA point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cgpcn (optional)

ITU national CgPA point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cgpcn16 (optional)

16-bit ITU national CgPA point code with subfields *unit number-sub number area-main number area (un-sna-mna)*.

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna--000---15

mna---000---31

cgpcn24 (optional)

24-bit ITU national CgPA point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

cgselid (optional)

Calling party selector ID.

Range:

0 - 65534, none

none —deletes the current value of the *CGSELID* field

Default:

No change to the current value

cgssn (optional)

The subsystem number of the starting CgPA.

Range:

0 - 255

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

*0---255, **

Specify a valid value for each subfield of the point code, and separate the subfields with dash (-).

The asterisk (*) value is not valid for the *n* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc=000* is not valid if *ni=001--005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006--255*.

When `chg-sid:pctype=ansi` is specified, *ni--*--''* is valid if *ni=006--225*.

The point code *000---000---000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Point Code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn16 (optional)

16-bit ITU national destination point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

ecdssn (optional)

Subsystem number of the ending called party.

Range:

0 - 255

ecgssn (optional)

Subsystem number of the ending CgPA.

Range:

0 - 255

egta (optional)

End global title address. The end of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1-21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

Same as the specified *gta* value

fallback (optional)

Fallback option. The action that is taken if the last translation doesn't match when performing GTT using a FLOBR-specific GTT mode.

Range:

yes

GTT is performed based on the last matched entry

no

GTT fails and the MSU is discarded

sysdflt

The system-wide default fallback option in the SCCPOPTS table is used.

Default:

No change to the current value

family (optional)

The ANSI TCAP *FAMILY* field in the incoming MSU.

Range:

*0 - 255, *, none*

* —any valid value in the ANSI TCAP *FAMILY* field in the incoming MSU

none —there is no value in the ANSI TCAP *FAMILY* field in the incoming MSU

System Default:

none

force (optional)

Check mated application override.

Range:

yes

no

Default:

no

gta (optional)

Global title address. The beginning of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1-21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

gtmodid (optional)

Global title modification identifier.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

none —removes the association between the translation and the GTMODID

Default:

No change to the current value

loopset (optional)

SCCP loopset name. This parameter associates a translation set with a loopset.

Range:

ayyyyyyy

One leading alphabetic character and up to 7 following alphanumeric characters.

none —Disassociates the translation set from all loopsets.

mapset (optional)

MAP set ID. The Mated Application set ID.

Range:

1 - 36000, *dflt*

dflt —Default MAP set

mrnset (optional)

MRN set ID. The Mated Relay Node set ID.

Range:

1 - 3000, *dflt*, *none*

dflt —Default MRN set

none —The GTA translation does not participate in any load sharing.

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

0-255, *

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni*-*-* is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

opci (optional)

ITU international originating point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, *0-255*

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the

`chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn16 (optional)

16-bit ITU national originating point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

opcode (optional)

The TCAP *opcode* field in the incoming MSU.

Range: *0 - 255, *, none*

* —any valid value in the TCAP *OPCODE* field in the incoming MSU.

none —there is no value in the TCAP *OPCODE* field in the incoming MSU.

opcsn (optional)

The new OPC GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

optsn (optional)

Optional GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

none —deletes the current value of the parameter

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix- un-sna-mna*).

Range:

p-, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pkgtype (optional)

The ANSI and ITU TCAP package type.

Range:

ansiuni

ANSI unidirectional

ansiabort

ANSI abort

any

Wildcard value

bgn

Begin

cnt

Continue

cwp

Conversation with Permission

cwop

Conversation without Permission

end

End

ituabort

ITU abort

ituuni

ITU unidirectional

resp

Response

qwp

Query with Permission

qwop

Query without Permission

ANSI TCAP Package Types

ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort, any

ITU TCAP Package Types

bgn, ituabort, ituuni, any, end, cnt

ppmeasreqd (optional)

Per Path Measurement required. This parameter specifies whether to perform per path measurements.

Range:

yes

perform Per Path Measurements

no

do not perform Per Path Measurements

Default:

No change to the current value

ri (optional)

Routing indicator.

Range:

gt

ssn

Default:

No change to current value.

split (optional)

Split or change an existing GTA range.

Range:

yes

Splits the existing GTA range.

no

Changes the existing GTA range.

Default:

yes

ssn (optional)

Subsystem number.

Range:

002 - 255

Default:

If the xlat parameter is not changed to *dpcngt* —No change to current value

If the xlat parameter is changed to *dpcngt* —The *ssn* parameter value is removed.

testmode (optional)

This parameter invokes a Test Tool that is used to debug the FLOBR/TOBR rules.

Caution: If the testmode=on parameter is specified, then the rule is used only by test messages and is ignored by live traffic. If the testmode=off parameter is specified, then both test and live messages use the rule. Changing from testmode=off to testmode=on is equivalent to deleting the rule for live traffic.

Range:

on

process the translation rules defined in the test message

off

perform standard GTT behavior

Default:

off

xlat (optional)

Translate indicator. This parameter is used to specify translation actions and routing actions.

Range:

dpc

dpcngt

dpcssn

none

Default:

No change to the current value

Example

```
chg-gta:gttsn=lidb:gta=9195554321:xlat=dpcssn:ri=ssn:pc=001-255-252:ssn=254
chg-gta:gttsn=test:gta=100000:egta=199999:pca=1-1-1:xlat=dpcngt:ri=gt:gtmodid=set1
chg-gta:gttsn=setnat003:gta=987658321198765432102:pcn=s-129
chg-gta:gttsn=itui1:gta=9876583211987654321l2:pci=s-1-210-1
chg-gta:gttsn=setnat003:gta=987658321198765432122:pcn=s-128-aa
chg-gta:gttsn=setmap:gta=2345678911:egta=3456789022:ri=ssn:pc=2-2-2:ssn=221:mapset=dflt
```

In this example, the database contains a GTA range [5556000-5558000], but no part of the GTA range [5558001-5559000] exists. The command deletes the GTA range [5556000-5558000] from the database and adds two new GTA ranges [5556000-5556799] and [5556800-5559000].

```
chg-gta:gttsn=tst1:gta=5556800:egta=5559000:split=yes
```

This example deletes the GTA range [5556000-5556799] from the database and adds a new GTA range [5556200-5556500] to the database. All the parameters for the GTA range [5556200-5556500] have the

same values as that of the deleted [5556000-5556799] GTA range, except the pc parameter that is has a value of *1*.

```
chg-gta:gttsn=tst1:gta=5556200:egta=5556500:pc=1-1-2:split=no
```

This example deletes the GTA range [5556200-5556500] from the database and adds two new GTA ranges [5556200-5556400] and [5556401-5556500] to the database.

```
chg-gta:gttsn=tst1:gta=5556401:egta=5556500
```

This example specifies the default MRN set.

```
chg-gta:gttsn=setmrn:gta=1234567880:pc=1-1-2:mrnset=dflt
```

This example removes the MRN set ID.

```
chg-gta:gttsn=setmrn:gta=1234567890:egta=2234567890:pc=1-1-2:mrnset=none
```

```
chg-gta:gttsn=setcdgta:gta=123456789012345678901:egta=223456789012345678901:
optsn=cggta1:opcsn=opc1
```

```
chg-gta:gttsn=setcdgta:gta=123456789012345678901:egta=223456789012345678901:
cgselid=1024:opcsn=opc1
```

```
chg-gta:gttsn=setcdgta:gta=123456789012345678901:egta=223456789012345678901:
optsn=none
```

```
chg-gta:gttsn=setopc:opca=002-001-001:xlat=dpcssn:ri=ssn:
pca=001-001-001:ssn=20:optsn=setcgssn
```

```
chg-gta:gttsn=setcgpc:cgpca=001-001-001:xlat=dpcssn:ri=ssn:
pca=001-001-001:ssn=20:optsn=setcgssn
```

```
chg-gta:gttsn=setcgssn:cgssn=100:ecgssn=200:xlat=dpcssn:ri=ssn:
pca=001-001-001:ssn=20
```

```
chg-gta:gttsn=set1:gta=2543:egta=2943:actsn=actdisc1:ppmeasreqd=yes
```

```
chg-gta:gttsn=set2:cgpc=1-2-*:actsn=actudts1
```

```
chg-gta:gttsn=set3:opcn=2543:actsn=actudts1
```

```
chg-gta:gttsn=set4:cgssn=25:ecgssn=29:actsn=actdup1:xlat=dpc:ri=gt:pc=1-1-1
```

This example specifies hexadecimal digits for the gta and egta parameters.

```
chg-gta:gttsn=set1:gta=abcd:egta=abce
```

```
chg-gta:gttsn=setmap:gta=2345678901:egta=3456789012:ri=ssn:pc=1-1-3:ssn=225:mapset=2:loopset=raleigh1
```

This example specifies that calling party GT modification is required.

```
chg-gta:gttsn=setans004:cggtmod=yes:gta=981234
```

This example changes the GTA translations when the FLOBR feature is turned on.

```
chg-gta:gttsn=setcdgta:gta=1234567890:egta=2234567890:
xlat=dpcssn:ri=ssn:pca=001-001-001:ssn=100:fallback=no:testmode=on
```

This example changes the GTA translations when the OBSR feature is enabled and the FLOBR feature is turned on.

```
chg-gta:gttsn=setcdgta:gta=1234567890:egta=2234567890:
xlat=dpcssn:ri=ssn:pc=2-2-2:ssn=100:fallback=yes:optsn=setcggta:testmode=on
```

This example changes the GTA translations when the FLOBR feature is turned on.

```
chg-gta:gttsn=setcdssn:cdssn=15:ecdssn=29:xlat=dpc:pc=1-1-1:ri=gt
```

This example changes the GTA translations when the TOBR and OBSR features are turned on.

```
chg-gta:gttsn=setopcode:pkgtype=qwop:opcode=none:family=*:xlat=dpc:ri=gt:
pc=2-2-2:opcsn=setopc:optsn=setcdgta
```

```
chg-gta:gttsn=setopcode:pkgtype=bgn:opcode=none:acn=1-22-123-43-54-65-76:
xlat=dpc:ri=gt:pc=2-2-2:opcsn=setopc:optsn=setcdgta
```

This example changes the GTA translation for a DPC GTT set when the FLOBR feature is turned on.

```
chg-gta:gttsn=setdpc:dpc=1-1-1:optsn=setc1
```

```
chg-gta:gttsn=setcdgta:gta=78901234:xlat=dpc:gtmodid=none
```

```
chg-gta:gttsn=setcdgta:gta=123456789012345678901:xlat=none:gtmodid=gttsn1
```

```
chg-gta:gttsn=setopcode:pkgtype=bgn:opcode=none:acn=1-2-3-4-5-6-7:xlat=none:mapset=1
```

```
chg-gta:gttsn=setcdgta:gta=123456:xlat=none:mapset=1:mrnset=2
```

Example for 16 bit PC and CGPCACTION param.

```
chg-gta:gttsn=gtt1:xlat=dpc:ri=ssn:pcn16=1-14-0:cgpcn16=45-1-0:mapset=dflt:
```

```
cgpcaction=remove
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

The ANSI/ITU SCCP Conversion feature must be enabled before a translated point code that is of a different domain than the GTT set specified by the gttsn parameter can be specified.

At least one optional parameter must be specified.

The gttsn=none parameter cannot be specified.

The point code specified for the pc parameter must be a full point code.

The values of the gta and egta parameters must be the same length.

If the specified or previously provisioned translated point code is of type ANSI, then the ngti value of the referred GT Modification Identifier (see the `ent-gtmod` command) must be 2.

The length of the specified gta parameter must match the number of digits provisioned for the specified GTT set when the VGTT feature is turned off. If the VGTT feature is turned on, then up to 10 GTA lengths can exist per GTT set. If the Support for 16 GTT Lengths in VGTT feature is turned on, then up to 16 GTA lengths can exist per GTT set.

The specified gta/egta range must exist for the specified GTT set in the STP active database. While an exact match is not required, an overlap with another range cannot be specified. If the range overlaps, an error is generated that displays a list of overlapped global title addresses. An example follows that shows what happens when the user attempts to enter a range (such as 8005550000 to 8005559999) that overlaps an existing range. The overlapping links must match. If they do not, error message E2401 is generated displaying the list of overlapped global title addresses:

The following GTA ranges overlap the input GTA range START GTA END GTA 8005550000 8005551999 8005552000 8005553999 8005554000 8005555999 CHG-GTA: MASP A - Command Aborted

If a new or existing xlat=dpcngt parameter is specified, a new or existing ri=gt parameter must be specified.

If the ssn parameter is specified, a new or existing xlat=dpcssn parameter must be specified.

If the xlat=dpcssn parameter is specified, the ssn parameter must be specified.

If the pc/pca/pci /pcn/pcn24/pcn16 parameter is specified, and the point code is the STP true point code, then the value of the new or existing xlat parameter must be *dpcssn*, and the new or existing value of the ri parameter must be *ssn*.

If the pc/pca/pci/pcn/pcn24/pcn16 parameter, ssn parameter, or both, are specified, and the point code is the STP true point code, the ssn value must exist in the SS-APPL table.

If the pc/pca/pci/pcn/pcn24/pcn16 parameter is specified, then it must exist as a destination in the Route table or reside in a cluster that exists as a destination in the Route table (for global routing) unless the point code is the STP's true point code.

If new or existing ri=ssn and xlat=dpc parameters are specified, and the pc/pca/pci/pcn/pcn24/pcn16 parameter is not specified, then the existing PC must exist in the Remote Point Code/MAP table, unless the force=yes parameter is specified.

If new or existing ri=ssn, xlat=dpc, and pc/pca/pci/pcn/pcn24/pcn16 parameters are specified, the new point code must exist in the Remote Point Code/MAP table, unless the force=yes parameter is specified.

If a new or existing ccgt=yes parameter is specified, a new or existing ri=ssn parameter must be specified.

If the new or existing pc/pca/pci/pcn/pcn24/pcn16 parameter is an the STP point code or capability point code, then the ccgt=no parameter must be specified.

If new or existing ri=ssn and xlat=dpcssn parameters are specified, a new or existing xlat=dpcssn parameter must exist in the Remote Point Code/MAP table, unless the force=yes parameter is specified.

The GTT table cannot be full.

If the ri=gt parameter is specified, the mrnset parameter must be specified. If the ri=gt parameter is not specified, the mrnset parameter cannot be specified

If the Flexible GTT Load Sharing feature is enabled, the specified PC must already exist in the specified MRN set.

The specified MRN set must already exist in the MRN table.

If the Flexible GTT Load Sharing feature is enabled, the specified PC must exist in the MRN set.

The Flexible GTT Load Sharing feature must be enabled before the mrnset parameter can be specified.

If the ri=gt parameter is specified, the mrnset parameter must be specified. If the ri=ssn parameter is specified, the mrnset parameter cannot be specified.

The SEAS command can operate only on the default MRN set or the default MAP set.

If the ri=ssn parameter is specified, the mapset parameter must be specified. If the ri=gt parameter is specified, the mapset parameter cannot be specified.

Note: The mapset parameter can only be specified if the Flexible GTT Load Sharing feature is enabled.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must exist in the database.

The specified or previously provisioned PC/SSN must exist in the specified or previously provisioned MAP set.

The SEAS command cannot operate on any MAP set other than the default MAP set.

If the xlat=dpc parameter is specified, and the value of the force parameter is not *yes*, then the point code and MAP set must exist in the MAP table.

The specified GTA must occur within an existing GTA range in the specified GTT Set.

The gta, cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, cgssn/cdssn, opcode/acn/pkgtype, opcode/family/pkgtype, or dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be specified.

The FLOBR feature must be turned on before the cgssn, opcsn, optsn, and cgselid parameters can be specified in the same command.

The pc/pca/pci/pcn/pcn24/pcn16, cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, and dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameters must have values within the valid range for each subfield.

The value specified for the ecgssn/ecdssn parameter must be greater than the value specified for the cgssn/cdssn parameter.

The specified GTT set must have a set type of opcode (see the `ent-gttset` command) before the opcode/acn/pkgtype or opcode/family/pkgtype parameters can be specified. The specified GTT set must have a set type of cdssn, cgssn, cdgta/cgta, opc, or cgpc before the cdssn, cgssn, gta, opc, or cgpc parameter, respectively, can be specified.

The OBSR feature must be enabled before the opcsn, cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, or (e)cgssn parameters can be specified.

If the GTT set specified by the gttsn parameter (GTTSN set) has a set type of cdgta (see the `ent-gttset` command), then the optsn parameter cannot specify a GTT set (OPTSN set) with a set type of cgssn. The OPTSN set must have a set type of cggta or cgpc.

The FLOBR feature must be turned on before a GTTSN set with a set type of *cgpc*, *cggta*, or *opc* can be specified with an OPTSN with a set type other than *cgssn*.

If the FLOBR feature is turned on, and the GTTSN set has a set type of *cdgta* or *cdssn*, then the OPTSN set cannot have a set type of *opc*.

If the TOBR feature is turned on, and the GTTSN set has a set type of opcode, then the OPTSN set cannot have a set type of *opc*.

The cdselid, cgselid, and optsn parameters cannot be specified together in the command. If the GTTSN has a set type of *cdgta*, *cdssn*, or *opcode* (see the `ent-gttset` command) then the opcsn parameter can be specified if one of the other exclusive parameters is specified.

The gta parameter must be specified if the GTTSN set type has a value of *cdgta* or *cggta*. The gta parameter cannot be specified for other set types.

The cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameter must be specified if the GTTSN set type has a value of *cgpc*. The cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameter cannot be specified for other set types.

The opc/opca/opci/opcn/opcn24/opcn16 parameter must be specified if the GTTSN set type has a value of *opc*. The opc/opca/opci/opcn/opcn24/opcn16 cannot be specified for other set types.

The cgssn parameter must be specified if the GTTSN set type is *cgssn*. The cgssn parameter cannot be specified for other set types.

The range specified by the cgssn/ecgssn and cdssn/ecdssn parameters cannot overlap a currently existing range for the specified GTT set.

The GTT set specified by the opcsn parameter must have a set type of opc (see the `ent-gttset` command).

If the specified GTT set is an ANSI set, the cgpc/cgpca, opc/opca, and dpc/dpca parameters must be valid ANSI point codes. If the specified GTT set is an ITU set, the cgpci/cgpcn/cgpcn24/cgpcn16, opci/opcn/opcn24/opcn16, and dpci/dpcn/dpcn24/dpcn16 parameters must be valid ITU point codes.

The set domain of the opcsn parameter must be the same as the set domain of the gttsn parameter. For example, if the set domain of the gttsn parameter is ANSI, then the set domain of the opcsn parameter must be ANSI. If the set domain of the gttsn parameter is ITU, then the set domain of the opcsn parameter must be ITU.

The range specified by the cgssn/ecgssn and cdssn/ecdssn parameters must exist for the specified GTT set in the STP active data base. An exact match is not required.

The translation entry associated with the specified point code (dpc/dpca/dpci/dpcn/dpcn24/dpcn16, pc/pca/pci/pcn/pcn24/pcn16, or opc/opca/opci/opcn/opcn24/opcn16) or opcode must already exist.

The cgpc, cgssn, gta, opc, cdssn, and opcode parameters cannot be specified in the same command.

If the cgssn and cdssn parameters are both specified in the same command (in any order), then only the value for the last of the two parameters specified is used during processing.

The Hex Digit Support for GTT feature must be turned on before hexadecimal digits can be specified for the gta or egta parameters.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value of the loopset parameter must already exist in the database.

The value specified for the egta parameter must be greater than value specified for the gta parameter.

The value specified for the pc parameter cannot be associated with a proxy point code.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The FLOBR feature must be turned on before the fallback, cdselid, (e)cdssn, or dpc parameter can be specified.

The FLOBR feature must be turned on before the gttsn parameter can specify a GTT set with a set type other than *cdgta* (see the `ent-gttset` command) in the same command with the cgselid parameter.

The OBSR feature must be enabled or the FLOBR feature must be turned on before the cgselid parameter can be specified.

The same value cannot be specified for the gttsn and optsn parameters.

The ANSI/ITU SCCP Conversion feature must be enabled before the GTT set specified by the optsn parameter can have a different domain than the GTT set specified by the gttsn parameter.

A TOBR quantity feature must be turned on before the opcode, pkgtype, acn, or family parameter can be specified.

The opcode, pkgtype, and family parameters must be specified together for ANSI TCAP translations. The opcode, pkgtype, and acn parameters must be specified together for ITU TCAP translations.

If the GTT set specified by the gttsn parameter has a set type of opcode (see the `ent-gttset` command), then the opcode/acn/pkgtype or opcode/family/pkgtype parameters must be specified. These parameters cannot be specified if the GTT set has of any other set type.

If the GTT set specified by the gttsn parameter has a set type of *cdssn* (see the `ent-gttset` command), then the cdssn parameter must be specified. This parameter cannot be specified if the GTT set has any other set type.

The opcsn parameter can be specified only if the GTT set specified by the gttsn parameter has a set type of *cdgta, opcode*, or *cdssn* (see the `ent-gttset` command).

The value specified for the gttsn parameter must match the name of an existing GTT Set.

A value of *none* must be specified for the optsn, cgselid, or cdselid parameter before the parameter can be changed to another value.

The ANSI/ITU SCCP Conversion feature must be enabled and the FLOBR feature must be turned on before the cgcnvsn parameter can be specified.

The GTT set specified by the gttsn parameter must have a set type of *cdgta* or *cggta* (see the `ent-gttset` command), before the cgcnvsn parameter can be specified.

The value specified for the gttsn parameter cannot be the same as the value specified for the cgcnvsn parameter.

If the family parameter is specified, then the pkgtype parameter must have a value of *ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort*, or *any*.

If the acn parameter is specified, then the pkgtype parameter must have a value of *bgn, ituabort, ituuni, any, end*, or *cnt*.

The gttsn parameter must be specified and must match an existing GTT set.

The GTT set name specified in the optsn, opcsn, or cgcnvsn parameters must match an existing GTT set name.

If the pkgtype=ituabort parameter is specified, then a value of *none* must be specified for the acn and opcode parameters.

If the pkgtype=ansiabort parameter is specified then a value of *none* must be specified for the family and opcode parameters.

The OBSR feature must be enabled or the FLOBR feature must be turned on before the optsn parameter can be specified.

The GTT Action Set specified by the actsn parameter must already exist in the database.

If the GTT set specified by the gttsn parameter has a set type of *dpc* (see the `ent-gttset` command), then the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be specified. If the GTT set has a set type other than *dpc*, then the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot be specified.

The value specified for the gtmodid parameter must already exist in the GTMOD table (see the `ent-gtmod` command).

The values specified for the gta and egta parameters must be an exact match to the GTA values referred in GTT Action Path table (see the `ent-gttapath` command).

If the FGTTLS feature is enabled, and the xlat=none parameter is specified, then the mrnset or mapset parameter must be specified.

If the xlat=none parameter is specified, then the ri, pc/pca/pci/pcn/pcn24/pcn16, force, ssn, and ccgt parameters cannot be specified.

The acn and family parameters cannot be specified together in the command.

If the cgssn parameter is specified, then the (e)cdssn parameter cannot be specified. If the cdssn parameter is specified, then the (e)cgssn parameter cannot be specified.

If the opc or dpc parameter is specified, then the (e)gta, (e)cgssn, (e)cdssn, and opcode parameters cannot be specified.

The J7 Support feature must be enabled before the cgpcn16/opcn16/dpcn16 parameters can be specified.

The J7 Support feature must not be enabled before the cgpcn24/opcn24/dpcn24/cgpca/opca/dpca parameters can be specified.

Notes

The maximum length of the resulting GTA string must not exceed 21 digits when translation is complete.

If a GTT is being deleted or changed and the point code (DPC or RTE) is not found in the route table (unless the point code is the STP's true point code), then the following message is displayed in the terminal scroll area:

```
NOTICE: No DPC and/or RTE found for GTT being deleted or changed.
```

The above situation may occur if the reference count rules were not enforced and a DPC and/or RTE were deleted while being referenced by a GTT entry. This indicates a software error; contact My Oracle Support (MOS).

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

When the Flexible GTT Load Sharing feature and the Intermediate GTT Load Sharing feature are on, multiple relationships can be defined among a set of destination point codes in the existing MRN table. The relationship used in a particular translation is based on the GTA digits used for translation. The mrnset parameter and the post-translation PC create a key that is used to perform a lookup in the MRN table. This lookup results in a set of alternate PCs, from which a PC is selected, based on relative cost, to route the MSU in most cost-effective way.

When the Flexible GTT Load Sharing feature is turned on, multiple relationships can be defined among a set of PC/SSN pairs in the existing MAP table. The relationship used in a particular translation is based on the GTA digits used for translation.

When the Origin-based SCCP Routing feature is enabled, the CdPA GTA entry can be provisioned in addition to the CgPA GTA, CgPA PC, CgPA SSN, and OPC entries. When provisioning, the Advanced CdPA GTA entry can associate with the CgPA GTA set or the CgPA PC set, the SELID and/or OPC set; the CgPA GTA, CgPA PC, or OPC can associate with the CgPA SSN set; the CgPA SSN cannot associate with any other GTT set. The Advanced CdPA GTA entry may contain the selector ID along

with CgPA information present in the MSU to search the Selector table again for the CgPA GTA or CgPA PC Set.

A loopset consists of a set of point codes that form a routing loop in the network. If the SCCP Loop Detection feature is enabled, then the loopset can be associated with or disassociated from specified translation entries. Loopsets that are associated with translation entries are checked during intermediate and final GTT traffic routing. If a loop exists, then the system can be notified with or without discarding the associated traffic.

If the range specified by the gta and egta parameters does not exactly match the existing range, then the existing range is split. All addresses in the existing range that are outside the range specified by the gta/egta parameters retain the original xlat, ri, pc and ssn parameters. A new range is created that is bounded by the gta/egta parameters. The new range contains new values for the xlat, ri, pc and ssn parameters that are present in the command, while retaining parameter values from the previous range that do not have corresponding new values in the command.

If the FLOBR GTT hierarchy is provisioned on a linkset, then translations do not have to be searched in a predetermined manner. If a translation points to another GTTSET/SELID, then database searches continue. The number of searches is limited by the following conditions:

- The same GTT set name cannot be referred more than once.
- Up to 7 database searches can be performed.

If the FLOBR feature is turned on, then any translation can point to any GTTSETs other than that specified by the GTTSN. The CdPA GTA and CdPA SSN translations can also point to an OPCSN. For CdPA GTA and CdPA SSN translations, if an OPTSN GTTSET/SELID is provisioned apart from an OPCSN, then the OPTSN GTTSET/SELID takes precedence over the OPCSN.

Translations associated with the TOBR feature:

- ANSI Opcode—ANSI opcode specifier, ANSI TCAP Package type, and Family
- ITU Opcode—ITU opcode, ITU TCAP Package Type, and ACN

Translations associated with the FLOBR feature:

- CdPA SSN Translations—Can be configured with routing and flexible routing data. The provisioning rules for CdPA SSN translations are the same as CgPA SSN translations in OBSR.
- DPC Translations—The provisioning rules for DPC translations are the same as OPC translations except that OPCSN parameter cannot be configured for DPC translations.

Output

```
chg-gta:gttsn=set2:xlat=dpcssn:ri=ssn:pc=3-3-3:ssn=10:cgpc=1-2-*:actsn=actudts1:ppmeasreqd=yes

    tekelecstp 10-02-15 17:29:06 EST  EAGLE 42.0.0
    CHG-GTA: MASP A - COMPLTD
;
```

Related Commands

dlt-gta, *ent-gta*, *rtrv-gta*

Use this command to change entries in the Default Global Title Conversion table. A table entry is identified by the direction and the tta or tti parameter, or the tti/np/nai parameter combination. The Notes section for this command describes rules for changing entry information.

Parameters

dir (mandatory)

Direction of conversion.

Range:

atoi

ANSI to ITU conversion

itoa

ITU to ANSI conversion

both

Conversion in both directions

nai (optional)

Nature of address indicator. This parameter is mandatory when gtixlat=24 is specified, and cannot be specified when gtixlat=22 is specified.

Range:

*0 - 63, **

Default:

No change to current value

np (optional)

Numbering plan. This parameter is mandatory when gtixlat=24 is specified, and cannot be specified when gtixlat=22 is specified.

Range:

*0 - 15, **

Default:

No change to current value

npdd (optional)

New prefix digits to be deleted. The number of new prefix digits to be deleted. These digits will be replaced with the new prefix digits string (npds).

Range:

0 - 21

Default:

No change to current value

npds (optional)

New prefix digits string. The new prefix digits string that will replace the received prefix digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

No change to current value

nsdd (optional)

New suffix digits to be deleted. The number of new suffix digits to be deleted. These digits will be replaced with the new suffix digits string (nsds).

Range:

0 - 21

Default:

No change to current value

nsds (optional)

New suffix digits string. The new suffix digits string that will replace the received suffix digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

No change to current value

rdmod (optional)

Reset digit modifiers (npdd/npds or nsdd/nsds) values to "no digit modification."

Range:

yes

Reset the npdd/npsd or nsdd/nsds parameter values

no

Do not reset the npdd/npsd or nsdd/nsds parameter values.

Default:

No change to current value

tta (optional)

ANSI translation type. This parameter is mandatory when dir=atoi or dir=both is specified.

Range:

*0 - 255, **

Default:

No change to current value

tti (optional)

ITU translation type. This parameter is mandatory when dir=atoi is specified.

Range:

*0 - 255, **

Default:

No change to current value

Example

This example changes a dir=atoi entry's current tti value to 5:

```
chg-gtcnv:dir=atoi:tta=10:tti=5
```

This example changes a dir=atoi entry's current tti, nai, and np values to 7, 8, and 6 respectively, and changes or adds NSDD and NSDS values:

```
chg-gtcnv:dir=atoi:tta=11:tti=7:nai=8:np=6:nsdd=3:nsds=123
```

This example changes a dir=itoa entry's current TTA value to 11, and changes or adds NPDD and NPDS values:

```
chg-gtcnv:dir=itoa:tta=11:tti=7:npdd=3:npds=123
```

This example changes a dir=itoa entry's TTA value to 12, and changes or adds NSDD and NSDS values:

```
chg-gtcnv:dir=itoa:tta=12:tti=7:nai=8:np=6:nsdd=5:nsds=45667
```

This example adds or changes a dir=both entry's NSDD and NSDS values:

```
chg-gtcnv:dir=both:tta=12:tti=33:nsdd=3:nsds=456
```

This example changes a default dir=atoi entry's current TTI value to 9, and changes or adds NSDD and NSDS values:

```
chg-gtcnv:dir=atoi:tta=*:tti=9:nsdd=1:nsds=9
```

This example changes a default dir=atoi entry's current TTI, NAI, and NP value to 4, 6, and 5 respectively:

```
chg-gtcnv:dir=atoi:tta=*:tti=4:nai=6:np=5
```

This example changes a default dir=itoa entry's current TTI value to 17, and changes or adds NPDD and NPDS values:

```
chg-gtcnv:dir=itoa:tta=17:tti=*:nai=*:np=*:npdd=3:npds=123
```

This example resets existing NPDD/NPDS or NSDD/NSDS values to "no digit modification":

```
chg-gtcnv:dir=both:tta=12:tti=11:rdmod=yes
```

This example specifies hexadecimal digits for NSDS:

```
chg-gtcnv:dir=atoi:tta=*:tti=4:npdd=3:npds=abc1234fed
```

Dependencies

The ANSI/ITU SCCP Conversion feature must be enabled before this command can be entered.

If the dir=atoi parameter is specified, then the tta parameter must be specified.

If the dir=both parameter is specified, then the tta and tti parameters must be specified.

If the dir=both parameter is specified, then a wildcard value (*) cannot be specified for any of the other parameters.

If the dir=atoi parameter is specified, then a value of * can be specified only for the tta parameter.

If the dir=itoa parameter is specified, then a value of * must be specified for the tti, np, and nai parameters.

If the dir=itoa and gtixlat=22 parameters are specified, then a value of * cannot be specified.

The specified dir, tta, tti, np, and nai parameter combination cannot already exist in the database.

The nsdd/nsds and the npdd/npds parameters cannot be specified together in the command.

The Hex Digit Support for GTT feature must be enabled and on before hexadecimal digits can be specified for the npds and nsds parameters.

Notes

The use of asterisks (wildcards) is allowed only once for each direction of ANSI to ITU and ITU to ANSI. This provides a configurable default.

In the conversion direction of ANSI to ITU, an asterisk can be specified only for the ANSI tta parameter.

In the conversion direction of ITU to ANSI, the asterisk value must be specified for the itu, tti, np, and nai parameters.

Asterisks are not allowed when conversion is in both directions (dir=both).

The suffix digit manipulation parameters nsdd and nsds cannot be specified in the same command with the prefix digit manipulation parameters (npdd and npds). The npdd and nsdd parameters specify how many digits to delete, if any, from the beginning or end respectively of the Global Title address digits. The npds and nsds parameters specify what digits, if any, to append to the beginning or end respectively of the Global Title address digits.

The gtixlat parameter is expressed in the form of the ANSI GTI and the ITU GTI. The gtixlat parameter is used to indicate the conversion of the Global Title Indicator between the ANSI and ITU standards. For example: A gtixlat value of *24* converts an incoming ANSI GTI2 to an outgoing ITU GTI 4 or an incoming ITU GTI 4 to an outgoing ANSI GTI2.

Output

```
chg-gtcnv:dir=atoi:gtixlat=22:tta=10:tti=5
```

```
    rlghncxa03w 03-11-07 11:43:07 EST  EAGLE 31.3.0
    CHG-GTCNV:  MASP A - COMPLTD
;
```

Related Commands

dlt-gtcnv, *ent-gtcnv*, *rtrv-gtcnv*

chg-gtmod

Change GT Modification Data

Use this command to change GT Modification (GTMOD) entry data. The GTMOD entry consists of a GTMOD ID and GTMOD specific data.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

gtmodid (mandatory)

GT Modification Identifier.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

cgpassn (optional)

Calling party subsystem number. This parameter specifies the calling party subsystem address that receives the message.

Range:

2 - 255, none

Default:

No change to the current value

ngti (optional)

New Global Title Indicator. This parameter specifies whether a new GTI translation format is type 2 or type 4.

Range:

2

4

none

Default:

No change to the current value

ngtmodid (optional)

New GT Modification Identifier.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

nnai (optional)

New nature of address indicator. This parameter specifies the value that is used to replace the received NNAI.

Range:

0 - 127, none

Default:

none-if the ngti=2 parameter is specified. Otherwise, no change to the current value.

nnp (optional)

New numbering plan. The value used to replace the received numbering plan.

Range:

0 - 15, none

Default:

none-if the ngti=2 parameter is specified. Otherwise, no change to the current value.

npdd (optional)

Number of prefix digits to be deleted. The number of digits to be deleted from the prefix of the received GT address.

Range:

1 - 21, none

Default:

No change to the current value

npds (optional)

New prefix digits string. The digits to be prefixed to the received GT address.

Range:

1-21 digits, *none*

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

No change to the current value

nsdd (optional)

Number of suffix digits to be deleted. The number of digits to be deleted from the suffix of the received GT address.

Range:

1 - 21, none

Default:

No change to the current value

nsds (optional)

New suffix digits string. The digits to be suffixed to the received GT address.

Range:

1-21 digits, *none*

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

No change to the current value

ntt (optional)

New Translation Type. The value that replaces the received Translation Type.

Range:

0 - 255, none

Default:

No change to the current value

off (optional)

Turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

gt0fill

on (optional)

Turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

gt0fill

precd (optional)

Precedence. This parameter specifies whether the prefix or suffix takes precedence during modification of the received GT address.

Range:

pfx

sfx

Default:

pfx-if the npdd and npds parameters are specified

sfx-if the *nsdd* and *nsds* parameters are specified

Example

```
chg-gtmod:gtmodid=set2:ngti=4:nnp=4:nnai=2:off=gt0fill:npds=2:precd=sfx:nsds=1
chg-gtmod:gtmodid=set3:on=gt0fill:nnp=7:nnai=100:nsdd=2:ntt=none
```

Dependencies

If the ngti=4 parameter is specified, then the nnp and nnai parameters must be specified.

If the ngti=2 parameter is specified, then the nnp and nnai parameters cannot be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before the ngti parameter can be specified.

The Hex Digit Support for GTT feature must be turned on before hexadecimal digits can be specified for the npds or nsds parameter.

At least one optional parameter must be specified.

The AMGTT, AMGTT CdPA Only, or AMGTT CgPA Upgrade feature must be turned on before any parameter except the ntt parameter can be specified.

The value specified for the gtmodid parameter must already exist in the GTMOD table.

If the npdd/npds and nsdd/nsds parameters are specified or were previously provisioned, then the precd parameter must be specified.

The combined digit length of the values for the specified or previously provisioned npds and nsds parameters cannot be greater than 21.

The (n)gtmodid=none parameter cannot be specified.

If the ngti=4 parameter is specified, then the referred translated point code cannot be ANSI. For ANSI point codes, the ngti value must be 2.

If the ngti=4 parameter is specified or was previously provisioned, then a value of *none* cannot be specified for the nnp and nnai parameters.

If the ngti=none parameter is specified, then the on=gt0fill parameter cannot be specified.

If the on=gt0fill parameter is specified, then the ngti parameter must be specified.

The value specified for the ngtmodid parameter cannot already exist in the database.

The same value cannot be specified for the on and off parameters.

Notes

on/off options

- *gt0fill* —GT zero fill. Specifies whether the last 0 of the GTA is a treated as a valid digit (OFF) or as filler (ON) during GT Modification for the gti(x)=2 to gti(x)=4 scenario.

Output

```
chg-gtmod:gtmodid=gtmodid2:ngti=4:nnp=4:nnai=2:off=gt0fill
```

```
    tekelecstp 10-03-18 14:43:31 EST  EAGLE 42.0.0
    Command entered at terminal #4

    GTMOD table is (2 of 50000) 1% full

    CHG-GTMOD: MASP A - COMPLTD
;
```

Related Commands

dlt-gtmod, *ent-gtmod*, *rtrv-gtmod*

chg-gtt

Change Global Title Translation

Use this command to change the routing objects for messages requiring global title translation. The global title addresses remain unchanged.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

gta (mandatory)

Global title address. The beginning of a range of global title digits.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

cggtmod (optional)

Calling party GT modification indicator. This parameter specifies whether calling party global title modification is required.

Range:

yes

no

Default:

no

egta (optional)

End global title address. The end of a range of global title digits.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

egta same as *gta*

gtmodid (optional)

Global title modification identifier.

Range:

ayyyyyyyy

1 alphabetic followed by up to 8 alphanumeric characters

Default:

No change to the current value

loopset (optional)

SCCP loopset name. This parameter associates a translation set with a loopset.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters.

none —Disassociates the translation set from all loopsets.

mapset (optional)

MAP set ID. The Mated Application set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

mrnset (optional)

MRN set ID. The Mated Relay Node set ID.

Range:

1 - 3000, dflt, none

dflt -Default MRN set

none -The GTT translation does not participate in any load sharing

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24 (optional)

Point code.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the

`chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc* ,*prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

ri (optional)

Routing Indicator. This parameter provides routing instructions to the receiving signaling point. In gateway screening, messages may be screened based on the value of the routing indicator.

Range:

gt

Allow a called party address with a routing indicator value of *global title*.

ssn

Allow a called party address with a routing indicator value of *dpc/ssn*.

Default:

No change in current value.

split (optional)

Split or change an existing GTA range.

Range:

yes

Split the existing GTA range.

no

Change the existing GTA range.

Default:

yes

ssn (optional)

Subsystem number.

Range:

002 - 255

Default:

If the xlat=dpcngt parameter is specified, there is no change to the current value.

If the xlat=dpcngt parameter is not specified, the ssn parameter is removed.

ttn (optional)

Translation type name.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

Default:

No translation name is given

type/typea/typei/typen/typen24/typeis/typens (optional)

Translation type. The translation type and network type. This parameter is the decimal representation of the 1-byte field used in SS7.

The type and typea parameters specify an ANSI network.

The typei parameter specifies an ITU-international network.

The typen parameter specifies an ITU-national network.

The typen24 parameter specifies a 24-bit ITU-national network.

The typeis parameter specifies an ITU-international spare network.

The typens parameter specifies an ITU-national spare network.

A translation type numeric value may be entered as an ANSI type (*type* or *typea*) and as an ITU type (*typei/typen/typen24/typeis/typens*). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE protocol processing as either ANSI or ITU; therefore, ITU applies to ITU-I, ITU-I spare, ITU-N, ITU-N spare, and ITU-N24.

Range:

0 - 255

Default:

No translation type is specified

xlat (optional)

Translate indicator. Translation actions and routing actions.

Range:

dpc

dpcssn

dpcngt

Default:

No change in current value.

Example

```
chg-gtt:type=5:gta=9195551212:egta=9195551999:xlat=dpcssn:ri=ssn:
pc=255-002-001 :ssn=255
```

```
chg-gtt:ttn=lidb2:gta=9197771212:egta=9197771999:xlat=dpcngt:ri=gt:
pc=255-002-001
```

```
chg-gtt:ttn=lidb6:gta=910777:pc=255-002-002
```

```
chg-gtt: type=10:gta=8005553232:egta=8005554000:gtmodid=sn1
```

```
chg-gtt:type=11:gta=8005553232:egta=8005554000:gtmodid=none
```

```
chg-gtt:gta=123456:pci=s-1-129-7:typei=41
```

```
chg-gtt:gta=223456:pcn=s-128-aa:typen=3
```

```
chg-gtt:ttn=setmrn:gta=1234567890:egta=2234567890:pc=1-1-2:mrnset=none
```

```
chg-gtt:ttn=setmrn:gta=2234567891:egta=2234567892:pc=1-1-2:mrnset=dflt
```

```
chg-gtt:ttn=setmrn:gta=2345678901:egta=3456789012:pc=1-1-3:mrnset=2
```

```
chg-gtt:ttn=setmap:gta=2345678911:egta=3456789022:ri=ssn:pc=2-2-2:ssn=6:
mapset=dflt
```

The database contains a GTA range [5556000-5558000], but no part of the GTA range [5558001-5559000] exists. This example deletes the GTA range [5556000-5558000] from the database and adds a new GTA range [5556800-5559000] to the database.

```
chg-gtt:ttn=tst1:gta=5556800:egta=5559000:split=no
```

This example deletes the GTA range [5556800-5559000] from the database and adds three new GTA ranges [5556800-5556899], [5556900-5557000] and [5557001-5559000] to the database.

```
chg-gtt:ttn=tst1:gta=5556900:egta=5557000
```

This example specifies hexadecimal digits for the gta, egta, and nsds parameters.

```
chg-gtt:type=1:xlat=dpcssn:ri=ssn:ssn=10:pc=1-1-1:gta=df3456789012345678906:
egta=df345678901234567890a
```

```
chg-gtt:ttn=setmap:gta=2345678901:egta=3456789012:ri=ssn:pc=1-1-3:ssn=10:mapset=2:
loopset=none:gtmodid=set6
```

This example specifies that calling party GT modification is required.

```
chg-gtt:gta=981234:type=4:cggtmod=yes
```

```
chg-gtt:typeis=5:gta=123456:egta=129999:xlat=dpc:ri=gt:pci=s-1-1-4
```

```
chg-gtt:typens=5:gta=123456:egta=129999:xlat=dpc:ri=gt:pcn=s-111
```

Dependencies

If the pcn parameter is specified, its format must match the format that was assigned with `chg-stpopts:npcfmti`.

The value specified for the tt parameter must correspond to the value specified for the type/typea/typei/typen/typen24/typeis/typens parameter.

The value of the tt parameter must exist in the Translation Type table.

The ANSI/ITU SCCP Conversion feature must be enabled before a translated point code and a translation type in different network types can be specified.

If the xlat=dpc, ri=ssn, and pc/pca/pci/pcn parameters are specified, then the point code must exist in the MAP table.

If the new or existing xlat parameter value is *dpc*, the new or existing ri parameter value is *ssn*, and the pc/pca/pci/pcn parameter is not specified, a point code must exist in the Remote Point Code/MAP table.

If the xlat parameter value is changed from *dpcssn* to *dpc* or *dpcngt*, a new ssn parameter value cannot be specified, and the current ssn parameter value must be removed.

If the new xlat parameter value is *dpcssn*, and the current ssn parameter value has been removed, a new ssn parameter value must be specified.

The start GTA length must equal the number of digits specified by the translation type. If the VGTT (variable length GTT) feature is turned on, then up to 10 GTA lengths per translation type are allowed. When the `ent-gtt` command is entered to create entries, the software keeps track of the lengths and allows only ten different lengths. The global title address specified for the translation type must then have the same number of digits as an existing GTA.

If the specified or previously provisioned translated point code is of type ANSI, then the ngti value of the referred GT Modification Identifier (see the `ent-gtmod` command) must be 2.

If the egta parameter is specified, the length must equal the length of the start GTA.

If the egta parameter is specified, the value must be greater than the value specified for the gta parameter.

The range of global title addresses to be changed, as specified by the start and end global title addresses, must match exactly or be contained within an existing range in the global title translation data for the specified translation type.

The new gta - egta range cannot include the GTA or EGTA of an existing range. However, the new GTA range can completely fall within an existing GTA range. If the range overlaps, an error is generated

that displays a list of overlapped GTAs. An example follows that shows what happens when the user attempts to enter a global title address range (such as 8005550000 to 8005559999) that overlaps an existing range. The overlapping links must match. If they do not, the error message displays the list of overlapped global title addresses:

```
The following GTA ranges overlap the input GTA range
START GTA END GTA 8005550000 8005551999 8005552000 8005553999 8005554000
8005555999
CHG-GTT: MASP A - Command Aborted
```

The tt parameter cannot be specified with a value that has been defined as an alias for another translation type.

Either the type or the ttn parameter must be specified.

Point code entries must be full point codes. Partial point codes are not allowed.

Table 11: Valid Parameter Combinations for chg-gtt Routing Parameters shows the valid combinations for the xlat, ri, and ssn parameters. All other combinations are rejected.

Table 11: Valid Parameter Combinations for chg-gtt Routing Parameters

New or Existing XLAT Value	New or Existing RI Value	Routing Action	SSN Value	
DPC	GT	Translate DPC only and route on GT	Cannot be specified. The current database entry is removed.	
DPC	SSN	Translate DPC only and route on SSN	Cannot be specified. The current database entry is removed.	
DPCSSN	GT	Translate DPC and SSN and route on GT	Must be specified	
DPCSSN	SSN	Translate DPC and SSN and route on SSN	Must be specified	
DPCNGT	GT	Translate DPC only and route on GT	Cannot be specified. The current database entry is removed.	

To enter this command, the Remote Point Code table cannot be full.

To enter this command, the subsystem table for primary remote point codes cannot be full.

If the ri=ssn parameter is specified, the mrnset parameter cannot be specified.

If the Flexible GTT Load Sharing feature is enabled, the point code must already exist in the specified MRN set.

The specified MRN set must already exist in the MRN table.

The Flexible GTT Load-Sharing feature must be enabled before the mrnset parameter can be specified.

The SEAS command is not allowed to operate on any other MRN set except the default MRN set.

The mapset parameter can only be specified if the Flexible GTT Load Sharing feature is enabled, and the ri=ssn parameter is specified. If the ri=ssn parameter is specified, the mapset parameter must be specified. If the ri=gt parameter is specified, the mapset parameter cannot be specified.

If the Flexible GTT Load Sharing feature is not enabled, the mapset parameter cannot be specified.

At least one entry must be provisioned in the specified MAP set in the MAP table.

The specified or previously provisioned point code and subsystem number must exist in the specified or previously provisioned MAP set.

The SEAS command cannot operate on any MAP set other than the default MAP set.

The specified GTA must lie within an existing GTA range in the specified GTT Set.

The specified GTA range must not overlap with any other existing GTA range in the specified GTT Set.

If the Flexible GTT Load Sharing feature is enabled, then the specified PC must exist in the MRN set.

If the ri=gt parameter is specified, the mapset parameter cannot be specified.

The Hex Digit Support for GTT feature must be turned on before hexadecimal digits can be specified for the gta or egta parameter.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value of the loopset parameter must exist in the Loopset table.

If the ri=gt parameter is specified, the mrnset parameter must be specified.

The GTT table cannot be full.

If the value of the pc/pca/pci/pcn/pcn24 parameter is the True Point Code, then the xlat=dpcssn parameter and the ri=ssn parameter must be specified.

If the ssn parameter is specified, and if the value of the pc/pca/pci/pcn/pcn24 parameter is the True Point Code, then the value of the ssn parameter must exist in the SS-APPL table.

The value of the pc/pca/pci/pcn/pcn24 parameter must exist as a destination in the ordered route entity set or must reside in a cluster (ANSI only) that exists as a destination in the ordered route entity set.

If the xlat=dpcssn and ri=gt parameters are specified, then the ssn parameter must be specified.

The xlat=dpcssn parameter must be specified before the ssn parameter can be specified.

If the xlat=dpcngt parameter is specified, then the ri=gt parameter must be specified.

The gta length is not defined for the specified translation type entity.

If the tt parameter is not specified, then the value of the ttn parameter must match the value of a tt parameter in the STP database.

The value of the pc/pca/pci/pcn/pcn24 parameter cannot be out of range.

At least one optional parameter must be specified.

The value specified for the pc parameter cannot be associated with a proxy point code.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The GTT set associated with the translation type specified by the ttn parameter must have a set type of cdgta (see the `ent-gttset` command).

The value specified by the gtmodid parameter must already exist in the GTMOD table (see the `ent-gtmod` command).

The ttn=none parameter cannot be specified.

The network domain of the translation type specified by the ttn parameter cannot be CROSS (see the `ent-gttset` command).

The xlat=none parameter cannot be specified.

The values specified for the gta and egta parameters must match the GTA values referred in the GTT Action Path table (see the `ent-gttapath` command).

Notes

The specified DPC, SSN, relative cost, and routing indicator will overwrite the existing data values in the table.

When the Intermediate GTT Load Sharing feature and the Flexible GTT Load Sharing feature are on, multiple relationships can be defined among a set of destination point codes in the existing MRN table. The relationship used in a particular translation is based on the GTA digits used for translation. The MRN Set and the post-translation PC formulate a key used as a lookup in the MRN table. The MRN table lookup results in a set of alternate PCs, one of which is selected (based on relative cost) to route the MSU in the most cost effective way.

When the Flexible GTT Load Sharing feature is turned on, multiple relationships among a set of PCs and SSNs in the existing MAP table are supported. The relationship used in a particular translation is based on the GTA digits used for translation. The MAP set ID and PC/SSN formulate a key that is used to perform lookup tasks in the MAP table. The lookup results in a set of mate PC/SSNs, one of which is selected to route the MSU in the most cost effective way.

If the AMGTT feature is turned off, then the Default GT Conversion table is used for conversion.

Load sharing for intermediate GTT traffic requires the Intermediate GTT Load Sharing feature, which can be run in conjunction with the Flexible GTT Load Sharing feature. Intermediate GTT load sharing is performed through the MRN table, and the GTT destination is a PC. If both the Intermediate and Flexible GTT Load Sharing features are on, different load-sharing relationships can be defined between the same set of PCs, and different sets of destinations can contain the same PCs.

Load sharing for final GTT traffic is performed through the MAP table, and the GTT destination is a PC/SSN combination. If the Flexible GTT Load Sharing feature is on, different load-sharing relationships can be defined between the same set of PC/SSNs, and different sets of destinations can contain the same PC/SSN combinations.

A loopset consists of a set of point codes that form a routing loop in the network. If the SCCP Loop Detection feature is enabled, then the loopset can be associated with or disassociated from specified translation entries. Loopsets that are associated with translation entries are checked during intermediate and final GTT traffic routing. If a loop exists, then the system can be notified with or without discarding the associated traffic.

The maximum length of the resulting GTA string must not exceed 21 digits when translation is complete.

If the range specified by the gta and egta parameters does not exactly match the existing range, then the existing range is split. All addresses in the existing range that are outside the range specified by the gta and egta parameters retain the original xlat, ri, pc, and ssn parameters.

A new range is created that is bounded by the gta and egta parameters. The new range contains new values for the xlat, ri, pc, and ssn parameters that are present in the command, while retaining parameter values from the previous range that do not have corresponding new values in the command.

If the EGTT feature is turned on, then the following occurs for the `chg-gtt` command:

- For ANSI, if a GTT selector is deleted using the `dlt-gttsel` command, then the corresponding GTT entry cannot be updated.
- For ITU, if a true GTT selector entry (GTI=2 or GTI=4) is deleted using the `dlt-gttsel` command, or if the GTT set name of an entry is changed using the `chg-gttsel` command, then the corresponding GTT entry cannot be updated.

Output

```
chg-gtt:gta=981234:type=4:cggtmod=yes:gtmodid=set3
```

```
    tekelecstp 10-03-09 17:29:06 EST  EAGLE 42.0.0
    CHG-GTT: MASP A - COMPLTD
;
```

Related Commands

dlt-gtt, *ent-gtt*, *rtrv-gtt*

chg-gttact

Change a GTT Action entry

Use this command to change a Global Title Translation (GTT) Action entry. A GTT Action entry consists of an Action ID, an action, and action specific data. The action specified in the entry determines the process that is performed on the MSU during translation.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

actid (mandatory)

GTT Action ID. The Action ID associated with the GTT Action entry.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

act (optional)

Action. The GTT Action that is applied to the message.

Range:

disc

discard message with no return error

dup

route a copy of the message to a specified duplicate node

fwd

route the original message to a specified forward node instead of the destination indicated by the GTT/ DB data

srvc

apply service (GPORT/GFLEX/SMSMR) on the message

tcaperr

discard message that has a specified TCAP error

udts

discard message and send UDTS/XUDTS

atcaperr (optional)

ANSI TCAP error cause. The reason for discarding a message that contains the ANSI TCAP portion associated with the *tcaperr* GTT Action.

Range:

0 - 255

Default:

No change to the current value

cdgtmodid (optional)

Called party global title modification identifier.

Range:

ayyyyyyyy

1 alphabetic followed by up to 8 alphanumeric characters

none —removes the association between the GTT Action entry and the CdPGT modification identifier

Default:

No change to the current value

cggtmodid (optional)

Calling party global title modification identifier.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

none —removes the association between the GTT Action entry and the CgPGT modification identifier

Default:

No change to the current value

cgpc (optional)

ANSI CgPA point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code *(prefix-ni-nc-ncm).*

Synonym:

cgpca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

cgpci (optional)

ITU international CgPA point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cgpcn (optional)

ITU national CgPA point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cgpcn16 (optional)

16-bit ITU national CgPA point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un---000---127

sna ---000---15

mna---000---31

cgpcn24 (optional)

24-bit ITU national CgPA point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp).* The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

cgpcogmsg (optional)

The data used as the Calling Party Point Code in the outgoing message.

Range:

dflt

Default. The standard Global Title Translation process supplies the CgPA PC.

cgpcicmsg

CgPA PC data from the incoming MSU

opcicmsg

OPC data from the incoming MSU

provcgpc

provisioned CGPC/CGPCA/CGPCI/CGPCN/CGPCN24/CGPCN16 data in the GTT Action

remove

CGPC will be removed from outgoing MSU

Default:

No change to the current value

defactid (optional)

Default Action ID. The default action that is performed when the *fwd* GTT Action fails to route the MSU.

Range:

ayyyyyyyy

1 leading alphabetic character followed by 8 alphanumeric characters

The defactid parameter can take one of the following values:

- GTT Action ID with a GTT Action of *disc*, *udts*, or *tcaperr* (see the act parameter). This value must already be defined in the GTT Action table.
- *fallback* —The MSU is routed using routing data in the translated MSU.

itcaperr (optional)

ITU TCAP error cause. The reason for discarding the message that contains the ITU TCAP portion associated with the *tcaperr* GTT Action.

Range:

0 - 255

Default:

No change to the current value

loopset (optional)

SCCP loopset name. This parameter associates a GTT Action with a loopset.

Range:

ayyyyyyy

One leading alphabetic character and up to 7 following alphanumeric characters.

none —disassociates the GTT Action from all loopsets

Default:

No change to the current value

mapset (optional)

MAP Set ID. The Mated Application Set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

Default:

No change to the current value

mrnset (optional)

MRN Set ID. The Mated Relay Node Set ID.

Range:

1 - 3000, dflt, none

dflt —Default MRN Set ID

none —The GTT Action does not participate in any loadsharing.

Default:

No change to the current value

nactid (optional)

New GTT Action ID.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

off (optional)

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

uimreqd

useicmsg

on (optional)

Enables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

uimreqd

useicmsg

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code *(prefix-ni-nc-ncm).*

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un---000---127

sna ---000---15

mna---000---31

ri (optional)

Routing indicator. The routing indicator in the SCCP called party address of the MSU being processed.

Range:

gt

route by the global title digits

ssn

route by the subsystem number

snai (optional)

The service nature of address indicator.

Range:

Sub -- Subscriber number

Natl -- National significant number

intl -- International number

rnidn -- Routing number prefix and international dialed/directory number

rnndn -- Routing number prefix and national dialed/directory number

rnsdn -- Routing number prefix and subscriber dialed/directory number

ccrndn -- Country code, routing number, and national directory number

snp (optional)

The service numbering plan.

Range:

e164 ---- E.164 numbering plan

e212 ---- E.212 numbering plan

e214 ---- E.214 numbering plan

srvcerr (optional)

The action to be performed when the Service triggered by GTT Action Services fails. The MSU can be processed by either applying the results of the pre-Service GTT, or continue with the specific Service error.

Range:

SRVC --- Continue with specific service error

GTT --- Apply the result of pre-GTT service

Default:

SRVC

srvcname (optional)

Service to be applied on the MSU when *act* is set to srvc.

Range:

GFLEX, *GPORT*, *SMSMR*

ssn (optional)

Subsystem number. The value used for the SSN in the SCCP called party address of the MSU.

Range:

2 - 255, none

none —an SSN is not used

udtserr (optional)

UDTS error cause. The reason associated with the UDTS GTT Action for discarding the message.

Range:

0 - 255

Default:

No change to the current value

Example

```
chg-gttact:actid=dup1:act=dup:ssn=40
```

Changing the Action Id of the already provisioned GTT Action entry:

```
chg-gttact:actid=dup1:act=dup:nactid=dup2
chg-gttact:actid=disc1:act=tcaperr:atcaperr=10
chg-gttact:actid=actfwd1:act=fwd:pc=2-2-2:ri=gt:defactid=none
chg-gttact:act=dup:actid=dup2:cdgtmodid=set1:cggtmodid=none
chg-gttact:act=dup:actid=dup5:cggtmodid=set4
chg-gttact:actid=actfwd2:act=fwd:pc=2-2-2:ri=gt:defactid=fallback:on=useicmsg
chg-gttact:actid=actfwd3:act=fwd:pc=2-2-2:ri=gt:cgpcogmsg=opcicmsg
chg-gttact:actid=actdup3:act=dup:pc=2-2-2:ri=gt:cgpc=1-1-1:cgpcogmsg=provcgpc
chg-gttact:act=fwd:actid=actfwd5:pcn16=1-14-0:ri=gt:mrnset=dflt:cgpcogmsg=remove
chg-gttact:actid=gflex1:act=GPORT
chg-gttact:actid=actsrvc1:snp=e164:snai=rnndn:srvcerr=gtt
```

Dependencies

A value of *dup* or *fwd* must be specified for the act parameter before the pc/pca/pci/pcn/pcn24/pcn16, cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, cgpcogmsg, cdgtmodid, cggtmodid, ssn, ri, mrnset, mapset, or loopset parameter can be specified and before a value of *useicmsg* can be specified for the on or off parameter.

The act=tcaperr parameter must be specified before the atcaperr and itcaperr parameters can be specified.

The act=udts parameter must be specified before the udtserr parameter can be specified.

The act=fwd parameter must be specified before the defactid parameter can be specified.

The Service Numbering Plan (*snp*), Service Nature of Address Indicator (*snai*), Service Name (*srvcname*) and Service Error Cause (*srvcerr*) parameters can only be specified when *act* is set to srvc.

The *srvc* GTT Action cannot be changed to any other GTT Action (Duplicate/forward/TCAP Error/Discard/UDTS Error) and vice versa.

A value of *disc, udts*, or *tcaperr* must be specified for the act parameter before a value of uimreqd can be specified for the on or off parameter.

The GTT Action entry specified by the actid parameter must already exist in the database.

The value specified for the nactid parameter cannot already exist in the database.

A value of *none* or *fallback* cannot be specified for the actid or nactid parameter.

If a value of *dup* or *fwd* is specified for the act parameter then the pc/pca/pci/pcn/pcn24/pcn16 parameter must be specified.

If the cgpcogmsg=provcgpc parameter is specified, then the cgpc/cgpca/cgpci/cgpcn/cgpcn24/pcn16 parameter must be specified.

The GTT Action - DISCARD feature must be enabled before a value of *disc, udts*, or *tcaperr* can be specified for the act parameter.

The GTT Action - DUPLICATE feature must be enabled before the act=dup parameter can be specified.

The specified PC/SSN must already exist in the specified MAP set.

If the ri=ssn parameter is specified, then the mrnset parameter cannot be specified.

The Flexible GTT Load Sharing feature must be enabled before the mrnset parameter can be specified.

If the ri=gt parameter is specified, then the mapset parameter cannot be specified.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must already exist in the database.

The specified MRN set must already exist in the MRN table.

If the Flexible GTT Load Sharing feature is enabled, then the specified PC must already exist in the specified MRN set.

The point code specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter must be a full point code.

The value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter must already exist as a destination in the Route table.

If the value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter is the STP true point code, then the value specified for the ssn parameter must already exist in the SS-APPL table.

The value specified for the pc parameter cannot be associated with a proxy point code.

If the pc/pca/pci/pcn/pcn24/pcn16, ri=ssn and ssn parameters are specified, then the PC/SSN must be populated in the Remote Point Code and MAP tables.

The point code specified for the pc/pca/pci/pcn/pcn24/pcn16 and cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameters must be within the range specified by the parameter definition.

A value of *disc, utds*, or *tcaperr* must be specified for the defactid parameter.

The ri=ssn and the ssn=none parameters cannot be specified together in the command.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value specified for the loopset parameter must already exist in the database.

The GTT Action - FORWARD feature must be enabled before the act=fwd parameter can be specified.

The point code specified by the pc/pca/pci/pcn/pcn24/pcn16 parameter must be associated with a valid route.

If the value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter is the STP true point code, then the ri=ssn parameter must be specified.

The values specified for the cdgtmodid and cggtmodid parameters must already exist in the GTMOD table.

The AMGTT or AMGTT CgPA Upgrade feature must be turned on before the cggtmodid parameter can be specified.

The GTT Action ID specified by the defactid parameter must already exist.

The pc/pca/pci/pcn/pcn24/pcn16 and cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameters must have the same domain.

One of the optional parameters must be specified.

The value specified by the act parameter cannot be changed until the associated Action ID is referenced by an Action Set or by any forward action. The value can only be changed from *disc/udts/tcaperr* to *disc/udts/tcaperr*.

The defactid=none parameter cannot be specified.

The same value(s) cannot be specified for the on and off parameters.

The GFLEX feature must be activated if the GFLEX service is entered with the SRVCNAME parameter.

The GPORT feature must be activated if the GPORT service is entered with the SRVCNAME parameter.

The Portability Check for Mobile Originated SMS feature/PPSMS feature must be turned ON, or the MO SMS ASD/MO SMS B-Party Routing/MO SMS GRN/MO SMS IS41-to-GSM Migration/MO-based GSM SMS NP/MO-based IS41 SMS NP feature must be ENABLED before the SMSMR Service is entered with SRVCNAME parameter.

If the value specified for the SRVCNAME parameter is GFLEX, then the snai=sub, natl or intl parameter must be specified.

If the value specified for the SRVCNAME parameter is GPORT/SMSMR, then the snai= rnidn, rnndn, rnsdn or ccrndn parameter must be specified.

If the value specified for the SRVCNAME parameter is GPORT/SMSMR, then the snp=e164 parameter must be specified.

If the value specified for the SRVCNAME parameter is GFLEX, then the snp=e164, e212 or e214 parameter must be specified.

The GTT destination must exist in the DSTN table.

Notes

on/off options

- *uimreqd* —UIM required. Specifies whether a UIM should be generated.
- *useicmsg* —Use Incoming Message. Specifies whether to apply GTT Action data to the message as the message was received (OFF) or after any EPAP or GTT translation/modification data has been applied (ON).

We cannot change *srvc* GTT Action to any other GTT Action (Duplicate/forward/TCAP Error/Discard/UDTS Error) and vice versa. A *srvc* GTT Action representing one service can be changed to another service.

Output

```
chg-gttact:actid=dup1:ssn=40
```

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0
    chg-gttact:actid=dup1:ssn=40
    Command entered at terminal #4

    GTT Action table is (2 of 2000) 1% full

    CHG-GTTACT: MASP A - COMPLTD
;
```

```
chg-gttact:actid=gflex1:act=GPORT
```

```
    tekelecstp 13-12-07 13:41:11 EST  EAGLE 46.0.0
    chg-gttact:actid=gflex1:act=GPORT
    Command entered at terminal #1
    GTT Action table is (5 of 2000) 1% full
    CHG-GTTACT: MASP A - COMPLTD
;
```

Related Commands

dlt-gttact, *ent-gttact*, *rtrv-gttact*

chg-gttapath

Change a GTT Action Path Entry

Use this command to change a GTT Action path entry. A GTT Action path consists of pairs of "setname + value" for Opcode/CgGTA/CdGTA. Each "setname + value" pair must already be defined in the GTT translation table.

Parameters

gttpn (mandatory)

GTT Path name.

Range:

ayyyy

1 leading alphabetic character and up to 4 following alphanumeric characters.

acn (optional)

Application context name. The ITU TCAP *ACN* field in the incoming MSU.

Range:

*0 - 255, * none*

none—there is no ITU TCAP *ACN* field in the incoming MSU

cdgta (optional)

Called Party Global Title Address.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

cdgttsn (optional)

GTT set name (CDPA type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

cggta (optional)

Calling Party Global Title Address.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

cggttsn (optional)

GTT set name (CGPA type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

family (optional)

The ANSI TCAP*FAMILY* field in the incoming MSU.

Range:

0 - 255, ***, *none*

none —there is no value in the ANSI TCAP *FAMILY* field in the incoming MSU

ngttpn (optional)

GTT Path name. The new GTT path name.

Range:

ayyyy

1 leading alphabetic character and up to 4 following alphanumeric characters.

opcode (optional)

The TCAP *OPCODE* field in the incoming MSU.

Range:

*0 - 255, *, none*

none —there is no value in the TCAP *OPCODE* field in the incoming MSU

opgttsn (optional)

GTT set name (Opcode type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

pkgtype (optional)

The ANSI and ITU TCAP package type.

Range:

ituuni

ITU unidirectional

qwp

Query with Permission

qwop

Query without Permission

resp

Response

cwp

Conversation with Permission

cwop

Conversation without Permission

any

Wildcard value

bgn

Begin

end

End

cnt

Continue

ituabort

ITU abort

ansiabort

ANSI abort

ansiuni
ANSI unidirectional

ANSI TCAP Package Types:
ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort, any

ITU TCAP Package Types:
bgn, ituabort, ituuni, any, end, cnt

Example

```
chg-gttapath:gttpn=path1:opgttsn=opsn2:acn=1-1-1-1-1-1-1:opcode=123:pkgtype=ituuni
chg-gttapath:gttpn=path1:cggttsn=cgsn2:cggta=45673
chg-gttapath:gttpn=path1:ngttpn=path2
```

Dependencies

If the family parameter is specified, then a value of *ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort*, or *any* must be specified for the pkgtype parameter.

If the acn parameter is specified, then a value of *bgn, ituabort, ituuni, any, end*, or *cnt* must be specified for the pkgtype parameter.

If the pkgtype=ituabort parameter is specified, then a value of *none* must be specified for the acn and opcode parameters.

If the pkgtype=ansiabort parameter is specified then a value of *none* must be specified for the family and opcode parameters.

The opcode, pkgtype, and family parameters must be specified together for ANSI TCAP translations. The opcode, pkgtype, and acn parameters must be specified together for ITU TCAP translations.

If the family and opcode parameters are specified, then either both parameters must have a value of *none* or neither parameter can have a value of *none*.

A value of *none* cannot be specified for the opgttsn, cggttsn, and cdgttsn parameter(s).

The specified path cannot already exist in the GTT Action Path table.

The acn and family parameters cannot be specified together in the command.

The GTT Action - DISCARD, GTT Action - FORWARD, or GTT Action - DUPLICATE feature must be enabled before this command can be entered.

A translation entry corresponding to the specified (opgttsn + opcode + pkgtype + acn/family)/(cgttsn + cggta)/(cdgttsn + cdgta) parameters must exist.

At least one GTT set-value combination must be specified.

The GTT set name specified by the opgttsn, cggttsn, or cdgttsn parameter must match an existing GTT set name.

The GTT set name specified by the opgttsn, cggttsn, and cdgttsn parameters must have set types of opcode, cggta, and cdgta, respectively.

The GTA value specified by the cggta or cdgta parameter must be the start GTA in the translation entry.

The GTT path name specified by the gttpn parameter must already exist in the database.

A GTT set-value combination(s) cannot be associated with a GTT path that is already associated to another combination. The value specified for the path name must be different from the existing path name.

The GTT path name specified by the ngttpn parameter cannot already exist in the database.

The value specified for the gttpn and ngttpn parameters cannot be a reserved word.

At least one optional parameter must be specified.

Output

`chg-gttapath:gttpn=path2:cggttsn=cgsn2:cggta=45673`

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0
    chg-gttapath:gttpn=path2:cggttsn=cgsn2:cggta=45673
    Command entered at terminal #4.

    GTT Action Path table is (1 of 10000) 1% full

    CHG-GTTAPATH: MASP A - COMPLTD
;
```

Related Commands

dlt-gttapath, *ent-gttapath*, *rtrv-gttapath*

chg-gttaset

Change a GTT Action Set entry

Use this command to change Global Title Translation (GTT) Action Set data. A GTT Action Set consists of an Action Set name and a set of Action IDs. The specified Action IDs determine the actions that are applied to the MSU during translation. Action IDs are configured using the `ent/chg/dlt-gttact` commands.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

actsn (mandatory)

GTT Action Set Name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid1 (optional)

GTT Action ID 1. The first Action ID associated with the GTT Action Set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

none—removes the Action ID from the GTT Action Set

actid2 (optional)

GTT Action ID 2. The second Action ID associated with the GTT Action Set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

none—removes the Action ID from the GTT Action Set

actid3 (optional)

GTT Action ID 3. The third Action ID associated with the GTT Action Set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

none—removes the Action ID from the GTT Action Set

actid4 (optional)

GTT Action ID 4. The fourth Action ID associated with the GTT Action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

none—removes the Action ID from the GTT Action Set

actid5 (optional)

GTT Action ID 5. The fifth action ID associated with the GTT Action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

none—removes the Action ID from the GTT Action Set

actid6 (optional)

GTT Action ID 6. The sixth Action ID associated with the GTT Action Set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

none—removes the Action ID from the GTT Action Set

nactsn (optional)

New GTT Action Set Name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

off (optional)

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

testmode

on (optional)

Enables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

testmode

Example

Changing the GTT Action Set name:

```
chg-gttaset:actsn=asetdisc1:nactsn=asetdisc2
```

Removing Action ID1 and ID3 from an Action Set and changing ID2 to another ID in the GTT Action Set table:

```
chg-gttaset:actsn=asetdup1:actid1=none:actid2=disc1:actid3=none:off=testmode
```

```
chg-gttaset:actsn=asetfwd1:actid1=actfwd1:actid2=actdup1:on=testmode
```

```
chg-gttaset:actsn=asetsrvc1:actid1=actdup2:actid2=actsrvc2
```

Dependencies

The Action ID specified by the actid(X) parameter(s) must already exist in the GTT Action table.

The value specified for the nactsn parameter cannot already exist in the database.

The GTT Action Set name specified by the actsn parameter must already exist in the GTT Action Set table.

A value of *none* cannot be specified for the (n)actsn parameter.

At least one Action ID in the Action Set must be associated with an action other than *none* or *fallback*.

Only one Action ID in an Action Set can be associated with an action of type *disc, udts*, *tcaperr* or *srvc*.

If an Action ID with an action of fwd is specified, then no other Action ID in the Action Set can be associated with an act of *disc*, *udts*, *tcaperr*, *srvc*, or *fwd*.

If an Action ID with an action of *srvc* is specified, then no other Action ID in the same Action Set can be associated with an act of *fwd*, *disc*, *udts*, *tcaperr*, or *srvc*.

If the Action Set contains 5 Action IDs with an action of *dup* then the remaining Action ID cannot have an action of *dup*.

Action IDs associated with an action of *disc, udts, tcaperr*, *srvc*, or *fwd* must be the last actions in an Action Set.

One of the optional parameters must be specified.

The actid1/actid2/actid3/actid4/actid4/actid5/actid6 parameters must each specify a unique Action ID in the command.

The EGTT feature must be turned on before this command can be entered.

The same option(s) cannot be specified for the on and off parameters.

Notes

on/off options

- *testmode*—invokes a field-safe Test Tool used to debug the GTT Action Set rules

Output

```
chg-gttaset:actsn=asetdup1:actid1=dup2:on=testmode
```

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0
    chg-gttaset:actsn=asetdup1:actid1=dup2:on=testmode
    Command entered at terminal #4.

    GTT Action Set table is (2 of 20000) 1% full

    CHG-GTTASET: MASP A - COMPLTD
;
```

Related Commands

dlt-gttaset, *ent-gttaset*, *rtrv-gttaset*

chg-gttsel

Change GTT Selectors

Use this command to change the global title translation (GTT) set linked with an existing gti(x), tt, np/npv, nai/naiv, lsn, selid, eaglegen, and cgssn combination.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the

Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

Note: The nature of address indicator parameters (naiv or nai) and the numbering plan parameters (npv or np) can be specified using either a mnemonic or an explicit value. Both values cannot be specified at the same time for the same parameter. *NAIV/NAI Mapping* shows the mapping between the naiv and nai values. *NPV/NP Mapping* shows the mapping between the npv and np values.

gti/gtia/gtii/gtin/gtin24/gtiis/gtins /gtin16 (mandatory)

Global title indicator.

For all EGTT selector commands, the domain is defined as GTI and GTIA (ANSI), GTII (ITU international), GTIN (ITU national), GTIN24 (24-bit ITU national), GTIIS (ITU international spare), GTINS (ITU national spare) and GTIN16 (16-bit ITU National).

For the selector commands, GTI and GTIA are equivalent. GTT selectors can be provisioned for the same translation type (TT) with different ITU domains. GTT selectors are provisioned independently for each domain.

Range:

0, 2, 4

Supported value for ANSI: *gti=0, 2* and *gtia=0, 2*

Supported values for ITU: *gtii/gtin/gtin24/gtiis/gtins/gtin16=0, 2, 4*

cdgtasn (optional)

CdPA GTA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

none —Set names do not point to the CdGTA set.

none —Set names do not point to the CdGTA set.

cdgttsn (optional)

CdPA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

none —Set names do not point to the CdPA GTT set.

cggtasn (optional)

CgPA GTA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

none —Set names do not point to the CgGTA set.

cggttsn (optional)

CgPA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

none —Set names do not point to the CgPA GTT set.

cgpcsn (optional)

CgPA PC GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

none —Set names do not point to the CgPC set.

cgssn (optional)

CgPA subsystem number.

Range:

0 - 255

eaglegen (optional)

This parameter specifies whether the selector is used by system-generated messages.

Range:

yes

used by a system MSU

gttsn (optional)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

lsn (optional)

Linkset name. The linkset used in GTT routing.

Range:

ayyyyyyyyy

1 leading alphabetic character followed by up to 9 alphanumeric characters

nai (optional)

Nature of Address indicator.

Range:

sub

rsvd

natl

intl

dflt

naiv (optional)

Nature of Address indicator value.

Range:

0 - 127

np (optional)

Numbering Plan.

Range:

e164

generic

x121

f69

e210

e212

e214

private

dflt

npv (optional)

Numbering Plan value.

Range:

0 - 15

selid (optional)

Selector ID.

Range:

0 - 65534

tt (optional)

Translation type.

Range:

0 - 255

Example

```
chg-gttsel:gtii=2:tt=40:cdgtasn=setcggta:cgpcsn=none:cgssn=10:selid=12
chg-gttsel:gtia=2:tt=253:gttsn=newansi
chg-gttsel:gtin=4:tt=0:np=dflt:nai=dflt:gttsn=setint000
```

This example changes the selectors linked with GTTSN ANSI1 so that the selectors are linked with ANSI2 (if ANSI2 is an existing GTT set in the database):

```
chg-gttsel:gtii=4:tt=5:npv=1:naiv=2:gttsn=ansi2
chg-gttsel:gtin=4:tt=60:npv=5:naiv=5:cgpcsn=setcgpc:selid=100:cgssn=10
chg-gttsel:gtia=2:tt=21:cggttsn=setcgpc:cdgttsn=setcdgta:cgssn=20:selid=1:lsn=ls10
chg-gttsel:gtia=2:tt=2:cdgttsn=setcdgta:lsn=ls1010
chg-gttsel:gtia=2:tt=2:cdgttsn=setcdgta:eaglegen=yes
chg-gttsel:gtins=4:cdgttsn=setitu004:tt=4:np=e164:nai=intl
chg-gttsel:gti=0:cdgttsn=setansi0
chg-gttsel:gtin16=2:tt=10:cgpcsn=abc
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

The np and npv parameters cannot be specified together in the same command.

The nai and naiv parameters cannot be specified together in the same command.

The gti/gtia=4, gti(x)=, and gti(x)=3 parameters cannot be specified.

If the gti/gtia/gtii/gtin/gtin24/gtiis/gtins/gtin16=2 parameter is specified, then the np/npv and nai/naiv parameter combinations cannot be specified.

If the gtii/gtin/gtin24/gtiis/gtins/gtin16=4 parameter is specified, an np(v)/nai(v) parameter combination must be specified. These parameters can be specified in any combination.

The network domain (ANSI or ITU) must match that of the GTT Set entry specified by the cdgttsn, cdgtasn, or gttsn parameter.

The GTT set specified by the cdgtasn, cdgttsn, or gttsn parameter must already exist in the GTT Set table.

A value of *none* cannot be specified for the gttsn, cdgtasn, cdgttsn, cggttsn, cggtasn, or cgpcsn parameter.

The OBSR feature must be enabled before the cdgtasn, cggtasn, cgpcsn, or cgssn parameter can be specified.

The GTT set specified by the cgttsn, cggtasn, or cgpcsn parameter must already exist in the GTT Set table.

The network domain of the CgPA GTT Set specified by the cggttsn, cggtasn, or cgpcsn parameter must match the domain indicated by the gti(x) parameter.

The set type specified by the cggtasn or cgpcsn parameter must match the set type of the corresponding entry in the GTT set table. For example, the cggtasn parameter should have a set type of *cggta*, and the cgpcsn parameter should have a set type of *cgpc*.

A value of *none* cannot be specified for the cdgtasn parameter if the gttsn parameter specifies the only GTTSET associated with that selector.

If the FLOBR feature is turned on, then the cdgtasn, cggtasn, and cgpcsn parameters cannot be specified.

An entry must already exist that matches the gti(x), tt, and np(v)/nai(v) combination of parameters.

If the OBSR feature is enabled or the FLOBR feature is turned on, then the gttsn parameter cannot be specified.

The np and nai parameters must both have a value of *dflt* or neither can have a value of *dflt*.

The FLOBR feature must be turned on before the l sn, eaglegen, cdgttsn, and cggttsn parameters can be specified.

At least one GTT set name parameter must be specified. These parameters include:

- cdgtasn, cggtasn, or cgpcsn if the OBSR feature is enabled
- cdgttsn or cggttsn if the FLOBR feature is turned on
- gttsn if the OBSR feature is not enabled and the FLOBR feature is not turned on

The GTT Set specified by the cdgtasn or gttsn parameter must have a set type of cdgta (see the `ent-gttset` command).

The linkset specified by the lsn parameter must already exist in the Linkset table.

The SSNSELID Table cannot contain more than 100,000 entries.

The GTTDBMM Table cannot contain more than 42,502 entries.

If the lsn parameter is specified, then the cdgttsn or cggttsn parameter must be specified.

The cggtasn, cgpcsn, and cggttsn parameters cannot be specified together in the command.

The gttsn, cdgtasn, and cdgttsn parameters cannot be specified together in the command.

If the gttsn, cdgttsn, or cdgtasn parameter is specified, then the cgssn parameter cannot be specified. If the cggtasn, cgpcsn, or cggttsn parameter is specified, then the cgssn parameter must be specified.

If the eaglegen=yes parameter is specified, then the lsn, selid, gttsn, cdgtasn, cgssn, cggttsn, cggtasn , and cgpcsn parameters cannot be specified.

If the np=dflt or nai=dflt parameter is specified, then the cggtasn, cggttsn, cgpcsn, cgssn, eaglegen, lsn, and selid parameters cannot be specified.

If the gti(x)=0 parameter is specified, then the eaglegen, tt, np/npv, and nai/naiv parameters cannot be specified.

If a value of 2 or 4 is specified for the gti(x) parameter, then the tt parameter must be specified.

Notes

The entry that matches the specified parameter combination is assigned to the specified gttsn.

When the Origin-based SCCP Routing feature is enabled, two GTT sets, either the cdgtasn/cggtasn or the cdgtasn/cgpcsn, can be assigned to a GTT selector. The cggtasn and cgpcsn GTT sets are mutually exclusive and cannot be assigned to the same GTT selector.

When the value of the cggtasn/cgpcsn GTT set is specified as none, that combination (domain, tt, gti, np/npi, na/nai, cgssn, and selid) are deleted from the database. At any point of time, each provisioned selector must have at least one GTT set.

There is no J7 FAK dependency on the GTIA/GTIN16/GTIN24 parameters. The command can be entered successfully whether the J7 FAK is enabled or not enabled.

GTT Selector entries configured using GTIN24/GTIN16 parameters shall be treated as ITU-N24 entries if the J7 FAK is disabled and shall be treated as ITU-N16 entries if the J7 FAK is enabled.

Output

```
chg-gttsel:gti=0:cdgttsn=setansi0
```

```
    tekelecstp 10-04-28 13:02:49 EST  Eagle 42.0.0
    chg-gttsel:gti=0:cdgttsn=setansi0
    Command entered at terminal #4.
    CHG-GTTSEL: MASP A - COMPLTD
;
```

Related Commands

dlt-gttsel, *ent-gttsel*, *rtrv-gttsel*

chg-gttset — Change GTT Set

Use this command to specify the attributes to change for an existing set of global title translations.

Parameters

gttsn (mandatory)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters.

ndgt (optional)

Number of digits. The number of digits required for GTAs associated with this GTT set.

Range:

1 - 21

netdom (optional)

Network domain. This command does not distinguish between ITU national or ITU international because the Enhanced Global Title Translation (EGTT) feature does not discriminate between the ITU-I and ITU-N translations.

Note: Thenetdomparameter refers to the incoming message network domain.

Range:

cross

ansi

itu

ngttsn (optional)

New GTT set name. The GTT set name that will replace the existing GTT set name.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters.

Example

```
chg-gttset:gttsn=lidb:netdom=cross
chg-gttset:gttsn=setxyz:netdom=cross:ndgt=10
chg-gttset:gttsn=acdgta:ngttsn=acdgta1
```

Dependencies

The (n)gttsn=none parameter cannot be specified.

The specified netdom parameter value must be *cross*. This command cannot be used to change the netdom setting from *cross* to *ansi* or *itu*.

If the settype parameter has a value of *cdssn, cgpc, cgssn, opc, opcode*, or *dpc*, then the ndgt parameter cannot be specified.

The EGTT feature must be turned on prior to using this command.

The value specified for the gttsn parameter must match the name of an existing GTT Set.

If the VGTT feature is turned on, the ndgt parameter cannot be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before the netdom parameter can be specified.

If GTAs are assigned to the GTT set, the ndgt parameter cannot be specified.

The netdom=cross parameter can be specified only if the settype=cdgta parameter is specified.

Output

```
chg-gttset:gttsn=acdgta:ngttsn=acdgta1
```

```
    tekelecstp 10-04-28 17:58:38 EST  Eagle 42.0.0
    GTT-SET table is (1 of 2000) 1% full.

    CHG-GTTSET: MASP A - COMPLTD
;
```

Related Commands

dlt-gttset, *ent-gttset*, *rtrv-gttset*

chg-gtw-stp

Change Gateway Parameters

Use this command to modify the level 3 ANSI transfer control status (TFCSTAT) when converted from ITU to ANSI.

Parameters

tfcstat (mandatory)

The desired level 3 control status on a TFC message received from an ITU node destined for an ANSI node.

Range:

1 - 3

Example

```
chg-gtw-stp:tfcstat=1
```

Dependencies

None

Notes

None

Output

```
chg-gtw-stp:tfcstat=1
```

```
    rlghncxa03w 04-01-11 11:34:04 EST  EAGLE 31.3.0
    CHG-GTW-STP: MASP A - COMPLTD
;
```

Related Commands

rtrv-gtw-stp

chg-gws-actset

Change Gateway Screening Stop Action Sets

Use this command to configure the gateway screening (GWS) stop action sets in the system database. Stop action sets are used to define the actions performed on the Message Sending Units (MSUs) that pass the gateway screening process. The GWS Stop Action table contains a maximum of 16 stop action sets, with each stop action set containing a maximum of 10 stop actions. The first three GWS stop action sets (actid=1, actid=2, and actid=3) are already defined with the existing GWS stop actions shown in *Table 12: Gateway Screening Stop Action Definitions*.

Table 12: Gateway Screening Stop Action Definitions

Gateway Screening Stop Action ID	Gateway Screening Stop Action Set Name	Stop Action 1	Stop Action 2	Action Performed by the system
1	copy	copy	—	Copy the MSU for the STP LAN feature.
2	rdct	rdct	—	Redirect the MSU for the DTA feature.
3	cr	copy	rdct	Copy the MSU for the STP LAN feature and redirect the MSU for the DTA feature.

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters in the `chg-ls` command, the GWS action in the stop action set will be performed at the end of the screening process.

Parameters

Note: The TIF, TIF2, and TIF3 stop actions each represent a specific TIF service. The services are provisioned using the`chg-npp-serv` command.

Note: Definitions of the values for the act1 - act10 parameters are located in the *Notes* section.

Note: GWS Stop Actions DUP and STRIP can be provisioned only in the GWS Action Set.

actid (mandatory)

The identification number of the GWS stop action set.

Range:

4 - 16

act1 (optional)

Stop action 1.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act2 (optional)

Stop action 2.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act3 (optional)

Stop action 3.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act4 (optional)

Stop action 4.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act5 (optional)

Stop action 5.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act6 (optional)

Stop action 6.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act7 (optional)

Stop action 7.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act8 (optional)

Stop action 8.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act9 (optional)

Stop action 9.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

act10 (optional)

Stop action 10.

Range:

cncf

copy

dup

none

rdct

sccp

strip

tif

tif2

tif3

tinp

tlnp

Default:

No change to the current value

actname (optional)

The name of the GWS stop action set.

Range:

ayyyyy

One alphabetic character followed by up to five alphanumeric characters.

Default:

No change to the current value

all (optional)

Clears all of the actions in the specified stop action set and deletes the stop action set.

Range:

none

Default:

Undefined

force (optional)

Use this parameter when erasing the action set or changing the action name.

Range:

yes

Example

```
chg-gws-actset:actid=4:actname=cncf:act1=cncf
chg-gws-actset:actid=5:actname=dup:act1=dup
```

Dependencies

At least one optional parameter must be specified.

If the all=none parameter is specified, then no other optional parameters can be specified.

The actname=none parameter cannot be specified.

The force=yes parameter must be specified to change an existing stop action.

The Calling Name Conversion Feature must be turned on before the CNCF stop action can be specified.

The TLNP feature must be turned on or the ISUP NP with EPAP feature must be enabled before the TLNP stop action can be specified.

The TLNP feature must be turned on before the TLNP stop action can be specified.

A specific stop action can be specified for one and only one stop action parameter for each stop action set.

The value specified for the actname parameter cannot already exist in the database.

A value of *copy* can be specified for only the act1 parameter.

If the RDCT stop action is specified with other stop actions, then it must be specified with the last stop action parameter specified for the command.

The TLNP stop action cannot be specified in the same action set with the CNCF stop action.

The TINP gateway screening stop action cannot be specified in the same action set with the CNCF gateway screening stop action.

The TINP feature must have been enabled before upgrading to Release 39.2 or later before the TINP stop action can be specified.

At least one TIF feature must be enabled before the TIF, TIF2, or TIF3 stop action can be specified.

Only one of the TIF, TIF2, TIF3, TLNP, TINP, RDCT, and SCCP stop actions can be specified in the command.

If specified, the TIF, TIF2, TIF3, TLNP, TINP, RDCT, or SCCP stop action must be the last stop action in the command.

The SCCP stop action cannot be specified in the same Action Set with the CNCF stop action.

The MTP Routed GWS Stop Action feature must be enabled before the SCCP stop action can be specified.

The GWS STRIP stop action cannot be specified with other stop actions in the same Action Set.

The GWS DUP point code (GDPC) must be configured in the STPOPTS table before the GWS DUP stop action can be specified.

Notes

The GWS stop action 1 (act1) is the first stop action to be performed, and GWS stop action 10 (act10) is the last stop action to be performed on the MSU. These parameters can have the following values:

- *cncf*—Convert the PIP parameter with the GN parameter or the GN parameter with the PIP parameter in the ISUP IAM message for the Calling Name Conversion Facility feature
- *copy*—Copy the MSU for the STP LAN feature
- *dup*---- MSUs that pass gateway screening are duplicated towards a point code configured in STPOPTS:GDPC.
- *none*—No action is performed on the MSU
- *rdct*—Redirect the MSU for the DTA feature
- *sccp*—SCCP messages that pass gateway screening are forwarded to the SCCP card for service processing. This GWS stop action applies only to MTP routed UDT/UDTS and XUDT/XUDTS messages.
- *strip*--- De-encapsulate the MSUs encapsulated by GWS REDIRECT stop action and then send to MTP3 layer for further processing.
- *tif*—Apply TIF processing to MSU
- *tif2*—Apply TIF processing to MSU
- *tif3*—Apply TIF processing to MSU
- *tinp*—ISUP IAMs that pass gateway screening are intercepted by the Triggerless ISUP NP equipped EAGLE and converted to include the RN if the call is to a ported number. This GWS stop action applies only to the Triggerless ISUP NP feature.

- *tlnp*—ISUP IAMs that pass gateway screening are intercepted by the Triggerless LNP equipped EAGLE and converted to include the LRN if the call is to a ported number. This GWS stop action applies only to the Triggerless LNP feature.

Output

```
chg-gws-actset:actid=4:actname=cncf:act1=cncf
```

```
    rlghncxa03w 04-01-10 11:43:04 EST  EAGLE 31.3.0
    CAUTION: GWS action set may be referenced by one or more GWS rules
    CHG-GWS-ACTSET: MASP A - COMPLTD
;
```

```
chg-gws-actset:actid=5:actname=dup:act1=dup
```

```
    tklcstp 13-10-10 11:43:04 EST  EAGLE 46.0
    CAUTION: GWS action set may be referenced by one or more GWS rules
    CHG-GWS-ACTSET: MASP A - COMPLTD
;
```

Related Commands

rtrv-gws-actset

chg-gws-redirect

Change Gateway Screening Redirect

Use this command to change the provisioning data for the redirect function. The values that are specified for this command are stored in the Redirect table, and they are used to set the variable fields of the MSUs being redirected. For example, if the ri=gt parameter is specified, the value *gt* is set for the routing indicator in the called party address (CDPA) of the MSU being redirected.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dpc (optional)

Specifies the value used to set the ANSI destination point code field in the routing label of the MSU that is being redirected. The point code has subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Default:

Current value.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

Specifies the value used to set the ITU international destination point code field in the routing label of the MSU that is being redirected. The point code has subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

Default:

Current value.

dpcn (optional)

Specifies the value used to set the ITU national destination point code field in the routing label of the MSU that is being redirected. The point code is in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) when the `chg-stpopts:npcfmti` flexible point code option is on. A group code (*gc*) must be specified when the ITUDUPPC feature is on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

Default:

Current value.

dpcn24 (optional)

Specifies the value used to set the 24-bit ITU national destination point code field in the routing label of the MSU that is being redirected. The point code has subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

Default:

Current value.

dpcn16 (optional)

Specifies the value used to set the 16-bit ITU national destination point code field in the routing label of the MSU that is being redirected. The point code has subfields *unit number-sub number area-main number area (un-sna-mna)*.

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Default:

Current value.

enabled (optional)

This parameter specifies whether MSUs that have passed gateway screening are redirected or routed as normal.

Range:

on

redirect the MSU

off

route the MSU as normal

Default:

No change to the current value

gta (optional)

The value used to set the global title address (dialed digits) in the SCCP called party address of the MSU being redirected.

Range:

1-21 digits

ri (optional)

The value used to set the routing indicator in the SCCP called party address of the MSU being redirected.

Range:

gt

route by global title digits

ssn

route by subsystem number

Default:

No change to the current value

ssn (optional)

The value used to set the subsystem number (SSN) in the SCCP called party address of the MSU being redirected. This number is the SSN of the SCP to which all MSUs meeting the redirect criteria are to be redirected.

Range:

0 - 255

Default:

No change to the current value

tt (optional)

The type of the global title translation (GTT). It is the decimal representation of the 1-byte field used in SS7. This value is used to set the type of the GTT in the SCCP called party address of the MSU being redirected.

Range:

0 - 255

Default:

No change to the current value

Example

```
chg-gws-redirect:dpc=111-222-111:ri=gt:ssn=10:tt=1:gta=180833:enabled=on
chg-gws-redirect:enabled=off
chg-gws-redirect:dpcn16=1-14-0:ri=gt:ssn=10:tt=10:gta=1:enabled=off
```

Dependencies

At least one optional parameter must be specified.

The dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be defined in the Destination table or defined as the STP site point code.

If the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter is defined as a destination, at least one route must be defined.

The redirect function data must exist in the database before it can be changed with this command.

Notes

None

Output

```
chg-gws-redirect:dpc=111-222-111:ri=gt:ssn=10:tt=1:gta=180833:enabled=on
```

```
    rlghncxa03w 04-07-10 11:43:04 EST  EAGLE 31.6.0
    CHG-GWS-REDIRECT: MASP A - COMPLTD
;
```

Related Commands

dlt-gws-redirect, *ent-gws-redirect*, *rtrv-gws-redirect*

chg-inpopts Change INP Options Command

Use this command to provision INP-specific data. This command updates the INPOPTS table.

Parameters

Note: The options in the on and off parameters are described in the Notes section.

cdpnnai (optional)

Called Party Number Nature of Address indicator.

Range:

0 - 127

The following parameter values are valid: *1* (Subscriber), *2* (Unknown), *3* (National), and *4* (International)

Default:

No change to the current value

cdpnpfx (optional)

Called Party Number Prefix.

Range:

1-15 digits

Valid digits are *0-9, A-F, a-f*

Default:

No change to the current value

defrn (optional)

Default routing number. A default routing number that is used for own-network subscribers.

Range:

1-15 digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

System Default:

none

dltpfx (optional)

Delete prefix.

Range:

yes

no

Default:

no

dra (optional)

Destination routing address. This parameter specifies the routing address format supported in INP "Connect" response messages.

Range:

rndn

RN + [CDPNPFX] + DN

rn

Routing Number

ccrndn

[CDPNPFX] + CC + RN + DN

rnnecdn

RN+ [CDPNPFX]+ NEC+ DN

homerndn

Home Routing Number

rnasd

RN + ASD

asdrn

ASD + RN

rnasddn

Supports RN +ASD+ [CDPNPFX] + DN in the INP "CONNECT" response messages.

asdrndn

Supports ASD+ RN + [CDPNPFX] + DN in the INP "CONNECT" response messages.

ccrnasddn

Supports [CDPNPFX] +CC + RN + ASD+DN in the INP "CONNECT" response messages.

asdrnccdn

Supports ASD+ RN+ [CDPNPFX]+ CC+ DN in the INP "CONNECT" response messages.

ccasdrndn

Supports [CDPNPFX] +CC + ASD + RN+DN in the INP "CONNECT" response messages.

rnasdccdn

Supports RN + ASD + [CDPNPFX] +CC + DN in the INP "CONNECT" response messages.

rnasdnecdn

RN + ASD + [CDPNPFX] + NEC + DN

asdrnnecdn

ASD + RN+ [CDPNPFX]+ NEC+ DN

rngrn

RN + GRN

grnrn

GRN + RN

rngrndn

RN + GRN + [CDPNPFX] + DN

grnrndn

GRN + RN + [CDPNPFX] + DN

ccrngrndn

[CDPNPFX] + CC + RN + GRN + DN

ccgrnrndn

[CDPNPFX] + CC + GRN + RN + DN

grnrnccdn
GRN + RN + [CDPNPFX] + CC + DN

rngrnccdn
RN + GRN + [CDPNPFX] + CC + DN

rngrnnecdn
RN + GRN + [CDPNPFX] + NEC + DN

grnrnnecdn
GRN + RN + [CDPNPFX] + NEC + DN

grn
GRN

grndn
GRN + [CDPNPFX] + DN

ccgrndn
[CDPNPFX] + CC + GRN + DN

Default:
No change to the current value

System Default:
rndn

dranai (optional)
Nature of Address indicator.

Range:
sub

unknown

natl

intl

ntwk

Default:
No change to the current value

dranaiv (optional)
Nature of Address indicator value.

Range:
0 - 127

dranp (optional)
Numbering plan.

Range:

e164

x121

f69

Default:

Current value

dranpv (optional)

Numbering plan value.

Range:

0 - 7

Default:

No change to the current value

ncdpnpfx (optional)

New Called Party Number Prefix.

Range:

1-15 digits, *none*

Valid digits are *0-9, a-f, A-F*

nec (optional)

National Escape Code.

Range:

1-5 digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

none

off (optional)

This parameter turns off the specified options. Up to 8 comma-separated unique options can be specified.

Range:

cutnpaste

on (optional)

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

Range:

cutnpaste

relcause (optional)

Release cause. The reason for releasing the call when an INP Circular Route is detected.

Range:

1 - 127

Default:

31 -normal, unspecified

snai (optional)

Service Nature of Address indicator.

Range:

sub

natl

intl

none

unknown

Default:

No change to the current value

sporttype (optional)

Service Portability type. This parameter specifies whether Service Portability is performed for the associated feature.

Note: The S-Port feature must be turned on before any change to the parameter will impact the associated feature.

Note: If Service Portability is performed, then the Service Portability prefix (RTDB 'GRN'entity id) is applied.

Range:

gsm

Apply Service Portability prefix for own-network GSM subscribers

is41

Apply Service Portability prefix for own-network IS41 subscribers

all

Apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

none

Service Portability is not performed for the feature.

Default:

No change to the current value

System Default:

none

sprestype (optional)

INP option that indicates the type of message the EAGLE is to send when an IDP message is received for INP service, the DN digits match, and the HLR ID is present.

Range:

connect

send a CONNECT message

continue

send a CONTINUE message

Default:

continue

Example

```
chg-inpopts:dra=rn:dranp=e164:dranai=intl
chg-inpopts:dranp=f69:dranai=sub:dra=rndn
chg-inpopts:dra=rn:dranp=e164:dranai=intl:cdpnpfx=fac:dltpfx=yes
chg-inpopts:dranp=f69:dranai=sub:dra=rndn:cdpnpfx=200
chg-inpopts:dranp=f69:dranai=sub:dra=rndn:cdpnpfx=200:ncdpnpfx=3abcdef:dltpfx=yes
chg-inpopts:dranp=f69:dranai=sub:dra=rndn:cdpnpfx=3abcdef:ncdpnpfx=none
chg-inpopts:dranp=f69:dranai=sub:dra=rndn:cdpnpfx=fed123:dltpfx=no
chg-inpopts:dra=rn:dranp=e164:dranai=intl:cdpnpfx=fac:dltpfx=no:cdpnnai=1
:snai=none
chg-inpopts:sprestype=connect
chg-inpopts:dra=rnnecdn:nec=abcd1
chg-inpopts:dra=asdrnccdn:dranp=e164:dranai=intl:cdpnpfx=fac:dltpfx=yes
chg-inpopts:relcause=30
chg-inpopts:dra=grnrndn:dranp=e164:dranai=intl
chg-inpopts:dranp=e164:dranaiv=10:dra=rn
chg-inpopts:dranai=sub:dranpv=3
chg-inpopts:dranpv=4:dranaiv=20
chg-inpopts:cdpnpfx=2a3b4c5d6e7f
chg-inpopts:cdpnnai=1:snai=sub
chg-inpopts:on=cutnpaste
chg-inpopts:dra=ccgrndn:dranp=e164:dranai=intl
```

Dependencies

At least one optional parameter must be specified.

The dranp and dranpv parameters cannot be specified together in the command.

The dranai and dranaiv parameters cannot be specified together in the command.

If the ncdpnpfx or dltpfx parameter is specified, the cdpnpfx parameter must be specified.

A value of *none* cannot be specified for the cdpnpfx parameter.

If the ncdpnpfx=none parameter is specified, then the dltpfx parameter cannot be specified.

The value specified for the cdpnpfx parameter must already exist in the INPOPTS table.

The value specified for the ncdpnpfx parameter cannot already exist in the INPOPTS table.

A maximum of 5 Called Party Number Nature of Address values is allowed.

The cdpnnai and snai parameters must be specified together in the command.

If this command is entered to delete a CdPN Nature of Address value from the INPOPTS table, then the value specified for the cdpnnai parameter must already exist in the INPOPTS table.

A valid value must be specified for the nec parameter.

A maximum of 40 Called Party Number Prefix values can be provisioned.

If the nec=none parameter is specified, then values of *asdrnnecdn, rnasdnecdn, rnnecdn, rngrnnecdn*, and *grnrnnecdn* cannot be specified for the dra parameter.

The INP CRP feature must be enabled before the relcause parameter can be specified.

The S-Port feature must be enabled before the sporttype parameter can be specified.

The INP feature must be enabled before this command can be entered.

The same option cannot be specified for the on and off parameters.

Notes

on/off options

- *cutnpaste*—Specifies whether the CutAndPaste parameter is included in an INP CONNECT response message. The value for the CutAndPaste parameter is the length of the incoming DN in the IDP query. If the *cutnpaste* option is provisioned, then this value is cut from the CdPN. The remaining digits are pasted to the end of the DRA digits sent by the STP in the CONNECT response to form the new routing digits. This option has a default of OFF.

Output

```
chg-inpopts:dra=rngrn:nec=0
```

```
    tekelecstp 09-05-05 12:20:32 EST  EAGLE 41.1.0
    CHG-INPOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-inpopts

chg-ip-card

Change Internet Protocol Card

Use this command to provision IP networking parameters for a given card.

Parameters

loc (mandatory)

Card location. The unique identifier of a specific application subsystem located in the STP.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

bpipaddr (optional)

Bonded Port IP address. This parameter specifies an IP address for the card in the specified location.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

A value of *0.0.0.0* removes the IP address from the parameter.

Default:

No change to the current value

bpsubmask (optional)

Bonded Port IP submask.

Range:

The value must be valid for the class of the entered IP address.

Valid for Class A Networks

- 255.0.0
- 255.192.0
- 255.224.0
- 255.240.0
- 255.248.0
- 255.252.0
- 255.254.0
- 255.255.128.0

Valid for Class A or B Networks

- 255.255.0.0
- 255.255.192.0
- 255.255.224.0
- 255.255.240.0
- 255.255.248.0
- 255.255.252.0
- 255.255.254.0
- 255.255.255.128

Valid for Class A, B, or C Networks

- 255.255.255.0
- 255.255.255.192
- 255.255.255.224
- 255.255.255.240
- 255.255.255.248
- 255.255.255.252

defrouter (optional)

Default router IP address. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where 192.126.100 is the network number and 5 is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

A value of *0.0.0.0* removes the IP address from the parameter.

Default:

No change to the current value

System Default:

0.0.0.0

dnsa (optional)

IP address for Domain Name Server A. TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where 192.126.100 is the network number and 5 is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

A value of *0.0.0.0* removes the IP address from the parameter.

Default:

No change to the current value

System Default:

0.0.0.0

dnsb (optional)

IP address for Domain Name Server B. TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where 192.126.100 is the network number and 5 is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

A value of *0.0.0.0* removes the IP address from the parameter.

Default:

No change to the current value

System Default:

0.0.0.0

domain (optional)

Domain name of the Domain server.

Range:

Any string of characters beginning with a letter and comprising up to 120 characters in length.

Valid characters are *0-9*, *a–z*, *A–Z*, - (dash), . (period).

Default:

No change to the current value

System Default:

Null

dscp (optional)

This parameter specifies the dscp value that shall be set for outbound messages for SIGTRAN cards.

Range:

0-63

Default:

No change to the current value

System Default:

0

rstdomain (optional)

Reset Domain Name. This parameter is used to reset the Domain Name to a NULL value.

Range:

yes

reset Domain Name to a NULL value

no

Domain Name does not change

Default:

no

sctpcsum (optional)

SCTP checksum algorithm. This parameter specifies the configured SCTP checksum algorithm for a specific card.

The system-wide setting for the SCTP checksum algorithm type (see the `chg-sg-opts` command) takes precedence over the setting for an individual card. The `chg-sg-opts:sctpcsum=percard` command must be entered before the `chg-ip-card:sctpsum=` command can be entered.

Range:

adler32

crc32c

System Default:

crc32c

srchordr (optional)

Host table search order

Range:

local

Local host table is searched first

srvr

Domain Server is searched first

srvronly

Only the Domain Server is searched

Default:

No change to the current value

System Default:

No search

Example

```
chg-ip-card:loc=1211:dnsa=150.1.1.1:domain=nc.tekelec.com:defrouter=150.1.1.105
chg-ip-card:loc=1107:sctpcsum=adler32
chg-ip-card:dscp=4
```

Dependencies

At least one optional parameter must be specified.

The value specified for the loc parameter must correspond to the location of a card that can run an IP application (other than the eroute application, which is not supported by this command). For a list of the cards and their associated applications, see *Table 62: Valid Card Applications and Types*.

The card in the location specified by the loc parameter must be inhibited before this command can be entered.

If the domain parameter is specified, the rstdomain parameter cannot be specified.

The default router IP address (defrouter) cannot be an existing IP link address.

The default router IP address (defrouter) must be local to the Ethernet A network or Ethernet B network for the card. The B network can be used only on E5-ENET and E5-ENET-B cards.

If the card in the location specified by the loc parameter is not an E5-SM4G or E5-SM8G-B card then the bpipaddr and bpsubmask parameters cannot be specified.

The IP address specified by the bpipaddr and bpsubmask parameters must be unique.

The bpipaddr parameter must be specified before the bpsubmask parameter can be specified.

A valid value must be specified for the bpsubmask parameter.

If the bpipaddr parameter is specified, then the bpsubmask parameter must be specified.

The `chg-sg-opts:sctpsum=percard` command must be entered before the sctpsum parameter can be specified in the `chg-ip-card` command.

Notes

The Domain Name has a 120 character limitation.

Table 13: Standard DSCP Values

DSCP Class	DSCP (bin)	DSCP (hex)	DSCP (dec)
NONE	000000	0×00	0
CS1	001000	0×08	8
AF11	001010	0×0A	10
AF12	001100	0×0C	12
AF13	001110	0×0E	14
CS2	010000	0×10	16
AF21	010010	0×12	18
AF22	010100	0×14	20
AF23	010110	0×16	22
CS3	011000	0×18	24

DSCP Class	DSCP (bin)	DSCP (hex)	DSCP (dec)
AF31	011010	0×1A	26
AF32	011100	0×1C	28
AF33	011110	0×1E	30
CS4	100000	0×20	32
AF41	100010	0×22	34
AF42	100100	0×34	36
AF43	100110	0×26	38
CS5	101000	0×28	40
EF	101110	0×2E	46
CS6	110000	0×30	48
CS7	111000	0×38	56

Output

```
chg-ip-card:loc=1211:dnsa=150.1.1.1:domain=nc.tekelec.com:defrouter=150.1.1.105:
sctpcsum=adler32
```

```
    rlghncxa03w 08-02-22 15:35:05 EST  EAGLE 38.0.0
    CHG-IP-CARD: MASP A - COMPLTD
;
```

```
chg-ip-card:dscp=10
```

```
rlghncxa03w 13-09-24 16:56:31 EST EAGLE 46.0.0
CHG-IP-CARD: MASP A - COMPLTD
;
```

Related Commands

chg-sg-opts, *rtrv-ip-card*

chg-ip-conn — Change IP Connection

Use this command to enable or disable a particular SIP or ENUM connection to receive SIP or ENUM traffic respectively. The IPCONN table supports the provisioning information related to the SIP or ENUM connections.

Parameters

cname (mandatory)

Connection name. This parameter specifies the unique logical name assigned to each SIP or ENUM connection.

Range:

zzzzzzzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 15 characters in length. Valid values are a..z, A..Z, 0..9.

open (mandatory)

The parameter specifies whether the connection manager should allow or disallow the SIP or ENUM connection to receive SIP or ENUM traffic.

Range:

yes

allow the SIP or ENUM connection to receive SIP or ENUM traffic respectively.

no

prohibit the SIP or ENUM connection to receive SIP or ENUM traffic respectively.

Default:

No change to the current value

System Default:

no

Example

```
chg-ip-conn:cname=conn1101a:open=yes
chg-ip-conn:cname=conn1101a:open=no
```

Dependencies

SIPNP Feature must be enabled before enabling or disabling any SIP connection.

At least one ENUM card must be provisioned before entering any ENUM connection information.

IPCONN table should be accessible.

The value specified for the CNAME parameter must already exist in the IPCONN table.

Notes

None

Output

```
chg-ip-conn:cname=conn1101a:open=yes
```

```
 tekelecstp 12-06-25 15:44:10 EST EAGLE 45.0.0
    chg-ip-conn:cname=conn1101a:open=yes
    Command entered at terminal #4.
    CHG-IP-CONN: MASP A - COMPLTD
;
```

Related Commands

dlt-ip-conn, *rtrv-ip-conn*, *ent-ip-conn*

chg-ip-lnk

Change Internet Protocol Link

Use this command to provision the IP link table.

Parameters

loc (mandatory)

Card location. The unique identifier of a specific application subsystem located in the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

port (mandatory)

Ethernet interface Port ID.

Range:

a, *b*

Port *b* is not valid for SS7IPGW and IPGWI applications with associations.

auto (optional)

Tells hardware whether to automatically determine duplex and speed.

Note: Always specify "auto=yes" for ports that connected to an ELAP. Only specify "auto=yes" for ports that connect to an EPAP whose Telco switches are configured to run at the speed of 1000 Mbps or auto.

Range:

yes

Automatically determine duplex and speed

no

Do not automatically determine duplex and speed

Default:

No change to the current value

System Default:

no

duplex (optional)

This is the mode of operation of the interface.

Note: Specify "duplex = full" if the port connects to an EPAP. Do not use this parameter for ports on E5-SM4G or E5-SM8G-B cards if "auto=yes" for such ports have been specified.

Range:

half

Half duplex

full

Full duplex

Default:

No change to the parameter value

System Default:

full

ipaddr (optional)

The IP address for the specified port. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where 192.126.100 is the network number and 5 is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

A value of *0.0.0.0* removes the IP address from the parameter.

Default:

No change to the parameter value.

System Default:

0.0.0.0

mactype (optional)

The Media Access Control Type of the interface.

Range:

802.3

The IEEE standard number 802.3 for Ethernet 1

dix

The Digital/Inter/Xerox*de facto*standard for Ethernet 2

Default:

No change to the parameter value

System Default:

dix

mcast (optional)

Multicast Control. This parameter enables or disables multicast support for the interface. This parameter is necessary for INP, G-Port, and G-Flex to establish the connection from the Service Module card to the MPS system.

Range:

yes

Multicasting is enabled on the interface and the sending and receiving of multicast frames is allowed.

no

All multicast frames are silently dropped.

System Default:

no

speed (optional)

The bandwidth for the interface in megabits per second

Note: Specify "speed=100" if the port connects to an EPAP. Do not use this parameter if "auto=yes" for such ports have been specified.

Range:

10

100

1000

Default:

No change to the parameter value

System Default:

100

submask (optional)

The subnet mask of the IP interface in the form of an IP address with a restricted range of values.

This parameter is mandatory when the *ipaddr* parameter is specified.

Range:

The value must be valid for the class of the entered IP address.

Valid for Class A Networks

- 255.0.0
- 255.192.0

- 255.224.0
- 255.240.0
- 255.248.0
- 255.252.0
- 255.254.0
- 255.255.128.0

Valid for Class A or B Networks

- 255.255.0.0
- 255.255.192.0
- 255.255.224.0
- 255.255.240.0
- 255.255.248.0
- 255.255.252.0
- 255.255.254.0
- 255.255.255.128

Valid for Class A, B, or C Networks

- 255.255.255.0
- 255.255.255.192
- 255.255.255.224
- 255.255.255.240
- 255.255.255.248
- 255.255.255.252

Default:

If the ipaddr parameter is not specified, there is no change to the parameter value. If a host's IP address is known, the default subnet mask should be chosen according to *Default Subnet Mask Values*.

Table 14: Default Subnet Mask Values

Network Class	IP Network Address Range	Default Subnet Mask
A	1.0.0.0 to 127.0.0.0	255.0.0.0
B	128.0.0.0 to 191.255.0.0	255.255.0.0
C	192.0.0.0 to 223.255.255.0	255.255.255.0

System Default:

0.0.0.0

Example

```
chg-ip-lnk:loc=1102:port=a:auto=yes
```

Dependencies

The value specified for the ipaddr parameter must already exist in the Host table.

Each IP address entered into the IP Link table must be unique.

At least one optional parameter must be specified.

If the auto parameter is specified, then the duplex and speed parameters cannot be specified.

The value specified for the loc parameter must correspond to the location of a card that can run an IP application (other than the EROUTE application, which is not supported by this command). For a list of the cards and their associated applications, see *Table 62: Valid Card Applications and Types*.

The card in the location specified by the loc parameter must be inhibited before this command can be entered.

For IPGWx cards, associations on port *b* are not allowed.

The local ipaddr and submask values of either the A or B network cannot be changed to an address that represents a different network if a default router and/or other gateway routers are is assigned to the current local network (display with `rtrv-ip-card` and `rtrv-ip-rte`).

The local IP address cannot be changed if the current or new local host has open sockets or associations (the open parameter set to *yes* with the `ent/chg-assoc` command).

The IP address of an existing IP link entry in the IP Link table cannot be changed if it exists in the IP Host table.

An IP link entry must be provisioned in the IP Link table before an IP host entry can be provisioned with a corresponding IP address in the IP Host table.

The IP host entry must be deleted from the IP Host table before an IP link entry can be deleted from the IP Link table.

An existing IP link entry in the IP Link table cannot be deleted (ipaddr=0.0.0.0) if it exists in the IP Host table.

The IP network address specified by the ipaddr and submask parameters must be different from the PVN and fast copy network addresses specified by the pvn/pvnmask, fcna/fcnamask, and fcnb/fcnbmask parameters (see the `chg-netopts` command).

The card in the location specified by the loc parameter must support the port specified by the port parameter.

The ipaddr and submask parameters must be specified together in the command.

The local IP address cannot be changed if the local host associated with a diameter connection has open connections (the open parameter set to *yes* with the `chg-assoc` command and that association is associated with a diameter connection in the DCONN table).

An IP address cannot be configured for the card if the card is provisioned as a GTT card.

Each IP address in the IP link table must be unique.

Speed = 1000 (1 Gbps link) can be specified only for ExAP port on the card.

Notes

None

Output

`chg-ip-lnk:loc=1102:port=a:auto=yes`

```
      chg-ip-lnk:loc=1102:port=a:auto=yes
    Command entered at terminal #3.
;
```

```
    tekelecstp 14-06-05 11:17:48 MST  EAGLE5 46.0.0-65.20.0
    CHG-IP-LINK: MASP B - COMPLTD
;
```

Related Commands

rtrv-ip-lnk

chg-is41-msg

Change IS41 test message

Use this command to provision IS41 test messages. These messages are used by the MO SMS NPP Test Tool to test MO-based IS41 SMS message processing by the NPP.

Parameters

msgn (mandatory)

Message number. The test message number that will be changed.

Range:

1 - 10

active (optional)

This parameter specifies whether the IS41 MOSMS message can be sent to the network card for processing.

Range:

yes

The message is sent to the network card.

no

The message is not sent to the network card.

Default:

No change to the current value

System Default:

no

cdpadgts (optional)

Called party address digits. The SCCP CdPA digits for the IS41 test message.

Range:

1-15 digits

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F* .

Default:

No change to the current value

System Default:

0123456789abcde

cdpagti (optional)

Called party address global title indicator. The SCCP CdPA GT for the IS41 test message.

Range:

0 - 15

Default:

No change to the current value

System Default:

4

cdpagtnai (optional)

Called party address global title nature of address indicator. The SCCP CdPA GT NAI for the IS41 test message.

Range:

0 - 127

Default:

No change to the current value

System Default:

4

cdpndgts (optional)

Called party number digits. The TCAP CdPN (*SMS_DA / SMS_ODA*) digits for the IS41 test message.

Range:

1-21 digits

Default:

No change to the current value

System Default:

01234567890abcde

cdpnes (optional)

Called party number encoding scheme. The TCAP CdPN (*SMS_DA* / *SMS_ODA*) encoding scheme for the IS41 test message

Range:

0 - 15

Default:

No change to the current value

System Default:

1

cdpnnai (optional)

Called party number nature of address indicator. The TCAP CdPN (*SMS_DA* / *SMS_ODA*) NAI for the IS41 test message.

Range:

0 - 1

Default:

No change to the current value

System Default:

1

cdpnnp (optional)

Called party numbering plan. The TCAP CdPN (*SMS_DA* / *SMS_ODA*) NP for the IS41 test message.

Range:

0 - 15

Default:

No change to the current value

System Default:

2

cgpadgts (optional)

Calling party address digits. The SCCP CgPA digits for the IS41 MOSMS message.

Range:

1-15 digits

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F* .

Default:

No change to the current value

System Default:

0123456789abcde

cgpagti (optional)

Calling party address global title indicator. The SCCP CgPA GT for the IS41 test message.

Range:

0 - 15

Default:

No change to the current value

System Default:

4

cgpagtnai (optional)

Calling party address global title nature of address indicator. The SCCP CgPA GT NAI for the IS41 test message.

Range:

0 - 127

Default:

No change to the current value

System Default:

4

cgpndgts (optional)

Calling party number digits. The TCAP CgPN (*SMS_OOA*) digits for the IS41 test message.

Range:

1-21 digits, *none*

none -deletes the current digits

Default:

No change to the current value

System Default:

01234567890abcde

cgpnes (optional)

Calling party number encoding scheme. The TCAP CgPN (*SMS_OOA*) encoding scheme for the IS41 test message

Range:

0 - 15

Default:

No change to the current value

System Default:

1

cgpnnai (optional)

Calling party number nature of address indicator. The TCAP CgPN (*SMS_OOA*) NAI for the IS41 test message.

Range:

0 - 1

Default:

No change to the current value

System Default:

1

cgpnnp (optional)

Calling party numbering plan. The TCAP CgPN (*SMS_OOA*) NP for the IS41 test message.

Range:

0 - 15

Default:

No change in the current value

System Default:

2

reset (optional)

This parameter resets all of the parameters to their default values.

Range:

yes

All of the message parameters are reset to their default values.

no

None of the message parameters are reset.

Default:

No change to the current value

Example

```
chg-is41-msg:msgn=1:cdpnnai=1:cdpadgts=12457896abcd:cgpnnai=1
chg-is41-msg:msgn=1:cdpnnai=1:cdpndgts=981123456
```

Dependencies

If the reset parameter is specified, then no other parameters can be specified.

At least one optional parameter must be specified.

Output

```
chg-is41-msg:msgn=1:cdpnnai=1:cdpndgts=987654321:cgpnnai=1
```

```
    tekelecstp 09-03-02 10:46:51 EST  EAGLE 40.1.0
    CHG-IS41-MSG: MASP A - COMPLTD
;
```

Related Commands

rtrv-is41-msg, *tst-msg*

chg-is41opts

Change IS41 Options

Use this command to change the values of one or more of the IS41 option indicators maintained in the IS41 Options (IS41OPTS) table.

Parameters

Note: The options for theonandoffparameters are described in the Notes section.

dfltrn (optional)

Default routing number. The routing digits if Service Portability is not applicable.

Range:

1-15 digits

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

esnmfg (optional)

ESN manufacturer code. The value that will be encoded in the manufacturer code section of the esn parameter for a LOCREQ response message.

Range:

0 - 255

Default:

0

esnsn (optional)

ESN serial number. The value that will be encoded in the serial number section of the esn parameter for a LOCREQ response message.

Range:

0 - 16777215

Default:

0

iec (optional)

International escape code. The international escape code that a received LOCREQ message can contain and have lookup performed.

Range:

1-5 digits, *none*

none —Removes the IEC from a received LOCREQ message before lookup.

Default:

none

locreqdn (optional)

This parameter specifies whether to obtain the Called Party, used for database lookup, from the SCCP or TCAP layer of a received LOCREQ message.

Range:

tcap

Obtains the Called Party from the TCAP layer.

sccp

Obtains the Called Party from the SCCP layer.

Default:

sccp

locreqrmhrn (optional)

LOCREQ remove HomeRN. This parameter specifies whether to remove the HomeRN from the TCAP Outgoing Called Party for a relayed LOCREQ message.

Range:

yes

Remove HomeRN.

no

Do not remove HomeRN.

Default:

no

mscmktid (optional)

MSCID market ID. The value that will be encoded in the Market ID section of the mscid parameter for a response LOCREQ message.

Range: ***0 - 65535***

Default:

0

mscswitch (optional)

MSCID market ID switch. The value that will be encoded in the Market ID Switch section of the mscid parameter for a response LOCREQ message.

Range:

0 - 255

Default:

0

mtplocreqlen (optional)

The number of terminating called party digits to extract from the LOCREQ message.

Range:

5 - 15

Default:

15

System Default:

0

mtplocreqnai (optional)

MTP-routed LOCREQ nature of address indicator. This parameter specifies how the Called Party from the TCAP layer of a received MTP-routed LOCREQ message will be interpreted.

Range:

ccrndn

Country code, routing number, and national directory number

frmsg

Incoming message value.

intl

International number

natl

National number

rnidn

Routing number prefix and international dialed/directory number

rnndn

Routing number prefix and national dialed/directory number

rnsdn

Routing number prefix and subscriber dialed/directory number

sub

Subscriber number

locreqlen

Number of terminating called party digits specified by the locreqlen parameter

Default:

frmsg

nec (optional)

National escape code. The national escape code that a received LOCREQ message can contain and have lookup performed.

Range:

1-5 digits, *none*

none —Removes the NEC from the received LOCREQ message before database lookup.

Default:

none

off (optional)

This parameter turns off the specified options. Up to 8 comma-separated options can be specified.

Range:

smsreqbypass

locreqrmhrn

locreqrspnd

on (optional)

This parameter turns on the specified options. Up to 8 comma-separated options can be specified.

Range:

smsreqbypass

locreqrmhrn

locreqrspnd

rspcdpapcp (optional)

Response called party point code present. The point code present bit that will encode the SCCP CdPA GTA of a LOCREQ response message.

Range:

off

The response will not contain a point code present bit.

on

The point code in the SCCP CgPA of the received LOCREQ message will be used. If no point code is present, the originating point code in the MTP Routing Label will be used.

frmsg

The point code present bit from the received message will be used. Override does not occur.

Default:

off

rspcdpari (optional)

Response called party routing indicator. The value of the routing indicator bit that will encode the SCCP CdPA GTA of a LOCREQ response message.

Range:

frmsg

The received message routing indicator bit will be used. Override does not occur.

gt

The GTA digits in the SCCP CgPA GTA of the received message will be used. If no GTA digits are present in the SCCP CgPA GTA, override will occur according to the cdpari=ssn parameter.

ssn

The SCCP CgPA of the received message will be used.

Default:

frmsg

rspcgpanai (optional)

Response calling party nature of address indicator. The nature of address (NAI) that will encode the SCCP CgPA GTA of a LOCREQ response message.

Range:

0 - 127, none

none —The NAI value in the SCCP CdPA of the received message will be used. Override does not occur.

Default:

none

rspcgpanp (optional)

Response calling party numbering plan. The numbering plan (NP) that will encode the SCCP CgPA GTA of a LOCREQ response message.

Range:

0 - 15, none

none —The NP in SCCP CdPA of the received message will be used. Override does not occur.

Default:

none

rspcgpapcp (optional)

Response calling party point code present. This parameter specifies the point code present bit that will encode the SCCP CgPA GTA of a LOCREQ response message.

Range:

frmsg

The point code present bit from the received message will be used.

on

The point code in the SCCP CdPA of the incoming LOCREQ message will be used. If no point code is present, the destination point code in the MTP Routing Label will be used.

off

The response message will not contain a point code present bit.

Default:

frmsg

rspcgpari (optional)

Response calling party routing indicator. The routing indicator bit that will encode the SCCP CgPA GTA of a LOCREQ response message.

Range:

frmsg

The value from the received message will used. Override does not occur.

gt

The GTA digits in the SCCP CdPA GTA of the received message will be used. If no GTA digits are present, override occurs according to the *cgpari=ssn* parameter.

ssn

The SCCP CdPA of the received message will be used.

Default:

frmsg

rspcgpatt (optional)

Response calling party translation type. The translation type (TT) that will encode the SCCP CgPA GTA of a LOCREQ response message.

Range: *0 - 255, none*

none —The TT in the SCCP CdPA of the received message will be used. Override does not occur.

Default:

none

rspdig (optional)

Routing number. The digit encoding format of the TCAP Outgoing Called Pary parameter for a LOCREQ response message.

The routing number will be used as is or concatenated with the Called Party Number. The routing number format will be used on a per EAGLE node basis.

Range:

ccrndn

Country Code + RN + DN

hrnrndn

HomeRN + RN + DN

rn

rndn

RN + DN

Default:

rn

rspdigtype (optional)

Response digit type. The value that will encode the Digit Type field in the TCAP Outgoing Called Party parameter of a LOCREQ response message.

Range:

0 - 255

Default:

6

rspmin (optional)

Response LOCREQ MIN parameter encoding. This parameter specifies how the min parameter of a LOCREQ response message will be encoded.

Range:

homern

The exact number of digits, with home RN prefix, as encoded in the Called Party of the received LOCREQ message.

nothomern

The exact number of digits, without home RN prefix, as encoded in the Called Party of the received LOCREQ message.

tendelhomern

The leading 10 digits of the Called Party of the received LOCREQ message after deleting the home RN prefix, if it exists.

tenhomern

The leading 10 digits the Called Party of the received LOCREQ message without deletion of the home RN prefix.

tenzero

10 digits filled with 0.

Default:

homern

rspnon (optional)

MSRN nature of number. The nature of number value that will encode the TCAP Outgoing Called Party parameter of a LOCREQ response message.

Range:

0 - 255, none

none —The NAI value in the Digits[Dialed] parameter of a received LOCREQ message is used.

Default:

none

rspnp (optional)

MSRN numbering plan. This parameter specifies the numbering plan that will encode the TCAP Outgoing Called Party parameter of the LOCREQ response message.

Range:

0 - 15, none

2 —Telephony Numbering

Default:

2

rspparm (optional)

Response parameter. The TCAP parameter that will encode the RN and/or DN information for a LOCREQ response message.

This value encodes the DigitType field of the TerminationList, RoutingDigits, or Digits[Destination] on a per EAGLE node basis.

Range:

ddigit

Digits[Destination].

rtdigit

Routingdigits

tlist

Termination list (Default)

Default:

tlist

smsreqbypass (optional)

This parameter specifies whether a received SMSREQ message that passes the MNP Service Selector (*serv=mnp* parameter in the `chg-sccp-serv` command) will undergo A-Port message processing.

Range:

yes

Bypass A-Port.

no

Do not bypass A-Port.

Default:

no

sporttype (optional)

Service Portability Type. The application of Service Portability that is applied to the associated feature.

The S-Port feature must be enabled before this parameter can be specified. The S-Port feature must be turned on before any change to the parameter will impact the associated feature.

Note: If Service Portability is performed, then the Service Portability prefix (RTDB 'GRN'entity id) is applied.

Range:

none

Service Portability is not performed for the feature.

gsm

apply Service Portability prefix for own-network GSM subscribers

is41

apply Service Portability prefix for own-network IS41 subscribers

all

apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

Default:

No change to the current value

System Default:

none

tcapsnai (optional)

This parameter specifies how the Called Party from the TCAP layer of a received LOCREQ message will be interpreted.

Range:

ccrndn

Country code, routing number, and national directory number

frmsg

Incoming message value

intl

International number

natl

National number

rnidn

Routing number prefix and international dialed/directory number

rnndn

Routing number prefix and national dialed/directory number

rnsdn

Routing number prefix and subscriber dialed/directory number

sub

Subscriber number

Default:

frmsg

Example

```
chg-is41opts:iec=12345:nec=12345:rspcgpari=gt:rspcdpari=gt
chg-is41opts:rspnon=1:tcapsnai=sub:mscmktid=78
chg-is41opts:locreqdn=tcap:rspcgpapcp=frmsg:rspnp=14:rspmin=tendelhomern
chg-is41opts:smsreqbypass=yes:rspcdpapcp=off
chg-is41opts:rspcgpanai=120:rspcgpanp=5:rspcgpatt=25
chg-is41opts:mtplocreqnai=intl:rspparm=tlist:rspdig=rn
chg-is41opts:rspnon=25:mscmktid=535:mscswitch=55
chg-is41opts:esnmfg=159:esnsn=7215:rspdigtype=67:locreqrmhrn=yes
chg-is41opts:sporttype=gsm:dfltrn=48607:on=smsreqbypass,locreqrspnd
```

Dependencies

The A-Port or IS41 GSM Migration (IGM) feature must be enabled before this command can be entered.

The Service Portability and LOCREQ Query Response features must be enabled before the sporttype parameter can be specified.

The smsreqbypass and locreqrmhrn parameters and the on or off parameter cannot be specified in the same command.

The LOCREQ Query Response feature must be enabled before the dfltrn parameter can be specified.

The LOCREQ Query Response feature must be turned on before the locreqrspnd option can be specified for the on or off parameter.

The same option cannot be specified for the on and off parameters.

Notes

on/off options

- *smsreqbypass* —Specifies whether a received SMSREQ message that passes the MNP Service Selector (see the `chg-sccp-serv` command) undergoes A-Port message processing. This option has a default of OFF.
- *locreqrmhrn* —LOCREQ remove HomeRN. Specifies whether to remove the HomeRN from the TCAP Outgoing Called Party for a relayed LOCREQ message. This option has a default of OFF.
- *locreqrspnd* —Specifies whether the system should always respond to a LOCREQ query. This option has a default of OFF.

Output

```
chg-is41opts:smsreqbypass=yes
```

```
    tekelecstp 06-09-11 15:13:20 EST  EAGLE 36.0.0
    Command entered at terminal #4.
    CHG-IS41OPTS: MASP A - COMPLTD
;
```

Related Commands

chg-is41smsopts, *rtrv-is41opts*, *rtrv-is41smsopts*

chg-is41smsopts — Change IS41 SMS System Options

Use this command to enter IS41 SMS system options in the database. This command updates the IS41SMSOPTS table.

Parameters

bpartygttsn (optional)

MO SMS B-Party Routing GTT Set name. The GTT set where Global Title Translation lookup on B-Party digits is performed.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

Default:

No change to the current value

System Default:

none

defrn (optional)

Default routing number. A default routing number that is used for own-network subscribers.

Range:

1-15 digits, *none*

Valid digits are *0-9, a-f, A-F*.

Default:

No change to the current value

System Default:

none

modaparam (optional)

This parameter specifies whether the SMS_DestinationAddress or SMS_OriginalDestinationAddress parameter from the IS41 SMDPP message is used for conditioning, lookup, and modification for the MO-based IS41 SMS NP and MO SMS IS41-to-GSM Migration features.

Range:

da

Destination Address

oda

Original Destination Address

Default:

No change to the current value

System Default:

da

moigmpfx (optional)

MO SMS IS41-to-GSM migration prefix. This parameter specifies whether the MO SMS IS41-to-GSM Migration feature uses digits from the RTDB network entity (NE) associated with the B number or the is412gsm parameter (see the `chg-gsmopts` command) as a prefix to modify the destination address in the outgoing SMDPP.

Range:

ne

The RTDB NE data associated with the B number is used for prefixing.

is412gsm

The provisioned IS412GSM migration prefix is used for prefixing.

Default:

No change to the current value

System Default:

ne

mosmsaclen (optional)

The number of the digits that are taken from the MO SMS CgPA and used as the Area Code in the MO SMS CdPA.

Range:

0 - 8

Default:

No change to the current value

System Default:

0

mosmsdigmat (optional)

This parameter specifies that the "HomeSMSC Match with Digits" search option can be used with the MO-based IS41 SMS NP and MO SMS IS41-to-GSM Migration features.

Range:

exact

The system searches for an exact match of digits in the HomeSMSC Table.

bestfit

The system searches for a match on the leading digits of an incoming message with any provisioned entry in HomeSMSC table if an exact match is not found.

bypass

The HomeSMSC search is not performed.

Default:

No change to the current value

System Default:

exact

mosmsgttdig (optional)

MO SMS B-Party Routing GTT digit. The digits that are used for Global Title Translation.

Range:

sccpcdpa

The SCCP CdPA is used for GTT.

mapbparty

The MAP B-Party number is used for GTT.

Default:

No change to the current value

System Default:

sccpcdpa

mosmsnai (optional)

MO-based SMS Nature Address Indicator. The number conditioning that is performed on the SMS_DestinationAddress digits in the SMDPP message before lookup in the number portability database is performed.

Range:

intl

Number is treated as INTL (1) for number conditioning.

nai

The NAI from the SMS_DestinationAddress parameter in the SMDPP message is used to perform number conditioning

nat

Number is treated as NATL (0) for number conditioning.

unknown

Number is treated as UNKNOWN (2) for number conditioning.

A value of *nai* must be specified before the intl, natl, nai1, nai2, nai3, and unkn parameters in the `chg-npp-serv` command can be changed to non-default values for the MOSMSICDPN service.

Default:

No change to the current value

System Default:

intl

mosmstype (optional)

MO-based SMS type. The value of the entity type that indicates that a successful lookup occurred in the number portability database.

Range:

sp

signaling point

rn

routing number

sprn

Lookup is successful if the value of the entity type is *sp* or *rn*.

all

Lookup is successful if the value of the entity type is *sp* or *rn*, or if no entity type is found.

Default:

No change to the current value

System Default:

sprn

mtsmsackn (optional)

MT-Based SMS acknowledgement. The message generated in response to a successful number portability database lookup for an SMSREQ message from a Home SMSC.

Range:

ack

SMSREQ_ACK message

nack

SMSREQ_NACK (Return Error) message

Default:

No change to current value.

System Default:

ack

mtsmschksrc (optional)

MT-Based SMS check source. This parameter specifies whether the SCCP CgPA GTA of a SMSREQ message is validated to determine whether the source of the message is a Home SMSC.

Range:

yes

The SCCP CgPA GTA of an SMSREQ message is validated.

no

The SCCP CgPA GTA of an SMSREQ message is not validated.

If the mtsmschksrc=yes parameter is specified, and if the incoming SMSREQ message has SCCP CgPA GTA, then the SCCP CgPA GTA must be found in the Home SMSC list for the source of the message to be considered a Home SMSC. If the message is not found in the Home SMSC list, then the MT-Based IS41 SMS NP feature does not process the message.

If the mtsmschksrc=no parameter is specified, or if SCCP CgPA GTA does not exist in the incoming message, then the source of the message is considered to be a Home SMSC, and the MT-Based IS41 SMS NP feature considers the message for processing.

Default:

No change to current value

System Default:

no

mtsmsdigtype (optional)

MT-Based SMS digit type. The value that is used to encode the "Type of digits" field in the SMS_Address parameter of an SMSREQ ACK message.

Range:

0 - 255

Default:

No change to the current value

System Default:

6

mtsmsdltr (optional)

MT-Based SMS delimiter. This parameter specifies whether to insert a delimiter string before or after the routing number (RN) when the RN is used in the mtsmsdnfmt digits.

Note: The delimiter string that is inserted is determined by the mtsmsdltrv parameter.

Range:

no

A delimiter string is not inserted.

prern

A delimiter digit string is inserted before the RN.

postrn

A delimiter digit string is inserted after the RN.

Default:

No change to the current value

System Default:

no

mtsmsdltrv (optional)

MT-Based SMS delimiter value. The delimiter digit string inserted before or after the RN when the RN is used in the mtsmsdnfmt digits.

Range:

1-5 digits, *none*

Valid digit *none* s are *0-9, a-f, A-F*.

Default:

No change to the current value

System Default:

none

mtsmsdnfmt (optional)

MT-Based SMS DN format. The required format of digits to be encoded in the "SMS_Address" parameter of the SMSREQ response.

Range:

rn

routing number

rndn

routing number and the international dialed/directory number

ccrndn

country code, routing number, and national directory/dialed number

dn

directory or dialed number

srfimsi

IMSI is encoded as the "SRFIMSI" parameter from the number portability database.

Default:

No change to the current value

System Default:

rndn

mtsmsesn (optional)

MT-Based SMS electronic serial number. This parameter specifies whether to encode the ESN parameter while generating the SMSREQ response message.

Range:

no

The ESN parameter is not encoded.

yes

The ESN parameter is encoded.

Default:

No change to the current value

System Default:

no

mtsmsnakerr (optional)

MT-Based SMS negative acknowledgement error. The TCAP access denied reason to be included in the NACK response message that is generated for SMSREQ messages.

Range:

0 - 255

Default:

No change to the current value.

System Default:

5

mtsmsparm (optional)

MT-Based SMS parameter. The format used to encode the "SMS_Address" parameter of an SMSREQ response message.

Range:

digit

DIGIT format

pcssn

PCSSN format

Default:

No change to the current value

System Default:

digit

mtsmsssn (optional)

MT-Based SMS subsystem number. The SSN that is encoded in "SMS_Address" field, if the mtsmsparm=pcssn parameter is specified, and the SSN entry is not found in the entity.

Range:

2 - 255

Default:

No change to the current value

System Default:

6

mtsmstype (optional)

MT-Based SMS type. The entity type that indicates a successful lookup occurred in the number portability database.

Range:

sp

signaling point

rn

routing number

sprn

spor**rn**

all

sp,**rn**, or DN with no entity

nonsp

rnor DN with no entity

Default:

No change to the current value

System Default:

rn

spfill (optional)

This parameter specifies whether the Numbering Plan Processor (NPP) can populate SP and RN entities for own network subscribers at the same time.

Range:

off

Do not populate both RN and SP entities at the same time

on

Allow population of the RN and SP entities at the same time

Default:

No change to the current value

System Default:

off

sporttype (optional)

Service Portability type. This parameter specifies whether Service Portability is performed for the associated feature.

Note: If Service Portability is performed, then the Service Portability prefix (RTDB GRN entity id) is applied.

Range:

gsm

Apply Service Portability prefix for own-network GSM subscribers

is41

Apply Service Portability prefix for own-network IS41 subscribers

all

Apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

none

Service Portability is not performed for the feature.

Default:

No change to the current value

System Default:

none

Example

This example sets the IS41 SMS options when MO SMS ASD or MO SMS GRN feature is enabled:

```
chg-is41smsopts:modaparam=da:mosmsnai=intl:mosmsaclen=3
```

This example sets the IS41 SMS options when the MT-based IS41 SMS NP feature is enabled:

```
chg-is41smsopts:mtsmsdltr=no:mtsmsparm=digit
chg-is41smsopts:mtsmsdltrv=9854:mtsmsackn=nack:mtsmsesn=no
chg-is41smsopts:mtsmsssn=2:mtsmsnakerr=55:mtsmsdigtype=25
chg-is41smsopts:mtsmschksrc=no
```

This example sets the IS41 SMS options when the MO SMS B-Party Routing feature is enabled:

```
chg-is41smsopts:bpartygttsn=setint001:mosmsgttdig=mapbparty
```

```
chg-is41smsopts:mtsmsdnfmt=dn:mtsmstype=sp
```

This example sets the IS41 SMS options when the MO-based IS41 SMS NP feature is enabled:

```
chg-is41smsopts:mosmstype=sp:mosmsnai=intl:mosmsdigmat=exact:
modaparam=da:mosmsaclen=3
```

This example sets the IS41 SMS options when the MO SMS IS41-to-GSM Migration feature is enabled.

```
chg-is41smsopts:mosmsdigmat=exact:moigmpfx=is412gsm:modaparam=da:
mosmsnai=intl:mosmsaclen=3
```

This example sets the Area Code Length, when MO-based IS41 SMS NP, MO SMS IS41-to-GSM Migr, MO SMS ASD or MO SMS GRN feature is enabled:

```
chg-is41smsopts:mosmsaclen=5
```

Dependencies

At least one parameter must be specified.

The mtsmsdltrv parameter must be specified before a value of prern or postrn can be specified for the mtsmsdltr parameter.

The value specified for the bpartygttsn parameter must match the name of an existing GTT Set.

The mosmsgttdig=sccpcdpa parameter must be specified before the bpartygttsn=none parameter can be specified.

The GTT set specified for the bpartygttsn parameter must have settype=cdgta (see the `ent-gttset` command).

If the bpartygttsn=none parameter is specified, then the mosmsgttdig=mapbparty parameter cannot be specified.

The MT-Based IS41 SMS NP feature must be enabled before the mtsmsdnfmt, mtsmstype, mtsmsparm, mtsmsdltr, mtsmsdltrv, mtsmsackn, mtsmsesn, mtsmsssn, mtsmsnakerr, mtsmsdigtype, or mtsmschksrc parameters can be specified.

The MO SMS IS41-to-GSM Migration feature must be enabled before the moigmpfx parameter can be specified.

The MO SMS B-Party Routing feature must be enabled before the bpartygttsn or mosmsgttdig parameter can be specified.

The MO-based IS41 SMS NP or MO SMS IS41-to-GSM Migration feature must be enabled before the mosmsdigmat parameter can be specified.

The MO-based IS41 SMS NP feature must be enabled before the mosmstype, defrn, and spfill parameters can be specified.

The MO-based IS41 SMS NP, MO SMS IS41-to-GSM Migration, MO SMS ASD, or MO SMS GRN feature must be enabled before the modaparam, mosmsnai, or mosmsaclen parameter can be specified. The modaparam parameter can also be specified if the MO SMS B-Party Routing feature is enabled.

The S-Port feature must be enabled before the sporttype parameter can be specified.

Output

```
chg-is41smsopts:mtsmsackn=ack
```

```
    tekelecstp 08-05-11 13:11:27 EST  EAGLE 39.0.0
    CHG-IS41SMSOPTS: MASP A - COMPLTD
;
```

Related Commands

chg-is41opts, *rtrv-is41opts*, *rtrv-is41smsopts*

chg-isup-msg

Change ISUP Message

Use this command to enter or change specific parameters of an ISUP test message in the TESTMSG table. The TIF Test Tool processes ISUP test messages to verify the TIF and NPP provisioned configuration in the system.

Parameters

msgn (mandatory)

Test message number. The ISUP test message number for which parameters are being changed in the TESTMSG table.

Range:

1 - 10

active (optional)

Active. This parameter sets the *Active* field of the specified ISUP test message.

Range:

no

Do not send the message to the network card for processing.

yes

Send the message to the network card for processing.

Default:

no

cdpndgts (optional)

Called Party Number digits. The value for the CdPN digits in the specified ISUP test message.

Range:

1-32 digits

1 - 32 hexadecimal digits. Valid digits are *0-9, a-f, A-F* .

System Default:

1234567890abcdef

Default:

No change to the current value

cdpnnai (optional)

Called Party Number Nature of Address Indicator. The value for the CdPN NAI in the specified ISUP test message.

Range:

0 - 127

Default:

No change to the current value

System Default:

4

cgpncat (optional)

Calling Party Number Category. The value of the CgPN Category in the specified ISUP test message.

Range:

0 - 255

Default:

0

cgpndgts (optional)

Calling Party Number digits. The value for the CgPN digits in the specified ISUP test message.

Range:

1-32 digits, *none*

1 - 32 hexadecimal digits. Valid digits are *0-9, a-f, A-F* .

Default:

No change to the current value

System Default:

1234567890abcdef

cgpnnai (optional)

Calling Party Number Nature of Address Indicator. The value of the CgPN NAI in the specified ISUP test message.

Range:

0 - 127

Default:

No change to the current value

nmbits (optional)

NM Bits. The value of the NM bits in the specified ISUP test message. NM bits are used to determine whether a number portability lookup has already been performed in the network.

Range:

0 - 3

0-1

Portability has not been performed.

2

The number is not ported.

3

The number is ported.

Default:

0

Example

```
chg-isup-msg:msgn=1:active=yes:nmbits=1:cgpndgts=987654321:cdpndgts=923487:cdpnnai=125
chg-isup-msg:msgn=6:cgpncat=200:cdpnnai=23
```

Dependencies

At least one of the optional parameters must be specified.

At least one TIF feature must be enabled before this command can be entered.

Output

```
chg-isup-msg:msgn=10:active=yes:nmbits=1

    tekelecstp 08-07-24 10:37:20 EST  EAGLE 39.2.0
    CHG-ISUP-MSG: MASP A - COMPLTD
;
```

Related Commands

rtrv-isup-msg, *tst-msg*

chg-j1 Change J1 Interface

Use this command to change an interface for a J1 card in the system. J1 interface can be provisioned on E5-E1T1/E5-E1T1-B.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

j1port (mandatory)

J1 port number

The value must be a J1 port that has already been configured with a J1 interface on the specified T1 card with application as CCS7ITU.

Range:

1-8

Any 1 of the 8 ports on an E5-E1T1 card can be specified when the card is used as J1 card.

encode (optional)

Indicator for use of B8ZS or AMI encoding/decoding.

Range:

b8zs

ami

Default:

No change to the current value.

ll (optional)

T1 cable length in feet between the EAGLE and the connecting node.

Range:

0-655

Default:

No change to the current value.

j1tsel (optional)

Timing source for a J1 card.

Range:

line

slave timing source

external

master timing source

Default:

No change to the current value.

Example

```
chg-j1:loc=1101:j1port=1:encode=ami:j1tsel=external
chg-j1:loc=1102:j1port=2:encode=b8zs:ll=250
```

Dependencies

At least one optional parameter must be specified.

The card location specified by the loc parameter must be equipped.

The J1 table must be accessible.

The Card (IMT) table must be accessible.

The card specified by the loc parameter must be a LIMT1 card type and application must be CCS7ITU.

The port specified by the j1port parameter must have already been configured with a J1 interface on the specified J1 card with application as CCS7ITU.

All signaling links that are serviced by the specified J1 card with application as CCS7ITU must be deactivated before the values for the encode, j1tsel, and ll parameters can be changed.

Card locations 1113 - 1118 (OAM, TDM, MDAL cards) cannot be specified as values for the loc parameter.

j1port must be in range from 1 to 8.

Notes

External timing is derived from the EAGLE High-Speed Master Clock (1.544 MHz for T1 or 2.048 MHz for E1): therefore, the Master Timing feature is required. Line timing is derived from its received data stream, if present.

Output

```
chg-j1:loc=1101:j1port=1:encode=ami
```

```
tekelecstp 13-12-20 12:33:39 EST  46.0.0-65.3.0
chg-j1:loc=1101:j1port=1:encode=ami
Command entered at terminal #4.
CHG-J1: MASP A - COMPLTD
;
```

Related Commands

dlt-j1, *ent-j1*, *rtrv-j1*, *tst-j1*

chg-l2t

Change Level 2 Timers

Use this command to change the values of the SS7 MTP level 2 timers. The timers are organized in 40 timer sets of which sets 1-35 have 9 timer values and sets 36-40 have 10 timer values. The timer sets are grouped and system default values are initialized by specification (ANSI, ITU, High Speed for China, High Speed for Q.703 Annex A, JT Q703, and High Speed for Unchannelized T1). Each timer set is administered individually by this command. The `ent-slk` command is used to assign an SS7 signaling link to any of the timer sets. Each assigned link is associated with a timer set.

Parameters

l2tset (mandatory)

Level 2 timer set. This parameter specifies the Level 2 timer set identifier or timer set number. Up to 40 different timer sets can be defined. A signaling link can be assigned to any of the timer sets.

Range:

1 - 40

1–10

ANSI links

11–20

low-speed ITU links

21-25

China high speed links

26-30

Q.703 Annex A high speed links

31-35

Unchannelized T1 high speed links

36-40

Japan ITU low speed links

nodata (optional)

This parameter specifies a value for the NODATA timer.

Note: The NODATA timer measures the amount of time, in milliseconds, that must pass with no transmissions on a link before the EAGLE interprets the condition as a link failure or terminal equipment failure and initiates changeover procedures.

Range:

100 - 500

Default:

No change to the current value

System Default:

100

t1 (optional)

Timer 1—Aligned/ready

Range:

5000 - 350000 (milliseconds)

ANSI timer sets 1–10—*5000–20000*

ITU timer sets 11–20—*40000–50000*

China timer sets 21–25—*25000–350000*

Q.703 Annex A timer sets 26–30—*25000–350000*

Unchannelized T1 timer sets 31–35—*16000–151000*

Japan timer sets 36--40--- *15000*

Default:

No change to the current value

System Default:

ANSI timer sets 1–10—*13000*

ITU timer sets 11–20—*40000*

China timer sets 21–25—*150000*

Q.703 Annex A timer sets 26–30—*300000*

Unchannelized T1 timer sets 31–35—*151000*

Japan timer sets 36--40--- *15000*

t2 (optional)

Timer 2—Not aligned

Range:

5000 - 480000 (milliseconds)

ANSI timer sets 1–10—*5000–30000*

ITU timer sets 11–20—*5000–150000*

China timer sets 21–25—*5000–150000*

Q.703 Annex A timer sets 26–30—*5000–150000*

Unchannelized T1 timer sets 31–35—*5000–14000*

Japan timer sets 36--40----*5000--480000*

Default:

No change to the current value

System Default:

ANSI timer sets 1–10—*11500*

ITU timer sets 11–20—*30000*

China timer sets 21–25—*130000*

Q.703 Annex A timer sets 26–30—*130000*

Unchannelized T1 timer sets 31–35—*14000*

Japan timer sets 36--40--*5000*

t3 (optional)

Timer 3—Aligned

Range:

1000 - 20000 (milliseconds)

ANSI timer sets 1–10—*5000–20000*

ITU timer sets 11–20—*1000–2000*

Q.703 Annex A timer sets 26–30—*1000–2000*

China timer sets 21–25—*1000–2000*

Unchannelized T1 timer sets 31–35—*5000–14000*

Japan timer sets 36--40---*3000*

Default:

No change to the current value

System Default:

ANSI timer sets 1–10—*11500*

ITU timer sets 11–20—*2000*

China timer sets 21–25—*1000*

Q.703 Annex A timer sets 26–30—*1000*

Unchannelized T1 timer sets 31–35—*14000*

Japan ITU low speed links 36--40---*3000*

t4epp (optional)

Timer 4—Proving period Emergency

Range:

200 - 10000 (milliseconds)

ANSI timer sets 1–10—*200–1000*

ITU timer sets 11–20— *400–600*

China timer sets 21–25—*400–600*

Q.703 Annex A timer sets 26–30—*400–600*

Unchannelized T1 timer sets 31–35—*3000–10000*

Japan timer sets 36--40--*3000*

Default:

No change to the current value

System Default:

ANSI timer sets 1–10—*600*

ITU timer sets 11–20—*500*

China timer sets 21–25—*500*

Q.703 Annex A timer sets 26–30—*500*

Unchannelized T1 timer sets 31–35—*3000*

Japan timer sets 36--40--*3000*

t4npp (optional)

Timer 4— Proving period normal

Range:

500 - 70000 (milliseconds)

ANSI timer sets 1–10—*500–5000*

ITU timer sets 11–20—*7500–9500*

China timer sets 21–25—*3000–70000*

Q.703 Annex A timer sets 26–30—*3000–70000*

Unchannelized T1 timer sets 31–35—*3000–30000*

Japan timer sets 36--40-- Not applicable

Default:

No change to the current value

System Default:

ANSI timer sets 1–10—*2300*

ITU timer sets 11–20—*8200*

China timer sets 21–25—*30000*

Q.703 Annex A timer sets 26–30—*30000*

Unchannelized T1 timer sets 31–35—*30000*

t5 (optional)

Timer 5—Sending SIB

Range:

40 - 500 (milliseconds)

ANSI timer sets 1–10—*40–500*

ITU timer sets 11–20—*80–120*

China timer sets 21–25—*80–120*

Q.703 Annex A timer sets 26–30—*80–120*

Unchannelized T1 timer sets 31–35—*80–120*

Japan timer sets 36--40--*200*

Default:

No change to the current value

System Default:

ANSI timer sets 1–10—*100*

ITU timer sets 11–20—*100*

China timer sets 21–25—*100*

Q.703 Annex A timer sets 26–30—*100*

Unchannelized T1 timer sets 31–35—*80*

Japan timer sets 36--40--*200*

t6 (optional)

Timer 6—Remote congestion

Range:

1000 - 10000 (milliseconds)

ANSI timer sets 1–10—*1000 - 10000*

ITU timer sets 11–20—*3000 - 6000*

China timer sets 21–24—*3000 - 6000*

Q.703 timer sets 26–30—*3000 - 6000*

Unchannelized T1 sets 31–35—*3000 - 6000*

Japan timer sets 36--40--*5000*

Default:

No change to the current value

System Default:

ANSI timer sets 1–10—*4000*

ITU timer sets 11–20—*4000*

China timer sets 21–25—*5000*

Q.703 Annex A timer sets 26–30—*5000*

Unchannelized T1 timer sets 31–35—*5000*

Japan timer sets 36--40--*5000*

t7 (optional)

Timer 7—Excessive delay of acknowledgment

Range:

200 - 3000 (milliseconds)

For ANSI timer sets 1–10—*200–3000*

ITU timer sets 11–20—*500–2000*

China timer sets 21–25—*500–2000*

Q.703 Annex A timer sets 26–30—*500–2000*

Unchannelized T1 timer sets 31–35—*500–2000*

Japan ITU low speed links 36--40---*2000--3000*

Default:

No change to the current value

System Default:

ANSI timer sets 1–10—*1500*

For ITU timer sets 11–20—*1500*

For China timer sets 21–25—*800*

For Q.703 Annex A timer sets 26–30—*800*

For Unchannelized T1 timer sets 31–35—*500*

Japan ITU low speed links 36--40--*2000*

Example

```
chg-l2t:l2tset=1:t1=5400
chg-l2t:l2tset=21:t4epp=600:t5=90:t6=3500:t7=1900
chg-l2t:l2tset=1:nodata=200
chg-l2t:l2tset=36:t2=6000
```

Dependencies

At least one optional parameter must be specified.

The value specified for the timer must be within the range for that domain.

The value specified for the timer must be in the allowed range.

For l2tset greater than 35, timers t1, t3, t4epp, t5, and t6 are not allowed to change.

Notes

ANSI timer defaults are within the Telcordia recommended ranges.

ITU timer defaults are within ITU Q.703 white book recommended ranges.

J1 timer defaults are within JT Q.703 white book recommended ranges.

If the value specified for the nodata parameter is greater than 200 milliseconds, then the following message appears:

Caution: WARNING: If NODATA timer value is greater than 200ms, links could go into congestion before link failure is declared

Output

```
chg-l2t:l2tset=21:t4epp=600:t5=90:t6=3500:t7=1900
```

```
    rlghncxa03w 05-02-07 11:11:28 EST  EAGLE5 34.0.0
    CHG-L2T: MASP A - COMPLTD
;
```

```
chg-l2t:l2tset=1:nodata=200
```

```
    tekelecstp 08-05-02 16:36:09 EST  EAGLE 39.0.0
    CHG-L2T: MASP A - COMPLTD
```

Related Commands

ent-slk, *rtrv-l2t*, *rtrv-slk*

chg-l3t

Change Level 3 Timers

Use this command to change the SS7 MTP level 3 timers. The SS7 MTP level 3 timers are organized in a timer set of 21 values each. Only one timer set is administered by this command. Each linkset is associated with the SS7 MTP level 3 Timer set. The linkset and timer set association is assigned with the link administration commands.

Parameters

Note: All timer values are entered in milliseconds. The `rtrv-l3t` command displays output in seconds.

Note: All it(X) parameters can be specified for ITU networks only. All t(x) parameters can be specified for ANSI or ITU networks. Tc parameter can be specified for J7 (Japan ITU-N) networks only.

l3tset (mandatory)

Timer set table. Only one timer set table exists. All SS7 signaling links use the SS7 MTP level 3 timer set table.

Range:

1

it18 (optional)

Timer 18—Timer within a signaling point whose MTP restarts to supervise the receipt of routing information and the activation of the link and link set.

Range:

19000 - 50000

Default:

No change to the current value.

System Default:

50000

it19 (optional)

Timer 19—Supervision timer during MTP restart to avoid ping-pong of TFP, TFR1, and TRA messages.

Range:

67000 - 69000

Default:

No change to the current value

System Default:

67000

it20 (optional)

Timer 20—Overall MTP restart timer at the signaling point whose MTP restarts.

Range:

59000 - 61000

Default:

No change to the current value.

System Default:

59000

it21 (optional)

Timer 21—Overall MTP restart timer at a signaling point adjacent to one whose MTP restarts.

Range:

63000 - 65000

Default:

No change to the current value.

System Default:

63000

it22 (optional)

Timer 22—Waiting to repeat local inhibit test.

Range:

180000 - 360000

Default:

No change to the current value

System Default:

90000

it23 (optional)

Timer 23—Waiting to repeat remote inhibit test.

Range:

180000 - 360000

Default:

No change to the current value

System Default:

90000

t1 (optional)

Timer 1—Changeover delay. Also used as isolation timer for ITU MTP Restart.

Range:

100 - 2000

Default:

No change to the current value

System Default:

800

t10 (optional)

Timer 10—Wait to repeat signaling route set test (SRST) message.

Range:

20000 - 90000

Default:

No change to the current value

System Default:

30000

t11 (optional)

Timer 11—Transfer restricted; in milliseconds.

Range:

1000 - 90000

Default:

No change to the current value System

System Default:

30000

t12 (optional)

Timer 12—Wait for uninhibit acknowledgment.

Range:

100 - 2000

Default:

No change to the current value

System Default:

800

t13 (optional)

Timer 13—Wait for force uninhibit.

Range:

100 - 2000

Default:

No change to the current value.

System Default:

800

t14 (optional)

Timer 14—Wait for inhibit acknowledgment.

Range:

200 - 4000

Default:

No change to the current value

System Default:

2000

t15 (optional)

Timer 15—Wait for repeat route set congestion test (RSCT).

Range:

200 - 4000

Default:

No change to the current value

System Default:

3000

t16 (optional)

Timer 16—Wait for route set congestion test (RSCT) updates.

Range:

200 - 3000

Default:

No change to the current value

System Default:

1400

t17 (optional)

Timer 17—Delay to avoid oscillation of initial alignment failure; in milliseconds.

Range:

500 - 2000

Default:

No change to the current value

System Default:

800

t18 (optional)

Timer 18—Repeat transfer restricted (TFR) once by response method.

Range:

2000 - 20000

Default:

No change to the current value

System Default:

10000

t19 (optional)

Timer 19—Failed link craft referral timer.

Range:

30000 - 600000

Default:

No change to the current value.

System Default:

480000

t2 (optional)

Timer 2—Wait for changeover acknowledge (COA).

Range:

100 - 3000

Default:

No change to the current value

System Default:

1400

t20 (optional)

Timer 20—Repeat local inhibit test; in milliseconds.

Range:

90000 - 120000

Default:

No change to the current value

System Default:

90000

t21 (optional)

Timer 21—Repeat remote inhibit test; in milliseconds.

Range:

90000 - 120000

Default:

No change to the current value

System Default:

90000

t22 (optional)

Timer 22—Timer at restarting STP, waiting for signaling links to become available; in milliseconds.

Range:

10000 - 60000

Default:

No change to the current value.

System Default:

10000

t23 (optional)

Timer 23—Timer at restarting STP, started after T22, waiting to receive all TRA messages; in milliseconds.

Range:

9000 - 100000

Default:

No change to the current value.

System Default:

10000

t24 (optional)

Timer 24—Timer at restarting STP with transfer function, started after T23, waiting to broadcast all TRA messages.

Range:

9000 - 60000

Default:

No change to the current value.

System Default:

10000

t25 (optional)

Timer 25—Timer at adjacent STP and restarting STP, waiting for TRA message; may be started at level 2.

Range:

30000 - 35000

Default:

No change to the current value

System Default:

30000

t26 (optional)

Timer 26—Timer at restarting STP, waiting to repeat TRW message.

Range:

12000 - 15000

Default:

No change to the current value.

System Default:

12000

t28 (optional)

Timer 28—Timer at STP adjacent to restarting STP, waiting for TRW message.

Range:

3000 - 35000

Default:

No change to the current value

System Default:

3000

t29 (optional)

Timer 29—Timer started when a TRA is sent in response to an unexpected TRA or TRW; also, started when traffic resumed without receipt of TRA.

Range:

60000 - 65000

Default:

No change to the current value

System Default:

60000

t3 (optional)

Timer 3—Time controlled diversion on changeback.

Range:

100 - 2000

Default:

No change to the current value

System Default:

800

t30 (optional)

Timer 30—Timer to limit sending of TFPs/TFRs in response to an unexpected TRA or TRW.

Range:

30000 - 35000

Default:

No change to the current value

System Default:

30000

t31 (optional)

Timer 31—False link congestion detection.

Range:

10000 - 120000

Default:

No change to the current value.

System Default:

60000

t32 (optional)

Timer 32—Link oscillation timer – Procedure A.

Range:

60000 - 120000

Default:

No change to the current value.

System Default:

60000

t4 (optional)

Timer 4—Wait for changeback acknowledge (CBA) #1.

Range:

100 - 2000

Default:

No change to the current value

System Default:

800

t5 (optional)

Timer 5—Wait for changeback acknowledge (CBA) #2.

Range:

100 - 2000

Default:

No change to the current value

System Default:

800

t6 (optional)

Timer 6—Controlled reroute.

Range:

100 - 2000

Default:

No change to the current value

System Default:

800

t7 (optional)

Timer 7—Signaling data link connection (SDLC) acknowledge.

Range:

100 - 3000

Default:

No change to the current value.

System Default:

1000

t8 (optional)

Timer 8—Transfer prohibited (TFP) inhibit.

Range:

500 - 2000

Default:

No change to the current value.

System Default:

800

tc (optional)

Timer C- Release transfer congestion status timer in J7 network.

Range:

3000 - 60000

Default:

No change to the current value.

System Default:

3000

Example

```
chg-l3t:l3tset=1:t1=800
chg-l3t:l3tset=1:t5=800:t6=800:t32=70000
```

Dependencies

The minimum parameter requirement is the table number and at least one timer specified.

Do not specify T20 and IT22 pairs of timers together because one value overrides the other.

Do not specify T21 and IT23 pairs of timers together because one value overrides the other.

Notes

The command line allows 157 characters. Some SS7 MTP level 3 timer changes may exceed this limit. Multiple entries of this command may be required in such cases.

Timer 9 is not currently supported in the SS7 protocol, and has been omitted from this manual. The command will support this timer when it has been defined in the protocol.

The default values are within the Telcordia recommended ranges.

tc timer is only supported in J7 network.

Output

```
chg-l3t:l3tset=1:t1=800
```

```
    rlghncxa03w 04-01-07 08:40:50 EST  EAGLE 31.3.0
    CHG-L3T: MASP A - COMPLTD
;
```

Related Commands

chg-l2t, *rtrv-l2t*, *rtrv-l3t*

chg-lbp

Change Loopback Point's Attribute Values

Use this command to change a far-end loopback point's attribute values maintained in the link fault sectionalization table.

Parameters

lbp (mandatory)

Loopback point ID. This parameter identifies a far-end loopback point that lies along an SS7 signaling link path between the STP and the target device (up to *and including* the target device).

Range:

1 - 32

link (mandatory)

SS7 signaling links. The SS7 signaling link to be tested.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

loc (mandatory)

Card location. The unique identifier of a specific application subsystem located in the STP.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

clli (optional)

Common Language Location Identifier (CLLI) code. This parameter specifies the CLLI or other mnemonic identifier used to refer to the given loopback point.

Range:

ayyyyyyyyyy

1 alphabetic character followed by up to 23 alphanumeric characters

Default:

No change to the current value

lfst (optional)

Link fault sectionalization test. The type of link fault sectionalization loopback test to be performed.

Range:

llt

latching loopback test

nlt

nonlatching loopback test

rep (optional)

Repetition count. The number of link elements of the same type (not including the target device) that lie between the STP and the link element to be tested.

Range:

0 - 31

Default:

No change unless:

0—The link element to be looped back for testing is NEI (rle=nei is specified)

0—The type of link fault sectionalization test is NLT (lfst=nlt is specified)

0—The new remote link element is the first loopback point of the link to be tested

1–30—Next sequential number for subsequent loopback points of the link to be tested

rle (optional)

Remote link element. The link element to be looped back for testing.

Range:

ds0

ocu

csu

dsu

nei

Default:

No change to the rle value

Example

```
chg-lbp:loc=1101:link=a:lbp=1:rle=ds0:lfst=llt
```

Dependencies

The Link Fault Sectionalization (LFS) feature must be on before using this command.

At least one optional parameter must be specified.

The card location specified in the loc parameter cannot be reserved by the system.

The card location (loc parameter) must identify a provisioned HC-MIM, E5-E1T1, or E5-E1T1-B card, provisioned with the LIMT1 card type, configured with either the SS7ANSI or CCS7ITU application.

The CLLI cannot be a reserved word.

The rep parameter value that is specified for this loopback point (LBP) must be greater than the rep parameter value of any previously defined LBP and less than the rep parameter value of any subsequently defined LBP.

The rep parameter must be specified if the default value is a duplicate of the rep parameter value of any previously defined loopback point.

The LBP must have been previously defined.

The rep parameter can be specified only if the lfst=llt parameter is specified.

If the rle=nei parameter is specified, the rep=0 parameter must be specified.

The rle=ds0 or the rle=nei parameter cannot be specified if the lfst=nlt parameter is specified. The DS0 and Network Element Interface (NEI) link elements do not support non-latching loopbacks.

For each SS7 signaling link, you can define only one loopback point with rle=nei specified; and that loopback point must be the terminating SS7 signaling link component.

For each SS7 signaling link, the loopback point with rle=nei specified must be the terminating SS7 signaling link component.

The card location specified in the loc parameter must be equipped.

Notes

None

Output

```
chg-lbp:loc=1101:port=a:lbp=1:rle=ds0:lfst=llt
```

```
    rlghncxa03w 05-01-17 15:35:05 EST  EAGLE5 33.0.0
    CHG-LBP: MASP A - COMPLTD
;
```

Related Commands

act-lbp, *dact-lbp*, *dlt-lbp*, *ent-lbp*, *rtrv-lbp*

chg-lnp-serv

Change LNP Service

Use this command to change an existing LNP service.

Parameters

Note: All alias translation types must be removed before the service can be moved to another translation type.

ndfltact (optional)

New default action associated with an LNP TT Service entry.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

The ndfltact parameter must have one of the following values:

- a GTT Action ID that already exists in the GTT Action table with an associated action of *disc/udts/tcaperr*
- *fallback* —Fallback to the relay data for MSUs relayed by LNP using relay data from the LNP database provided by the LNP Message Relay service. For an LNP Query message, the MSU is sent to the LNP local subsystem.
- *falltogtt* —Fallback to GTT. The GTT selector search is performed again, using gttselid=none.

Default:

No change to the current value

ndv (optional)

New digits valid.

Range:

sccp

tcap

Default:

No change to the current value

ngttselid (optional)

New GTT Selector ID.

Range:

0 - 65534, none

none —deletes the current value of the GTTSELID field

Default:

No change to the current value

nrqdtblnop (optional)

The action performed with a message that arrives at an SCCP card that does not have the necessary LNP table, and the current message routing is subsystem.

Range:

udts

generate UDTS for the processed MSU

disc

discard the processed MSU

Default:

No change to the current value

nserv (optional)

New reserved service type name.

Range:

ain

in

pcs

wnp

class

lidb

cnam

isvm

lnpqs

wsmsc

udf1

udf2

udf3

udf4

lrnqt

Default:

No change to the current value

ntt (optional)

New translation type.

Range:

0 - 255

Default:

No change to the current value

nttn (optional)

New User defined LNP Translation type name.

Range:

ayyyyyyy, none

1 alphabetic character followed by up to 7 alphanumeric characters

none —defaults the name to the reserved service type name

Default:

If *none* is specified, the default value is the reserved service type name (serv parameter).

If *none* is not specified, no change to current value.

off (optional)

Disables or turns off the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned off. Up to 10 feature options can be specified in the list.

Range:

gttrqd

on (optional)

Enables or turns on the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned on. Up to 10 feature options can be specified in the list.

Range:

gttrqd

serv (optional)

Reserved service type name.

Range:

ain

in

pcs

wnp

class

lidb

cnam

isvm

lnpqs

wsmsc

udf1

udf2

udf3

udf4

lrnqt

Default:

No change to the current value

tt (optional)

Translation type.

Range:

0 - 255

Default:

No change to the current value

Example

```
chg-lnp-serv:tt=10:ndfltact=fallback:on=gttrqd:ngttselid=none
chg-lnp-serv:serv=lidb:ntt=22:ndv=tcap:nttn=mrlidb
chg-lnp-serv:tt=239:nserv=lrnqt
```

Dependencies

The same value cannot be specified for the on and off parameters.

The ndfltact=none parameter cannot be specified.

The EGTT feature must be turned on before the ngttselid, ndfltact, or on/off=gttrqd parameter can be specified.

If a GTT Action ID is specified as the value for the ndfltact parameter, then the Action ID must already exist in the GTT Action table.

If a GTT Action ID is specified as a value for the ndfltact parameter, then the GTT Action ID must have an associated action of *disc*, *udts*, or *tcaperr*.

The LNP feature must be turned on before this command can be entered.

The LNP SMS feature must be turned on before the nserv=wsmsc parameter can be specified.

The PCS 1900 LNP (PLNP) feature must be turned on before the nserv=pcs parameter can be specified.

The WNP feature must be turned on before the nserv=wnp parameter can be specified.

The value of the ntt parameter cannot already exist in the LNP database.

The value of the nttn parameter cannot already exist in the LNP database.

The value of the serv parameter must already exist in the LNP database.

The serv or tt parameter and one other optional parameter must be specified.

The same value cannot be specified for the ndv and dv parameters.

An LNP alias cannot be specified as the value for the ntt parameter.

All LNP aliases for the existing service must be removed from the LNP database before the nserv or ntt parameter can be specified.

A reserved service type name can be specified as a value for the nttn parameter only if the name matches the existing service (the value specified for the serv parameter).

If a value of *wsmsc*, *udf1*, *udf2*, *udf3*, or *udf4* is specified for the serv parameter, then the ndv=sccp parameter must be specified.

If a value of *lnpqs*, *ain*, *in*, *pcs*, *wnp*, or *lrnqt* is specified for the serv parameter, then the ndv=tcap parameter must be specified.

The LRNQT feature must be turned on before the (n)serv=lrnqt parameter can be specified.

The value specified for the nserv parameter cannot already exist in the LNP database.

If the value specified for the tt parameter is an alias, then the ntt, nserv, nttn, and ndv parameters cannot be specified.

If the value specified for the (n)serv parameter is already associated with the *class*, *lidb*, *cnam*, *isvm*, *wsmsc*, *udf1*, *udf2*, *udf3*, or *udf4* service, then a value of *lnpqs*, *lrnqt*, *ain*, *in*, *wnp*, or *pcs* cannot be specified for the (n)serv parameter.

The ndfltact, ngttselid, and on/off=gttrqd parameters cannot be specified with the *udf1*, *udf2*, *udf3*, and *udf4* LNP Services.

The nrqdtblnop parameter requires that the Dual ExAP Config feature be enabled.

Notes

on/off options

gttrqd—GTT required. Specifies whether GTT is performed after the successful completion of an LNP Message Relay service and before initiation of an LNP Query service. This option has a default of OFF.

Output

```
chg-lnp-serv:tt=3:on=gttrqd:ngttselid=10:ndfltact=falltogtt
```

```
    rlghncxa03w 10-11-08 08:50:12 EST  EAGLE 43.0.0
    CHG-LNP-SERV:  MASP A - COMPLTD
;
```

Related Commands

dlt-lnp-serv, *ent-lnp-serv*, *rtrv-lnp-serv*

chg-lnpopts

Change LNP System Options

Use this command to enter LNP-specific system options in the database. This command updates the LNPOPTS table.

Parameters

Note: As of Release 43.0, the dra, lrndgts, naiv, and tndgts parameters are obsolete for this command.

admhipri (optional)

Give LNP database administration the highest administrative priority in the system.

Range:

yes

no

Default:

No change to the current value

amactype (optional)

AMA call type.

Range:

3 digits

Default:

No change to the current value

amafeatid (optional)

AMA feature ID.

Range:

3 digits

Default:

No change to the current value

amaslpid (optional)

AMA slip ID.

Range:

9 digits

Default:

No change to the current value

System Default:

none

ccp (optional)

Copy charge parameters. When this parameter has a value of *yes*, the system copies the Charge Number and Charge Party Station type from an LNP AIN query (if present) to the LNP AIN Response message.

Range:

yes

no

Default:

No change to the current value

cic (optional)

Carrier identification code.

Range:

3-4 digits

Default:

No change to the current value

gtwystp (optional)

Indicates that the LNP system is also configured as a Gateway STP.

Range:

yes

no

Default:

No change to the current value

incslp (optional)

Include AMA slip ID in the response.

Range:

yes

no

Default:

No change to the current value

jipdigits (optional)

Jurisdictional Information Parameter value.

Range:

6 digits

Default:

No change to the current value

jipprv (optional)

Determines whether a Jurisdictional Information Parameter value is to be added to the IAM.

Range:

yes

no

Default:

No change to the current value

servport (optional)

Service portability.

Range:

yes

allows splitting services between TN and LRN override records. This setting allows the LNP user to update LRN overrides for message relay services that are to be supported in the network. The TN gateway point code (NPAC subscription data) is used for message relay services the CLEC wants to provide.

no

If no LRN override services are provisioned, then the TN's gateway point codes (NPAC subscription data) are used to route queries out of the network. If one or more LRN override services are provisioned, the TN is considered to be ported into the network. In this case, if an LRN override service is requested and the LRN has other services administered, but the requested service is not provisioned, then a UDTS response for the service is provided.

Default:

No change to the current value

sp (optional)

Service provider ID.

Range:

xyyy

4 alphanumeric characters

Default:

No change to the current value

wqredrct (optional)

Wireless queries directed to default GTT.

Range:

on

allows GTT functionality to treat any wireless LNP (WNP and PCS) queries that require GT as a normal GTT

off

routes all wireless LNP queries (WNP and PCS) that require GT directly to the local subsystem

Default:

No change to the current value

tndgts (optional)

SCCP GTA digit length indicator for 10 or 11 digits.

Range:

yes

The system verifies that either 10 or 11 digits are present in the CDPA GTA. If 11 digits are present, the first digit is stripped to derive 10 digits for LNP SMS translation. If 10 digits are present, all 10 digits are used for LNP SMS translation.

no

The system verifies that 11 digits (plus a padded 0 digit) are present in the CDPA GTA. If 11 digits are present, the system strips the first digit and considers only 10 digits for LNP SMS translation.

Default:

No change to the current value

Example

```
chg-lnpopts:amaslpid=123456789
chg-lnpopts:amactype=003
chg-lnpopts:amafeatid=010
chg-lnpopts:incslp=yes
chg-lnpopts:cic=1369
chg-lnpopts:sp=1234
chg-lnpopts:jipdigits=919460
chg-lnpopts:jipprv=yes
```

```
chg-lnpopts:frcsmplx=yes
chg-lnpopts:admhipri=yes
chg-lnpopts:gtwystp=yes
chg-lnpopts:ccp=yes
chg-lnpopts:servport=yes
chg-lnpopts:wqredrct=off
chg-lnpopts:wsmsc10dig=yes
```

Dependencies

At least one optional parameter must be specified.

The LNP and Triggerless LNP (TLNP) features must be turned on before this command can be entered.

The Triggerless LNP feature must be turned on before the jipprv and jipdigits parameters can be specified.

The LNP SMS feature must be turned on before the wsmsc10dig parameter can be specified.

The LNP feature or AINPQ feature must be turned on before this command can be entered.

The WNP or PCS feature must be turned on before the wqredrct parameter can be specified.

Notes

If the admhipri=yes parameter is specified, LNP database administration can starve out normal STP updates during LNP administration of 2 TNs per second. If the parameter is set to *no*, then STP and LNP updates receive the same priority. Depending on the system activity level, the performance of LNP updates may be reduced.

If the gtwystp=yes parameter is specified, the LNP system is also configured as a gateway STP. The NPAC sends down capability point codes without routes. In this configuration, the system does not output a warning (UIM 1176) about capability point codes or true point codes without routes.

AINPQ feature dependency is required to get AIN queries processed by INPQ subsystem.

Output

```
chg-lnpopts:amaslpid=123456789
```

```
    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    CHG-LNPOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-lnpopts

chg-loopset

Change Loop Set command

Use this command to change the loopset data in the database. This command updates the Loopset Table. A single instance of this command can be used to append up to 6 point codes to the loopset (a loopset can contain a total of 12 point codes), replace all data in the loopset, or change one or two point codes in the loopset.

Parameters

name (mandatory)

Loopset name. Sn entry in the Loopset table.

The name=none parameter cannot be specified.

Range:

ayyyyyyy

1 alphabetic and up to 7 alphanumeric characters.

apcl (optional)

ANSI appending point code list with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm)*. The *prefix* subfield indicates a private point code *(prefix-ni-nc-ncm)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Synonym:

apcla

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

apcli (optional)

ITU international appending point code list with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code *(prefix-zone-area-id)*. This parameter allows up to 6 comma delimited entries in the point code list.

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

apcln (optional)

ITU national appending point code list in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the **chg-stpopts:npcfmti** flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

apcln24 (optional)

24-bit ITU national appending point code list with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

apc1n16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un--000--127

sna--000--15

mna---000--31

force (optional)

This parameter must be specified to modify a loopset that is being used by GTT.

Range:

yes

mode (optional)

Mode of operation. This parameter specifies whether the message is discarded when an SCCP loop is detected.

Range:

notify

Generates a UIM without discarding the message.

discard

Generates a UIM and discards the message.

npc1 (optional)

ANSI new point code 1 with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm)*. The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

npc1a

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

npc1i (optional)

ITU international new point code 1 with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

npc1n (optional)

ITU national new point code 1 in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the **chg-stpopts:npcfmti** flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*).The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

npc1n24 (optional)

24-bit ITU national new point code 1 with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

npc1n16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un--000--127

sna--000--15

mna--000--31

npc2 (optional)

ANSI new point code 2 with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm)*. The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

npc2a

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

npc2i (optional)

ITU international new point code 2 with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

npc2n (optional)

ITU national new point code 2 in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

npc2n24 (optional)

24-bit ITU national new point code 2 with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

npc2n16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area (un-sna-mna)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un--000--127

sna--000--15

mna--000--31

pc1 (optional)

ANSI point code 1 with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm)*. The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

pc1a

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pc1i (optional)

ITU international point code 1 with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pc1n (optional)

ITU national point code 1 in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pc1n24 (optional)

24-bit ITU national point code 1 with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pc1n16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un--000--127

sna--000--15

mna--000--31

pc2 (optional)

ANSI point code 2 with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm)*. The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

pc2a

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pc2i (optional)

ITU international point code 2 with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pc2n (optional)

ITU national point code 2 in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pc2n24 (optional)

24-bit ITU national point code 2 with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pc2n16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un--000--127

sna--000--15

mna--000--31

rpcl (optional)

ANSI replacing point code list with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm)*. The prefix subfield indicates a private point code (*prefix-ni-nc-ncm*). This parameter allows up to 6 comma-delimited entries in the point code list.

Synonym:

rpcla

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

rpcli (optional)

ITU international replacing point code list with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

rpcln (optional)

ITU national replacing point code list in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

rpcln24 (optional)

24-bit ITU national replacing point code list with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

rpc1n16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un--000--127

sna--000--15

mna--000--31

Example

This example sets the mode to discard and appends the listed point codes to the loopset RTP1 if the set is not being used by GTT.

```
chg-loopset:name=rtp1:mode=discard:apcl=3-7-3,5-7-5,7-4-7,5-4-5
```

This example replaces the point codes in the set with the listed point codes for the loopset RTP1 if the set is not being used by GTT.

```
chg-loopset:name=rtp2:rpcl=3-2-3,5-7-8,7-8-7,3-5-3
```

This example sets the mode to DISCARD in the loopset RTP2 if the set is not being used by GTT.

```
chg-loopset:name=rtp2:mode=discard
```

This example replaces PC1 with NPC1 in the loopset RTP1 if the set is not being used by GTT.

```
chg-loopset:name=rtp1:pc1=3-3-3:npc1=3-3-9
```

This example replaces PC1 and PC2 with NPC1 and NPC2 in the loopset RTP2 if the set is not being used by GTT.

```
chg-loopset:name=rtp2:pc1=3-2-3:npc1=3-3-9:pc2=7-8-7:npc2=7-7-9
```

This example sets the mode to NOTIFY in the loopset RTP2 even if the set is being used by GTT.

```
chg-loopset:name=rtp2:mode=notify:force=yes
```

```
chg-loopset:name=rtpn16:pc1n16=3-2-3:npc1n16=3-3-9:pc2n16=7-8-7:npc2n16=7-7-9
```

Dependencies

If the loopset is being used by GTT, and the rpcl, pc1/pc2/npc1/npc2, or mode parameter is specified, then the force=yes parameter must be specified.

If the pc2 parameter is specified, then the pc1 parameter must be specified.

If the npc1 or npc2 parameter is specified, then the corresponding pc1 or pc2 parameter must be specified.

The command requires at least one optional parameter.

The rpcl and apcl parameters cannot be specified together in the command.

If the pc1 or pc2 parameter is specified, then the apcl and rpcl parameters cannot be specified.

The value of the name parameter must already exist in the database.

The SCCP Loop Detection feature must be enabled before this command can be entered.

The GTT feature must be turned on before this command can be entered.

A maximum of 6 point codes can be added using this command with the apcl parameter. The Loopset entry can contain a maximum of 12 point codes.

The Loopset table can hold a maximum of 1,000 loopset entries, with each entry containing up to 12 point codes. Additional loopset entries and point codes cannot be added when the table is full.

The values for the apcl and rpcl parameters cannot consist of any invalid point codes. The valid point codes must be consecutively specified and separated by commas.

The name=none parameter cannot be specified.

At least one valid point code must be specified as a value for the apcl and rpcl parameters.

The values specified for the apcl and rpcl parameters must be unique.

If the npc1/pc1 or npc2/pc2 parameters are specified together, then the value of the npc parameter cannot equal the value of the pc parameter.

A valid point code must be specified for the pc1, pc2, npc1 or npc2 parameter.

Equal values cannot be specified for the pc1 and pc2 parameters.

Equal values cannot be specified for the npc1 and npc2 parameters.

When adding point codes using the apcl parameter, or changing point codes using the pc1/npc1 or pc2/npc2 parameters, the new point code type must match the point code type of the loopset where the point codes are being added or changed.

The value of the apcl parameter cannot already exist in the loopset.

The value of the pc1 or pc2 parameter must already exist in the loopset.

Notes

There is no J7 FAK dependency on the apcln16/rpcln16/pc1n16/npc1n16/pc2n16/npc2n16 parameters. The command can be entered successfully when the J7 FAK is not enabled.

There is no J7 FAK dependency on the apcln24/rpcln24/pc1n24/npc1n24/pc2n24/npc2n24 parameters. The command can be entered successfully when the J7 FAK is enabled.

There is no J7 FAK dependency on the apcl/apcla/rpcla/pc1a/npc1a/pc2a/npc2a parameters. The command can be entered successfully when the J7 FAK is enabled.

Output

This example replaces the existing point codes with new point codes in loopset RTP2 when that set is not being used by GTT:

```
chg-loopset:name=rtp2:pc1=3-2-3:npc1=3-3-9:pc2=7-8-7:npc2=7-7-9
```

```
    rlghncxa03w 07-02-10 08:41:17 EST  EAGLE Rel 35.6.0
    LOOPSET table is (12 of 1000) 1% full
    CHG-LOOPSET: MASP A – COMPLTD
;
```

Related Commands

dlt-loopset, *ent-loopset*, *rtrv-loopset*

chg-ls

Change Linkset

Use this command to change the attributes for a specified linkset in the system database. The new values overwrite the existing values. All parameters required for MTP distribution will be used whether they are explicitly specified or obtain from existing provisioning.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

lsn (mandatory)

Linkset name. Each linkset name must be unique in the system.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

action (optional)

This parameter adds or deletes the SAPC, mate IPGWx linkset name, or the value specified for the rcontext parameter.

Range:

add

delete

Default:

No change to the current value

System Default:

add

adapter (optional)

Adapter layer for links provisioned in an IPSG linkset.

Range:

m3ua

m2pa

Default:

No change to the current value

System Default:

m2pa

apc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

apca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

apc/apca/apci/apcn/apcn24 /apcn16 (optional)

Adjacent point code.

apci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

apcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

apcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

apcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-)

prefix---p

un---000---127

sna--000--15

mna--000--31

apcntype (optional)

ITU-N Adjacent Point Code Type. The format used for changeover and changeover acknowledgement messages.

Range:

itun

ITU National Adjacent Point Code type

itunchina

ITU National China Adjacent Point Code type

Default:

itun

asl8 (optional)

Adjacent SLS 8-bit indicator. This parameter specifies whether the adjacent node is sending MSUs with 8-bit SLSs.

Range:

yes

no

Default:

No change to the current value

asnotif (optional)

AS notification. This parameter specifies whether AS notifications are sent for an IPSG linkset.

Range:

yes

no

Default:

yes

If the adapter=m2pa parameter is specified, the default value is *no*.

If the adapter=m3ua parameter is specified, the default value *yes*.

bei (optional)

Broadcast exception indicator. This parameter specifies whether TFP (transfer prohibited) messages are allowed to be broadcast on the linkset.

Range:

yes

TFPs are not broadcast

no

TFPs are broadcast

Default:

No change to the current value

cggtmod (optional)

Calling party GT modification indicator. This parameter specifies whether calling party global title modification is required for the specified linkset.

Range:

yes

no

Default:

No change to the current value

clli (optional)

Far-end Common Language Location Identifier (CLLI). The CLLI assigned to the linkset.

Range:

ayyyyyyyyyy

1 alphabetic character followed by up to 10 alphanumeric characters

Default:

No change to the current value

gsmscrn (optional)

GSM MAP screening. This parameter specifies whether GSM MAP screening is allowed.

Range:

on

GSM map screening is allowed

off

GSM map screening is not allowed

Default:

No change to the current value

gttmode (optional)

Global Title Translation Mode. This parameter specifies a GTT Mode hierarchy for each link set.

Range:

cd

CdPA GTT only

cg

CgPA GTT only

acdcd

Advanced CdPA GTT, CdPA GTT

acdcgcd

Advanced CdPA GTT, CgPA GTT, CdPA GTT

acdcdcg

Advanced CdPA GTT, CdPA GTT, CgPA GTT

cgacdcd

CgPA GTT, Advanced CdPA GTT, CdPA GTT

cgcd

CgPA GTT, CdPA GTT

cdcg

CdPA GTT, CgPA GTT

fcd

FLOBR CdPA only

fcg

FLOBR CgPA only

fcgfcd

FLOBR CgPA, FLOBR CdPA

fcdfcg

FLOBR CdPA, FLOBR CgPA

sysdflt

System wide default value

Default:

No change to current value.

gwsa (optional)

Gateway screening action. This parameter specifies whether gateway screening (GWS) is on or off for the specified linkset.

Range:

on

off

Default:

No change to the current value

gwsd (optional)

Gateway screening MSU discard. This parameter specifies whether the discarding of MSUs that bypass the gateway screening function due to load-shedding is on or off. This parameter is also used with the redirect function; MSUs that cannot be screened are discarded if gwsd=on is specified.

Range:

on

off

Default:

off

gwsm (optional)

Gateway screening messaging. This parameter specifies whether messages are generated for each message screened by gateway screening.

Range:

on

off

Default:

No change to the current value

ipsg (optional)

IP signaling gateway adjacent point code. This parameter specifies whether a linkset is entered for an IPSG card. The specified adjacent point code is an IPLIM or IP gateway adjacent point code.

Range:

yes

no

Default:

no

iptps (optional)

IPGWx Linkset TPS.

If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

Range:

100 - 32000

The specified value must be divisible by 10.

Default:

No change to the current value

islsrsb (optional)

Incoming rotated signaling link selection (SLS) bit. The bit (1-4) for ITU and (1–8) for ANSI link sets to rotate as the new SLS LSB (Least Significant Bit) of the incoming linkset. The SLS is not modified in the outgoing message.

Table 29: Incoming SLS Bit Rotation for ITU shows how the rotation affects the four bits of the ITU SLS during linkset selection.

Table 30: Incoming SLS Bit Rotation for ANSI shows how the rotation affects the four bits of the ANSI SLS during linkset selection.

This parameter is used for ITU or ANSI messages on a per-linkset basis.

Range:

1 - 8

ITU linkset— *1 - 4*

ANSI linkset— *1 - 8*

The rsls8=yes parameter must be specified (see the `chg-lsopts` command) before a value greater than 5 can be specified.

Default:

No change to the current value

System Default:

1

itutfr (optional)

ITU TFR (Transfer Restricted) procedure indicator. This parameter specifies whether the TFR procedure is on or off on a per-linkset basis. This parameter is valid for ITU national linksets only.

Range:

on

off

Default:

No change to the current value

l3tset (optional)

Link timer set. This parameter is defined with the `chg-l3t` command.

Range:

1

Default:

No change to the current value

lst (optional)

Linkset type of the specified linkset. This parameter specifies whether the specified link is an access link, bridge link, cross link, diagonal link, or extended link, as defined in Telcordia GR-246-CORE, T1.111.5.

Range:

a

Access links

b

Bridge links

c

Cross links

d

Diagonal links

e

Extended links

Default:

No change to the current value

lsusealm (optional)

IPTPS linkset alarm threshold percent. The percent of the linkset TPS (iptps) at which an alarm is generated to indicate that the actual linkset TPS is approaching the configured iptps value for the linkset.

Range:

10 - 100

Default:

No change to the current value

System Default:

100

matelsn (optional)

Mate linkset name.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Default:

No change to the current value

maxslktps (optional)

Maximum per signaling link TPS. The maximum capacity a link is permitted when sufficient unused capacity is present on the host card.

Note: This parameter cannot be specified for links in non-IPSG linksets.

If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate

Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

Range:

100 - 9500

Note: The maximum value that can be specified for this parameter depends on the type of IPSG card that is used and whether the E5-ENET-B IPSG High Throughput feature is turned on:

- E5-ENET card-5000 TPS
- E5-ENET-B card when the E5-ENET-B IPSG High Throughput feature is turned off-6500 TPS
- E5-ENET-B card when the E5-ENET-B IPSG High Throughput feature is turned on-9500 TPS

Default:

No change to the current value

System Default:

6500

mtprse (optional)

ANSI or ITU MTP Restart equipped. This parameter specifies whether the node adjacent to the linkset is equipped with MTP Restart.

Range:

yes

equipped

no

not equipped

Default:

No change to the current value

multgc (optional)

Multiple group codes. The parameter specifies whether multiple group codes can be specified.

Range:

yes

no

nis (optional)

Network Indicator Spare. This parameter specifies whether the Network Indicator Spare option is on or off for the specified linkset. When this option is enabled, the Network Spare value for network indicator for both ANSI and ITU-National (ITU-N) links is supported by the system.

Range:

on

off

Default:

off

nlsn (optional)

New linkset name.

Range:

ayyyyyyyyy

Up to 10 alphanumeric characters; the first character must be a letter

Default:

No change to the current value

randsls (optional)

Random SLS (signaling link selection). This parameter is used to apply random SLS generation on a per linkset basis.

Specifying this parameter enables random SLS generation on a per linkset basis only if the randsls=perls parameter has been specified in the `chg-stpopts` command. For more details, refer to *Database Administration - SS7 User's Guide, Per-Linkset Random SLS*.

Range:

off

disables random SLS generation on a specified linkset

class0

enables random SLS generation for Class0 SCCP traffic on a specified linkset

all

enables random SLS generation for Class0 and Class1 SCCP traffic on a specified ITU linkset and for Class0 and ISUP traffic on a specified ANSI linkset

Default:

No change to the current value

rcontext (optional)

Routing Context. The new routing context for an IPSG-M3UA linkset.

Range:

0 - 4294967295

Default:

No change to the current value

sapci (optional)

ITU international secondary adjacent point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

sapci/sapcn/sapcn24/spcn16 (optional)

Secondary adjacent point code.

sapcn (optional)

ITU national secondary adjacent point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

sapcn24 (optional)

24-bit ITU national secondary adjacent point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

scrn (optional)

Gateway screening screen set. The gateway screening screen set assigned to this linkset.

When using this parameter to change Gateway Screening from an old screenset name with Gateway Screening Allowed Mode gwsa=off to a new screenset name with gwsa=on, the command must first be entered to assign the screenset name to NONE (scrn=none). This assignment prevents any rules from the old screenset from being applied during the interim period that it takes for the new screenset to load.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

none -deletes the screen set association

Default:

No change to the current value

slktps (optional)

Reserved per signaling link TPS for IPSG Linkset. The capacity guaranteed for each link in the linkset.

Note: This parameter is required for each link in an IPSG linkset and cannot be specified for links in non-IPSG linksets.

Note: The sum of guaranteed capacities for the links hosted by an IPSG card cannot exceed the IPSG card capacity.

Note: If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

Synonym:

rsvdslktps

Range:

0 - 9500

Note: The maximum value that can be specified for this parameter depends on the type of IPSG card that is used and whether the E5-ENET-B IPSG High Throughput feature is turned on:

- E5-ENET card-5000 TPS
- E5-ENET-B card when the E5-ENET-B IPSG High Throughput feature is turned off-6500 TPS

- E5-ENET-B card when the E5-ENET-B IPSG High Throughput feature is turned on-9500 TPS

Default:

No change to the current value

slkusealm (optional)

IPTPS signaling link alarm threshold percent. The percent of the link TPS at which an alarm is generated to indicate that the actual link TPS is approaching the alarmed IPTPS (slktps/rsvdslktps or maxslktps) configured for the link.

Range:

10 - 100

Default:

No change to the current value

System Default:

80

slsci (optional)

5-bit to 8-bit SLS conversion indicator. This parameter specifies whether the 5-bit to 8-bit SLS conversion feature is used to select links for outgoing messages direct to the given linkset. When enabled, the system replaces any 5-bit SLS values contained in received messages, with a random 8-bit value before the 5-bit SLS values are used by the STP to select the outgoing link in that linkset.

Range:

yes

enabled

no

disabled

Default:

No change to the current value

slsocbit (optional)

Other CIC (Circuit Identification Code) Bit. If the SLSOCB feature is turned on, this parameter specifies whether the Other CIC Bit option is to be used during link selection. If the option is to be used, specify which bit (5– 16) of the CIC is to be used as the other CIC bit. During link selection, the specified bit acts as the most significant bit of the new SLS and bits 2 through 4 of the received CIC become the least significant bits of the new SLS. This parameter is used for ITU-ISUP messages. The SLS is not modified in the outgoing message. *Table 15: slsocbit example (chg-ls)* shows a received CIC where bit 9 is the other CIC bit (slsocbit=9). The new SLS is 0100:

Table 15: slsocbit example (chg-ls)

16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
0	0	0	0	1	0	0	0	1	0	0	1	1	0	0	1

New SLS	0		1	0	0	

Range:

5 - 16

Default:

No change to the current value

slsrsb (optional)

Rotated SLS (Signaling Link Selection) Bit. The bit (1–4) to rotate as the new SLS LSB (Least Significant Bit). The SLS is not modified in the outgoing message.

Table 32: SLS Bit Rotation shows how the rotation affects the SLS during linkset selection.

This parameter is used for ITU messages on a per-linkset basis.

Range:

1 - 4

Default:

No change to the current value

sltset (optional)

SLTM record. The SLTM record to be associated with the linkset.

Range:

1 - 20

0 –sets the linkset to SLT reflect mode

Default:

No change to the current value

spc (optional)

ANSI secondary point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

spca

Range:

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

p-, 000-255, none

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid for *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

spc/spca/spci/spcn/spcn24/spcn16 (optional)

Secondary point code.

spci (optional)

ITU international secondary point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

Enter *none* to delete the point code.

The point code *0-000-0* is not a valid point code.

spcn (optional)

ITU national secondary point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

Enter *none* to delete the point code.

spcn24 (optional)

24-bit ITU national secondary point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000-255

ssa—000-255

sp—000-255

Enter *none* to delete the point code.

spcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000--127, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-)

un---000--127

sna--000--15

mna--000--31

Enter *none* to delete the point code.

tfatcabmlq (optional)

TFA/TCA broadcast minimum link quantity. The minimum number of links in the given linkset, or in the combined linkset in which the linkset resides, that must be available to user-part messages traffic. This parameter value is used by the STP to consider the first-choice ordered routes using that linkset as Allowed rather than Restricted.

If this parameter's provisioned or default value is 0, then the TFA/TCA broadcast minimum link quantity is calculated by the system to be either 1 for linksets containing 2 or fewer links, or half (rounded-up) of the number of links configured in the linkset for linksets containing more than 2 links.

If this parameter value is set to a specific value greater than 0, then the system does not calculate a TFA/TCA broadcast minimum link quantity. The specified value is used.

Range:

0, 1 - 16

Default:

No change to current value.

System Default:

0

tpsalmtype (optional)

IPSG IPTPS threshold alarm type. The IPTPS threshold that can be alarmed.

Range:

rsvdslktps
the SLKTPS/RSVDSLKTPS threshold is alarmed

maxslktps
the MAXSLKTPS threshold is alarmed

Default:
No change to the current value

System Default:
rsvdslktps

Example

Changes linkset WY644368 to use APC 144-202-5:

```
chg-ls:lsn=wy644368:apc=144-202-005
```

Changes link set WY644368 to Link Set Type A:

```
chg-ls:lsn=wy644368:lst=a
```

Adds an SAPC to a linkset:

```
chg-ls:lsn=linkset:sapcn=1234-fr:action=add
```

```
chg-ls:lsn=c002:gwsm=on: nis=on
```

```
chg-ls:lsn=nc003:sltm=reg:lst=b
```

Adds a 24-bit ITU-N SAPC to a linkset:

```
chg-ls:lsn=ls1:sapcn24=5-5-5
```

Deletes a 24-bit ITU-N SAPC from a linkset:

```
chg-ls:lsn=ls1:sapcn24=5-5-5:action=delete
```

Assigns a mate linkset to a linkset:

```
chg-ls:lsn=linkset:matelsn=matelinkset
```

Changes an ITUN24 linkset to an APCNTYPE for China:

```
chg-ls:lsn=ls2:apcntype=itunchina
```

```
chg-ls:lsn=nc003:slsci=yes:tfatcabmlq=2
```

```
chg-ls:lsn=lsitu1:gsmscrn=off
```

```
chg-ls:apca=p-011-2-3:lsn=lsa1:lst=a
```

```
chg-ls:lsn=ls1:randsls=all
```

Indicates that calling party GT modification is required:

```
chg-ls:lsn=ls1:apc=1-1-1:cggtmod=yes
```

Changes the linkset's SPC value:

```
chg-ls:lsn=lsl:spc=100-23-48
```

Changes the adapter of a specified IPSG linkset:

```
chg-ls:lsn=ls2:adapter=m2pa
```

Changes the AS notification status and routing context value for an IPSG-M3UA linkset:

```
chg-ls:lsn=m3ua33:rcontext=9999:action=add
```

Converts the linkset to IPSG:

```
chg-ls:lsn=m2pa33:ipsg=yes
```

This command changes the Incoming SLS Bit Rotation value to 6 for ANSI link sets:

```
chg-ls:lsn=ls1:islsrsb=6
```

Changes the GTTMODE value to FLOBR CdPA when the FLOBR feature is turned on:

```
chg-ls:lsn=ls3:gttmode=fcd
```

Converts the linkset to SLT reflect mode:

```
chg-ls:lsn=ls1:sltset=0
```

Change adapter type of a 16-bit ITU national linkset type:

```
chg-ls:lsn=ls1:apcn16=121-5-15:adapter=m3ua
```

Dependencies

A valid screenset name must be associated with the linkset, or the scrn parameter must be specified with a valid screenset name before the gwsa, gwsm, and gwsd parameters can be specified.

The gwsa=on parameter must be specified before the gwsd=on parameter can be specified.

At least one optional parameter must be specified.

If the lsrestrict=off parameter is specified (see the `chg-ss7opts` command), the tfatcabmlq database value for C linksets cannot be changed from the system default of 0. If the lsrestrict=on parameter is specified, the tfatcabmlq value for C linksets (lst=c) can be set to 1 - 16. If the tfatcabmlq value for one or more C linksets in the system is changed, the lsrestrict parameter cannot be changed from *on* to *off* until all of the changed C linkset tfatcabmlq values are set back to 0. C linksets are never the primary route (except to reach the STP's mate).

The tfatcabmlq parameter value cannot exceed the total number of assigned links in the linkset.

The linkset name must be in the database.

The screen set name specified by the scrn parameter must be valid and must be in the database.

Adjacent point codes must be full point codes.

The adjacent point code must be defined as a destination point code.

The adjacent point code cannot match the site point code.

The domain of the new adjacent point code must be the same as the previous adjacent point code unless there are no links in the linkset.

Only one linkset can be defined for an adjacent point code.

An SAPC cannot be deleted when routes exist for its SS7 domain.

If the gwsa=off and gwsm=off parameters are specified, all MSUs are passed. If the gwsa=off and gwsm=off parameters are specified for all linksets, gateway screening and the GWS redirect function for the DTA feature are disabled.

If the gwsa=on and gwsm=off parameters are specified, MSUs are screened but messages are not generated.

Caution: Even though gateway screening is in the screen test mode, as defined by the parameters gwsa=off and gwsm=on, the gateway screening action in the stop action set specified by the actname parameter of the screen set is performed at the end of the screening process.

The mtprse parameter can be specified only if the MTP restart feature, MTPRS (for ANSI), or ITUMTPRS (for ITU), is turned on. The `rtrv-feat` command can be used to verify whether the feature is turned on (MTPRS=YES or ITUMTPRS=YES in the output).

If the ipgwapc=yes or ipsg=yes parameter is specified, then the mtprse=yes parameter cannot be specified.

The clli and apc/apca/apci/apcn/apcn24/apcn16 parameters must be specified together in the command.

The value of the clli parameter must match the clli of the current site.

The asl8=yes parameter can be assigned only to an SS7 linkset (a linkset containing an adjacent point code in the SS7 domain).

The apcn parameter format must match the format assigned with the `chg-stpopts:npcfmti` parameter.

An SAPC parameter can be specified only for ITU-N and ITU-N24 linksets.

The slsocbit parameter is valid only for ITU linksets.

The slsrsb parameter is valid only for ITU linksets.

The GSM Map Screening feature must be turned on before the gsmscrn parameter can be specified.

The Enhanced GSM Map Screening feature must be turned on before the gsmscrn=on parameter can be specified for an ANSI linkset.

The itutfr parameter is valid only for ITU national linksets.

The group code of DPC(s) must match the group code of the APC/SAPC when the multgc=no parameter is specified.

If the adjacent point code's group code is changed, the multgc=yes parameter must be specified, or there must be no routes using the linkset.

The multgc parameter value can be changed to *no* only if there are no routes with group codes different from the adjacent point code's group code.

Only one ITU-N APC/SAPC is allowed with the multgc=no parameter.

Only one ITU-I or 24-bit ITU-N APC/SAPC is allowed per linkset.

The apcntype parameter can be specified only for ITU-N and ITU-N24 linksets.

A linkset cannot have both a 14-bit ITU-N and a 24-bit ITU-N APC/SAPC unless it contains only IPGWI links or IPLIM M3UA links. These links support 14-bit ITU-N and 24-bit ITU-N traffic simultaneously.

A linkset with the ipgwapc=no parameter cannot have both a 14-bit ITU-N and a 24-bit ITU-N APC/SAPC if no links are provisioned.

The SAPC cannot be a 24-bit ITU-N point code if the linkset contains IPLIM or E1 ATM links, which do not support 24-bit ITU-N traffic.

Private (p-) and private and spare (ps-) point codes can be assigned only to IPGW linksets (the ipgwapc=yes parameter is specified).

The iptps parameter cannot be specified for linksets that are not IPGWx.

The ipgwapc=yes or ipsg=yes parameter must be specified before the lsusealm parameter can be specified.

The ipgwapc=yes or ipsg=yes parameter must be specified before the slkusealm parameter can be specified.

The same value cannot be specified for the lsn and matelsn parameters.

If the action=add parameter is specified, the specified mate linkset cannot already be assigned as the mate of the specified linkset.

When the action=add parameter is specified, the specified mate linkset cannot already be the mate of another linkset.

The specified mate linkset must be an existing linkset in the database.

A mated linkset can have only one assigned link.

Mated linksets can contain only SS7IPGW or IPGWI links.

Mated linksets must have APCs of the same network type.

The card that has the link assigned to the specified linkset must be inhibited before the action=add parameter can be specified to assign the specified mate linkset to the specified linkset.

The card that has a link in the mate linkset must be inhibited before the action=delete parameter can be specified to delete the mate linkset assignment.

If the action=delete parameter is specified to delete a mate linkset assignment, the specified mate linkset must be the mate of the specified linkset in the database.

If the action=delete parameter is specified, then the sapc, matelsn, or rconext parameter must be specified. The parameters cannot be specified together in the command.

The mtprse parameter can be specified only if the MTP restart feature ITUMTPRS (for ITU) is turned on. The `rtrv-feat` command can be used to verify whether the feature is turned on (ITUMTPRS=YES in the output).

The slsocbit parameter is valid only if the SLSOCB feature is turned on.

The adjacent point code cannot match the capability point code.

An APC cannot be changed to a point code that has exception routes provisioned.

The apc or sapc parameter cannot be specified for an IPGWx linkset that is already assigned to a route involving another linkset.

The Origin-based SCCP Routing feature must be turned on before the gttmode parameter can have a value of *acdcd*, *cgacdcd*, *acdcgcd*, *acdcdcg*, *cgcd*, *cdcg*, or *cg*.

The APC/SAPC of an existing IPGW link set cannot be changed to an APC/SAPC that is already configured in a routing key.

All links assigned to the linkset must be removed before changing the apcntype parameter value from apcn to apcn24 or from apcn24 to apcn.

If one or more of the links in the specified linkset are in service, then the apc/apca/apci/apcn/apcn24/apcn16 parameter cannot be specified.

If apcn is specified for the Adjacent Point Code then the format of apcn must match the format dictated by the npcfmti parameter via the `chg-stpopts` command.

Gateway linksets must be configured from a SEAS terminal.

If the system is configured for ANSI formatted point code, the network indicator value of the foreign point code parameter must be 6 or greater when the cluster value is 0.

The value of the apc/apca/apci/apcn/apcn24/apcn16 or sapc/sapca/sapci/sapcn/sapcn24 parameter cannot be assigned to more than one linkset.

The new apc/apca/apci/apcn/apcn24/apcn16 parameter must have the same point code type as the apc/apca/apci/apcn/apcn24/apcn16 parameter currently specified for the linkset.

The value of the apc/apca/apci/apcn/apcn24/apcn16 parameter must exist in the Point Code table.

The lst parameter must have a value of *b*, *c*, or *d* if a network or cluster route is configured through the linkset.

If the multgc=yes parameter is specified, then an IPGWI or IPLIMI link must be specified.

If the ITUDUPPC feature is off, then the multgc=yes parameter cannot be specified.

If the multgc=yes parameter is specified, then the apci, apcn, apcn16, or apcn24 parameter must be specified.

The value of the sapc/sapca/sapci/sapcn/sapcn24 parameter must exist in the Destination Point Code table.

The apc/apca/apci/apcn/apcn24 or sapc/sapca/sapci/sapcn/sapcn24 parameter can be defined only once per linkset.

The maximum number of sapc/sapca/sapci/sapcn/sapcn24 entries is 1000.

The value of the specified lsn parameter cannot already exist in the database.

The specified matelsn parameter must already be equipped in the linkset database.

If the linkset is not mated to the linkset specified by the matelsn parameter, then the action=delete parameter cannot be specified.

The value specified for the spc parameter must be a valid full point code.

The values specified for the spc and apc parameters must have the same network type.

If the sapc, matelsn, rcontext, or action parameter is specified, then those four parameters are the only optional parameters that can be specified. If the action parameter is specified, then the sapc or rcontext or matelsn parameter must be specified. If the ipsg parameter is specified, then no other optional parameters can be specified.

The Multiple Linksets to Single Adjacent PC (MLS) feature must be turned on before the spc parameter can be specified.

The value specified for the spc parameter must already exist in the SPC table.

The SPC table must be accessible.

The point code type of the value specified for the spc parameter must be the same as the point code type of the value of the existing spc parameter.

The value specified for the spc parameter cannot already be specified as a secondary point code for an adjacent destination point code.

The value specified for the apc parameter must differ from the adjacent point code of the linkset specified by the lsn parameter.

The value specified for the spc parameter must differ from the secondary point code of the linkset specified by the lsn parameter.

If a proxy linkset is used, then the apc, sapc, action, and lst parameters cannot be specified.

An IPGW linkset cannot be moved to a node that already contains a linkset.

If an IPGW linkset is used, then the value specified for the apc parameter cannot be associated with a proxy point code.

If the ipgwapc=yes parameter is specified, then the spc parameter cannot be specified.

The specified combination of the apc and spc parameters must be unique for each linkset.

The specified combination of the apc and sapc parameters must be unique for each linkset.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The ipgwapc=yes parameter and the ipsg=yes parameter cannot be specified together in the command.

The ipsg=yes parameter must be specified before the adapter parameter can be specified.

The ipsg=yes and adapter=m3ua parameters must be specified before the asnotif parameter can be specified.

The ipsg=yes and adapter=m3ua parameters must be specified before the rcontext parameter can be specified.

If the IPSG linkset contains links, then the adapter parameter cannot be specified.

The ipgwapc=yes parameter must be specified before the value specified for the apc parameter can be an invalid point code (ANSI network = 0).

The ipgwapc=yes parameter must be specified before the iptps parameter can be specified.

The value specified for the iptps parameter must be divisible by 10.

The ipsg=yes parameter must be specified before the slktps/rsvdslktps or maxslktps parameter can be specified.

If the ipsg=yes and adapter=m3ua parameters are specified, then the lst=a parameter must be specified.

A maximum of 1 IPGW linkset or a maximum of 6 of any other linksets are allowed between any APC and the EAGLE.

If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

The value specified for the slktps/rsvdslktps parameter cannot cause the card to exceed the total maximum capacity of the card.

If the ipsg=yes and adapter=m3ua parameters are specified, then the multgc=yes parameter cannot be specified.

If the ipsg=yes and adapter=m3ua parameters are specified, then the tfatcabmlq parameter cannot be specified.

If the action=delete parameter is specified to delete the routing context, then the value specified for the rcontext parameter must be the value used by the specified linkset in the database.

The link must be equipped.

If the linkset already contains IPSG links, then the ipsg=no parameter cannot be specified.

If the ipsg=yes and adapter=m3ua parameters are specified, then a secondary adjacent point code cannot be specified for the linkset.

If one or more links in a specified linkset are in service, then the rcontext parameter cannot be specified.

Multiple signaling links in a single linkset cannot share the same association.

If multiple linksets share an association, then the rcontext parameter cannot be specified for only one linkset.

The value specified for the rcontext parameter must already exist in the database.

If a linkset shares an association with another linkset, then a unique value for the rcontext parameter must be specified for each linkset.

If the ipsg=yes parameter is specified, then the slktps/rsvdslktps parameter must be specified.

If the multgc=yes parameter is specified, then all links assigned to the linkset must be of the same type.

If any of the links are not in the OOS state, then the rcontext parameter cannot be specified.

The ISLSBR feature must be enabled before the islsrsb parameter can be specified.

The FLOBR feature must be turned on before the gttmode parameter can have a value of *fcd*, *fcg*, *fcgfcd*, or *fcdfcg*.

The rsls8=yes parameter (see the `chg-lsopts` command) must be specified for an ANSI linkset before a value greater than 5 can be specified for the islsrsb parameter.

If an ITU linkset is used, then a value of 1 – 4 must be specified for the islsrsb parameter.

The value specified for the slktps/rsvdslktps parameter must be less than or equal to the value specified for the maxslktps parameter.

The sltset=0 parameter can be specified only for a type A linkset (lst=a).

The value specified for the slktps/rsvdslktps and maxslktps parameters must be within the allowed range.

The ITUTFR (command `ent/chg-ls`) cannot be specified for a linkset to be configured for APCN16.

The NIS (command `ent/chg-ls`) cannot be specified for a linkset to be configured for APCN16.

The PPC specified must not be a private point code.

4722 E4722 Cmd Rej: PPC not supported for Private PC

The MTP Restart Equipped (MTPRSE) parameter is only valid for adjacent ANSI nodes in the SS7 domain.

The adapter type specified must be either m3ua or m2pa.

The GTT destination must exist in the DSTN table.

Notes

Any optional parameter that is not specified is not changed.

The links that directly connect the system with a distant node are grouped into one or more linksets. A linkset can contain up to 8 (international standards) or 16 (national standard) signaling links, depending on how the system attributes were defined when the network was created.

Signaling link test acknowledgments (SLTA) are the same type of maintenance message as the SLTMs received on the link.

MTP restart provides an orderly process for bringing signaling links back into service after the system has been isolated and restarted. A greater preference is given to restoring the STP to network service in an orderly fashion than to the speed of recovery. The time required is system dependent as shown:

- up to 64 LIMs—62 seconds (Link Alignment Delay)
- 64 - 127 LIMs—97 seconds
- 128 - 191 LIMs—132 seconds
- more than 191 LIMs—167 seconds

When two linksets are used as a combined linkset, each linkset should have the same slsci and asl8 values and the same slsocbit and islsrsb/slsrsb values.

Caution: This is not enforced in the system and there is no warning mechanism if the values of these parameters are not the same for each linkset.

The slsrsb parameter alone does not provide an even distribution of ITU-ISUP messages across all links within a linkset. The system uses all four bits of the SLS to determine the actual link to route messages. Because the static bit is simply rotated within the SLS, all possible values of the SLS field will still not be realized. The slsocbit parameter must also be used to provide an even distribution across all links within the linkset. If both parameters are used for a given linkset, the SLS field is processed in the following order:

- The SLS is modified using the Other CIC Bit option.
- The modified SLS is modified again using the Rotated SLS Bit option.
- The modified SLS is used by the existing linkset and link selection algorithms to select a link.
- The ISUP message is sent out of the link containing the original, unmodified SLS field.

To modify a secondary adjacent point code, *sapc* has to be first deleted, then added again.

A 24-bit ITU-N point code can be provisioned as an SAPC only if the APC is not already a 24-bit ITU-N point code.

Only one 24-bit ITU-N point code is allowed to be provisioned as an SAPC.

For a linkset containing either low speed CCS7ITU links or IPLIM M2PA links, if the APC is a 14-bit ITU-N point code, then a 24-bit ITU-N point code cannot be provisioned as an SAPC.

For a linkset containing either low speed CCS7ITU links or IPLIM M2PA links, if the APC is a 24-bit ITU-N point code, then a 14-bit ITU-N point code cannot be provisioned as a SAPC.

For a linkset containing either low speed CCS7ITU links or IPLIM M2PA links, if the APC is an ITU-I point code, then either a 24-bit ITU-N point code or a 14-bit ITU-N point code can be provisioned as an SAPC, but not both.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (*s*-) and the private and spare point code subtype prefix (*ps*-). All of the point code types support the private (internal) point code subtype prefix (*p*-).

The ITU National and ITU National China Adjacent Point Code types indicate the format that is used for changeover and changeover acknowledgement messages. China specifies a 16-bit field for data in changeover messages. The FSN occupies the first 12 bits. The trailing 4 bits are spare and are coded as 0. ITU uses a 24-bit field for data in the extended changeover/changeover acknowledgement messages. The FSN is encoded in the first 12 bits. The last 12 bits of the field are spare and are coded as zero.

The randsls parameter value applies to SCCP ITU-T messages and Class0 and ISUP ANSI messages when random SLS generation is set to occur on a per linkset basis (the randsls=perls parameter is specified in the `chg-stpopts` command).

If the randsls=perls parameter is specified, it is recommended that the linksets in a combined linkset be provisioned with the same randsls value to avoid undesired SLS distribution.

The tfatcabmlq=0 parameter specifies that the system broadcasts TFAs or TCAs only when half the links in the given linkset, or in the combined linkset in which it resides, become available.

A gateway linkset can be configured only from a SEAS terminal and not from a system terminal.

If the gwsa=off and gwsm=on parameters are specified, then all MSUs pass. Error messages are generated if an MSU matches a screening condition.

If the gwsa=on and gwsm=off parameters are specified, then MSUs are screened but messages are not generated.

If the gwsa=off and gwsm=on parameters are specified, then gateway screening is defined to be in the screen test mode. The gateway screening action in the stop action set specified by the actname parameter of the screen set is performed at the end of the screening process.

If the asl8=yes and the lst=a (a linkset containing access signaling links) parameters are specified, then the originator of the MSUs is generating 8-bit SLSs. For other linkset types, the asl8=yes parameter indicates that the adjacent STP is converting 5-bit SLSs to 8-bit SLSs. The SLS in MSUs received by the system on a linkset that has the asl8=yes parameter assigned is not converted. These MSUs are assumed to contain 8-bit SLSs.

If the gwsa=on, gwsm=on, and gwsd=off parameters are specified, then MSUs are screened, and error messages are generated if an MSU is passed when it should have been screened.

Incoming SLS Bit Rotation

If the ISLSBR feature is turned on, and Incoming SLS Bit Rotation is applied to an MSU, then the outgoing SLS bit rotation is not applied for that MSU. If the ISLSBR feature is turned off, or Incoming SLS Bit Rotation is not applied to an MSU, then the outgoing SLS bit rotation is applied for that MSU.

The valid ISLSRSB values are 1 – 4 for ITU linksets and 1 – 8 for ANSI linksets.

The randsls parameter is applied on incoming linksets for ANSI messages and on outgoing linksets for ITU messages.

Output

This example shows the output when the secondary point code is changed:

```
chg-ls:lsn=lsl:spc=100-23-48
```

```
    rlghncxa03w 07-07-18 08:16:14 EST  EAGLE 37.5.0
    CAUTION: Linkset SPC has changed - verify remote node's route.
    Link set table is (114 of 1024) 1% full

    CHG-LS: MASP A - COMPLTD
```

This example shows the output when GTT mode is changed to FLOBR CdPA:

```
chg-ls:lsn=ls3:gttmode=fcd
```

```
    tekelecstp 09-04-12 13:34:33 EST  EAGLE 41.0.0
    Link set table is (5 of 1024) 1% full.

    CHG-LS: MASP A - COMPLTD
;
```

Related Commands

chg-lsopts, *chg-slt*, *chg-ss7opts*, *dlt-ls*, *ent-ls*, *rtrv-ls*

chg-lsopts — Change Linkset Options

Use this command to administer the thresholds for IPSG-M3UA linksets and to set SLS bit rotation for ANSI linksets.

Parameters

lsn (mandatory)

Linkset name. The name of the linkset. Each linkset name must be unique in the system.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

icnimap (optional)

Incoming NI Map. The NI mapping for incoming MSUs on a linkset. The NI value in the incoming MSU is changed to the value specified by this parameter before processing the message.

Range:

itui2ituis

Map ITU International to ITU International Spare

ituis2itui

Map ITU International Spare to ITU International

itun2ituns

Map ITU National to ITU National Spare

ituns2itun

Map ITU National Spare to ITU National

none

NI mapping is not performed on the specified linkset.

Default:

No change to the current value

System Default:

none

numslkalw (optional)

Number of signaling links allowed. The IS-NR link count threshold required for an IPSG-M3UA linkset to transition from the Restricted or Prohibited state to the Allowed state.

Note: When the number of IS-NR links in an IPSG-M3UA linkset transitions from a value less than numslkalw to a value equal to or greater than numslkalw, the linkset transitions to the allowed state.

Range:

0 - 16

0 —The IS-NR link count threshold value for an IPSG-M3UA linkset is considered to be half of the number of links configured in the linkset.

Default:

No change to the current value

System Default:

1

numslkproh (optional)

Number of signaling links required to prohibit a linkset. The IS-NR link count threshold required for an IPSG-M3UA linkset to transition from the Restricted or Allowed state to the Prohibited state.

Note: When the number of IS-NR links in an IPSG-M3UA linkset transitions from a value equal to or greater than numslkproh to a value less than numslkproh, the linkset transitions to the Prohibited state.

Range:

0 - 16

Note: *0* —The IS-NR link count threshold value for an IPSG-M3UA linkset is considered to be half of the number of links configured in the linkset.

Default:

No change to current value

System Default:

1

numslkrstr (optional)

Number of signaling links required to restrict a linkset. The IS-NR link count threshold required for an IPSG-M3UA linkset to transition from the Allowed state to the Restricted state.

When the number of IS-NR links in an IPSG-M3UA linkset transitions from a value equal to or greater than numslkrstr to a value less than numslkrstr and greater than numslkproh, the linkset transitions from the Allowed state to the Restricted state. Transition from the Prohibited state to the Restricted state is not supported.

Range:

0 - 16

0 —The IS-NR link count threshold value for an IPSG-M3UA linkset is considered to be half of the number of links configured in the linkset.

Default:

No change to current value

System Default:

1

ognimap (optional)

Outgoing NI Map. The NI mapping for outgoing MSUs on a linkset. The NI value in the processed MSU is changed to the value specified by the ognimap parameter for that linkset before routing the message to the intended destination.

Range:

itui2ituis

Map ITU International to ITU International Spare

ituis2itui

Map ITU International Spare to ITU International

itun2ituns

Map ITU National to ITU National Spare

ituns2itun

Map ITU National Spare to ITU National.

none

NI mapping is not performed on the specified linkset.

Default:

No change to the current value

System Default:

none

pct (optional)

Point Code and CIC Translation. This option specifies whether to apply PCT to the specified linkset.

Range:

off

do not apply PCT to the linkset

on

apply PCT to the linkset

Default:

off

rsls8 (optional)

Rotate SLS by 5 or 8 bits. This parameter specifies whether the signaling link selector (SLS) of the incoming ANSI linkset is rotated by 5 or 8 bits.

Range:

yes

8 bit SLS of the incoming linkset is considered for bit rotation

no

5 bit SLS of the incoming linkset is considered for bit rotation

Default:

No change to the current value

System Default:

no

Example

The following example changes the threshold value of the numslkproh parameter to 3 for an IPSG-M3UA linkset.

```
chg-lsopts:lsn=lsm3ual:numslkproh=3
```

The following example sets the incoming and outgoing NI Mapping for a linkset.

```
chg-lsopts:lsn=lsnimap1:icnimap=itun2ituns:ognimap=ituns2itun
```

The following example sets 8 bit incoming bit rotation for an ANSI link set

```
chg-lsopts:lsn=lsl:rsls8=yes
```

```
chg-lsopts:lsn=ls111:pct=on
```

Dependencies

The value specified for the numslkproh parameter cannot be greater than the value specified for the numslkrstr parameter.

The value specified for the numslkrstr parameter cannot be greater than the value specified for the numslkalw parameter.

The value specified for the lsn parameter must indicate an IPSG-M3UA linkset before the numslkalw, numslkproh, and numslkrstr parameters can be specified.

The value specified for the numslkalw, numslkproh, or numslkrstr parameter cannot be greater than the number of links configured in the IPSG-M3UA linkset.

The ITU National and International Spare Point Code Support feature must be enabled before the icnimap and ognimap parameters can be specified.

The icnimap and ognimap parameters must be specified together in the command.

The NI mapping for incoming messages in a linkset must be compatible with the NI mapping for the outgoing messages.

Values for the icnimap and ognimap parameters other than *none* can be specified only for ITU-I and ITU-N APCs of the linkset.

An ANSI linkset must be specified by the lsn parameter before the rsls8=yes parameter can be specified.

The ISLSBR feature must be enabled before the rsls8 parameter can be specified.

A PCT quantity feature must be enabled before the pct parameter can be specified.

Notes

NI Mapping Parameter Compliance Rules

The values specified for the icnimap and ognimap parameters for a linkset must be compatible. *Table 16: NI Mapping Rules* shows the relationship between the parameters for a linkset.

Table 16: NI Mapping Rules

ICNIMAP	OGNIMAP
ITUI2ITUIS	ITUIS2ITUI
ITUIS2ITUI	ITUI2ITUIS
ITUN2ITUNS	ITUNS2ITUN
ITUNS2ITUN	ITUN2ITUNS
NONE	NONE

If the rsls8=yes parameter is specified, then 8 bits of the Incoming ANSI SLS are used for the ISLSBR feature. If the rsls8=no parameter is specified, then 5 bits are used.

Table 17: Incoming SLS Bit Rotation for ANSI Linksets summarizes the cases in which rotation is done on the Incoming ANSI SLS bits:

Table 17: Incoming SLS Bit Rotation for ANSI Linksets

Number of Incoming SLS Bits	RSLS8	Valid range of values of ISLSRSB	SLSCNV/SLSCI	If Incoming SLS bits are rotated or not
5	No	1-5	No	Yes
5	No	1-5	Yes	Yes (Lower 5 bits)
5	Yes	1-8	No	No
5	Yes	1-8	Yes	Yes
8	No	1-5	Yes/No	Yes (Lower 5 bits)
8	Yes	1-8	Yes/No	Yes

Output

```
chg-lsopts:lsn=ls1:rsls8=yes
```

```
tekelecstp 09-03-03 10:52:55 EST  EAGLE 41.0.0
Command entered at terminal #4.
Link set table is (7 of 1024) 1% full.
CHG-LSOPTS: MASP A - COMPLTD
```

Related Commands

chg-ls, *rtrv-ls*

chg-m2pa-tset

Change M2PA Timer Set

Use this command to change M2PA timers in an M2PA timer set. The srcset and tset parameters can be used to copy from one timer set to another.

Note: The M2PA RFC feature introduces 20 new timer sets. M2PA timer sets created prior to this feature become M2PA Draft 6 timer sets, which are used by the M2PA Draft 6 associations. M2PA RFC associations use the RFC timer sets.

Parameters

Note: All values specified for the timer parameters (t(X)) are in milliseconds.

tset (mandatory)

Timer set. The name of the M2PA timer set.

Range:

1 - 20

srctset (optional)

The timer set to be copied into the timer set specified by the tset parameter. If this parameter is specified, no other timer values can be specified.

Range:

1 - 20

t1 (optional)

T1 timer. Alignment timer. The amount of time M2PA waits to receive a Link Status Alignment message from the peer.

Range:

1000 - 350000

Default:

D6- *10000*

RFC- *35000*

t2 (optional)

T2 timer. M2PA RFC timer.

Note: This timer is not used in M2PA Draft 6 timer sets.

Range:

5000 - 150000

Default:

20000

t3 (optional)

T3 timer. Ready timer. The amount of time after proving that M2PA waits to receive a Link Status Ready message from the peer.

Range:

1000 - 60000

Default:

10000 D6

2000 RFC

t4e (optional)

T4E timer. Emergency proving timer. The amount of time M2PA generates Link Status Proving messages during emergency proving.

Range:

400 - 5000

Default:

500

t4n (optional)

T4N timer. Normal proving timer. The amount of time M2PA generates Link Status Proving messages during normal proving.

Range:

1000 - 70000

Default:

D6- *10000*

RFC- *30000*

t5 (optional)

T5 timer. Busy rate timer. The amount of time between sending Link Status Busy messages while the link is in service.

Range:

80 - 10000

Default:

1000 D6

100 RFC

t6 (optional)

T6 timer. Remote congestion timer. The amount of time that a congested link will remain in service.

Range:

1000 - 6000

Default:

3000

t7 (optional)

T7 timer. Excessive acknowledgement delay timer. The maximum amount of time that can pass between transmission of a user data message and receipt of an acknowledgement for that message from the peer. If this timer expires, the link is taken out of service.

Range:

200 - 2000

Default:

1200

t16 (optional)

T16 timer. Proving rate timer. The amount of time between sending Link Status Proving messages while T2N or T2E is running.

Note: The T16 value is given in microseconds.

Range:

100 - 500000

Default:

200000

t17 (optional)

T17 timer. Ready rate timer. The amount of time between sending Link Status Ready messages while T3 is running.

Range:

100 - 500

Default:

250

t18 (optional)

T18 timer. Processor outage rate timer. The amount of time between sending Link Status Processor Outage messages while the link is in service.

Range:

100 - 10000

Default:

1000

ver (optional)

Version. The M2PA version used by the association.

Range:

d6

rfc

Example

```
chg-m2pa-tset:tset=1:t1=20000
chg-m2pa-tset:tset=1:t1=20000:ver=d6
chg-m2pa-tset:srctset=1:tset=2:ver=rfc
```

Dependencies

At least one optional parameter must be specified.

The srctset parameter and the tset parameter cannot specify the same timer set name.

The specified timer must be supported for the Draft 6 version of M2PA.

Either a timer value or the srctset parameter must be specified.

Timer value parameters and the SRCTSET parameter cannot be specified together.

Notes

None

Output

```
chg-m2pa-tset:tset=1:t1=20000:ver=d6
```

```
    rlghncxa03w 06-01-18 08:16:14 EST  EAGLE 34.3.0
    CHG-M2PA-TSET:  MASP A - COMPLTD
;
```

Related Commands

rtrv-m2pa-tset

chg-map

Change Mate Applications

Use this command to add or modify an entry in the Mated Application Part (MAP) table. A MAP table entry consists of a mate PC/SSN, its attributes, and an Alternate Routing Indicator Mate MRN Set and MRN point code.

Note: A mate point code defines an adjacent signaling point, which is considered the mated signal transfer point (STP) to the system. See the *Notes* section for additional information on multiplicity modes.

Note: The GTT Load Sharing with Alternate Routing Indicator (GTT LS ARI) feature must be enabled before an Alternate RI Mate for a MAP Set can be provisioned.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Note: The mrnset and mrnpc parameters indicate whether an Alternate RI Mate search is performed in the MRN table if all of the point code/subsystem number combinations provisioned in a given MAP Set are unavailable or congested.

pc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24 /pcn16 (mandatory)

Primary remote point code.

pci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (mandatory)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

ssn (mandatory)

Subsystem number.

Range:

2 - 255

eswt (optional)

Entity set weight. The weight assigned to each PC/SSN in a weighted entity set.

Note: This parameter cannot be specified when adding PC/SSNs to a weighted entity set or when modifying RC or weight values for an individual PC/SSN.

Range:

1 - 99, none

none —Changes a weighted entity set to a non-weighted entity set.

force (optional)

This parameter must be specified to modify the rc parameter and the srm, mrc, or wt parameter in the same command.

Modification of the srm, mrc, or wt parameter depends on the parameter's current multiplicity state, which depends on the RC value. Changing the rc parameter value can change the multiplicity state, which can cause the srm, mrc, or wt parameter value to become invalid.

Range:

yes

grp (optional)

The concerned point code broadcast list (CSPC) group name. The CSPC is a group of point codes that should be notified of the subsystem status. A different CSPC group can be assigned to each mated PC/SSN. For ANSI, the EAGLE broadcasts SSP or SSA to the mate subsystem only if the mate's point code is provisioned as part of the CSPC group to receive an SSP or SSA.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none —Disassociates a concerned point code broadcast list group from the given mate application

Default:

Current value.

grpwt (optional)

Group weight. The weight assigned to each PC/SSN in a weighted RC group.

Note: This parameter cannot be specified when adding PC/SSNs to a weighted entity set or when modifying RC or weight values for an individual PC/SSN.

Range:

1 - 99

mapset (optional)

MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

Default:

dflt -if the Flexible GTT Load Sharing feature is not enabled

No change to current value—if the Flexible GTT Load Sharing feature is enabled

materc (optional)

Mate relative cost. The RC assigned to the mate PC/SSN that is being added to the entity set. The system determines the multiplicity mode based on the RC values (rc and materc parameters) of the subsystem.

Range:

0 - 99

Default:

Current value.

mpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

mpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Default:

000

mpc/mpca/mpci/mpcn/mpcn24/mpcn16 (optional)

Mate remote point code.

mpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Default:

000

mpcn (optional)

ITU national point code in the format of a 5-digit ITU number (*nnnnn*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

Default:

00000

mpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

Default:

000

mpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Default:

000

mrc (optional)

Message routing under congestion. This parameter specifies whether Class 0 messages to the specified PC/SSN are routed to the next preferred mode/subsystem when that PC/SSN is congested.

Range:

yes

no

Default:

No change to the current value

mrnpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

mrnpca

Default:

000

mrnpc/mrnpca/mrnpci/mrnpcn/mrnpcn24/mrnpcn16 (optional)

Alternate RI Mate point code.

mrnpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Default:

0-000-0

mrnpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Default:

00000

mrnpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp*).

Default:

000

mrnpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un--000--127

sna--000--15

mna--000--31

Default:

000

mrnset (optional)

Alternate RI Mate MRN Set ID. The MRN Set where the Alternate RI Mate search is performed.

Range:

1 - 3000, dflt

dflt —default MRN Set

Note: If the mrnpc parameter is specified, and the mrnset parameter is not specified, then the value for the mrnset parameter is automatically set to *dflt*.

Default:

No change to the current value

mssn (optional)

Mated subsystem number. The SSN that acts as a backup if the SSN fails.

Range:

2 - 255

Default:

Current value.

mwt (optional)

Mate point code weight. The weight assigned to the PC/SSN that is being added to a weighted entity set.

Range:

1 - 99

rc (optional)

Relative cost. The RC assigned to a specified PC/SSN. The EAGLE determines the multiplicity mode based on the relative costs (the rc and materc parameters) of the subsystem.

Range:

0 - 99

Default:

Current value.

srm (optional)

Subsystem routing messages. This parameter specifies whether subsystem routing messages (SBR, SNR) are transmitted between the mated applications.

This value can be provisioned in any of the multiplicity modes, but its value only affects traffic if the multiplicity mode is *DOM* or *COM*. See the *Notes* section for more information on multiplicity modes.

Range:

yes

no

Default:

Current value.

sso (optional)

Subsystem status option. This parameter specifies whether the PC/SSN initiates a subsystem test when a RESUME is received for the PC.

Range:

on

prohibited

off

allowed

Default:

Primary—no change

Mate, if entered— *off*

thr (optional)

Threshold. The in-service threshold assigned to each PC/SSN in a weighted entity set or RC group.

This parameter cannot be specified when adding PC/SSNs to a weighted entity set or RC group or when modifying RC or weight values for an individual PC/SSN.

If this parameter is not specified, a value of 1% is assigned to each weighted PC/SSN.

Range:

1 - 100

wt (optional)

Weight. The new weight assigned to the primary PC/SSN.

Range:

1 - 99

Example

This example enters 1 into the MAP table and adds it to the same group as 1. Because 1 already exists in the MAP table, the rc parameter is not used.

```
chg-map:pc=1-1-0:ssn=10:mpc=1-1-3:mssn=10:materc=40
```

This example enters 1 into the MAP table, and adds it to the same group as 1. Because 1 has a lower relative cost than 1, it is placed into the group in relative cost order.

```
chg-map:pc=1-1-0:ssn=10:mpc=1-1-2:mssn=10:materc=30
```

This example changes the relative cost for the specified PC/SSN pair:

```
chg-map:pc=1-1-0:ssn=10:rc=20
```

This example changes the concerned PC broadcast list group name for the specified PC/SSN pair:

```
chg-map:pc=1-1-0:ssn=10:grp=abc
```

This example changes the ITU-I spare point code entry s-1-12-2 and adds the spare mate point code entry s-2-23-3 in the map table:

```
chg-map:pci=s-1-12-2:ssn=10:rc=10:mpci=s-2-23-3:mssn=20:materc=10
```

This example turns ON the SSO option for PC 1-1-0 and SSN 10.

```
chg-map:pc=1-1-0:ssn=10:sso=on
```

This example turns OFF the SSO option for PC 1-1-0 and SSN 10.

```
chg-map:pc=1-1-0:ssn=10:sso=off
```

This example does not change the current value of the SSO option for the primary or the mate.

```
chg-map:pc=1-1-0:ssn=10:rc=10
```

This example turns ON the SSO option for primary and mate.

```
chg-map:pc=1-1-0:ssn=10:mpc=3-3-3:mssn=2:sso=on
```

This example turns OFF the sso option for primary and mate.

```
chg-map:pc=1-1-0:ssn=10:mpc=4-4-4:mssn=2:sso=off
```

This example does not change the current value for the SSO option for the primary. The SSO option is turned OFF for the mate, because the mate is specified but the sso parameter is not specified (the default is OFF for the mate when the mate is specified).

```
chg-map:pc=1-1-0:ssn=10:mpc=5-5-5:mssn=2
```

This example changes the ITU-I spare s-1-12-2 entry and adds the spare mate point code s-2-23-3 entry in the map table.

```
chg-map:pci=s-1-12-2:ssn=10:rc=10:mpci=s-2-23-3:mssn=20:materc=10
```

This example adds a new PC/SSN 1 in the existing MAP set 362.

```
chg-map:pc=1-1-1:ssn=10:mpc=1-1-3:mssn=10:materc=40:mapset=362
```

This example adds a new PC/SSN 1-1-3/15 to the same load-sharing group in the default MAP set to which 1-1-1/15 belongs.

```
chg-map:pc=1-1-1:ssn=15:mpc=1-1-3:mssn=15:materc=40:mapset=dflt
```

This example changes the RC of 1-1-1/10 in existing MAP set 362 to 20.

```
chg-map:pc=1-1-1:ssn=10:rc=20:mapset=362
```

This example changes a non-weighted shared or non-weighted combined entity set to a weighted shared or weighted combined entity set.

```
chg-map:pc=1-1-1:ssn=10:eswt=30
```

This example changes a non-weighted shared or non-weighted combined entity set to a weighted shared or weighted combined entity set. The example also sets a threshold value and changes the weights of all of the PC/SSNs in the entity set.

```
chg-map:pc=1-1-1:ssn=10:eswt=30:thr=50
```

This example changes a weighted shared or weighted combined entity set to a non-weighted shared or non-weighted combined entity set.

```
chg-map:pc=1-1-1:ssn=10:eswt=none
```

This example assigns a weight value to each PC/SSN in an RC group within a weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:grpwt=20
```

This example assigns a threshold value to each PC/SSN in an RC group within a weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:thr=70
```

This example assigns weight and threshold values to each PC/SSN in an RC group within a weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:grpwt=20:thr=70
```

This example changes the weight of an existing PC/SSN in a weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:wt=20
```

This example changes the weight of PC/SSN 1 and adds PC/SSN 1-2-1/10 to an existing weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:wt=50:mpc=1-2-1:mssn=10:materc=20:mwt=30
```

This example adds PC/SSN 1-3-2/10 to an existing non-weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:mpc=1-3-2:mssn=10:materc=20:mwt=10
```

This example changes the RC value and turns on MRC of an existing PC/SSN in a weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:rc=30:mrc=yes:force=yes
```

This example changes the RC value and turns on SRM of an existing PC/SSN in a weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:rc=30:srm=yes:force=yes
```

This example changes the RC value and the weight of an existing PC/SSN in a weighted entity set.

```
chg-map:pc=1-1-1:ssn=10:rc=30:wt=20:force=yes
```

This example changes the Alternate RI Mate (MRNSET and MRNPC) in an existing MAP set.

```
chg-map:mapset=362:pc=1-1-1:ssn=10:mrnset=1:mrnpc=1-1-2
```

Example for 16 bit PC:

```
chg-map:pcn16=1-1-1:ssn=10:rc=20:wt=30:mpcn16=1-2-3:mssn=10:materc=20:mwt=20:thr=40
```

Dependencies

At least one optional parameter must be specified.

The specified remote PC must exist in the MAP table.

The Spare Point Code Support feature must be enabled before an ITU-I or ITU-N spare point code can be specified.

The specified SSN must exist for the specified remote PC.

If a subsystem is configured for a subsystem number (SSN) value in the SS-APPL table, then the specified MAP table entry for that subsystem must be a valid point code type for that subsystem. The following point code types are not valid for the indicated subsystems:

- For the INP subsystem, the True Point code cannot be an ITU-I point code.
- For the AIQ, ATINPQ, VFLEX, and EIR subsystems, the True Point code cannot be an ITU-N24 point code.

The mate PC/SSN cannot be the same as the primary PC/SSN.

If the PC value is an ITU type (pci/pcn/pcn24/pcn16), the srm=yes parameter cannot be specified.

The apca and pcn24/pcn16 parameters cannot be specified for the same MAP set. The pci and pcn parameters cannot be specified for the same MAP set if the MAP set contains a true point code.

The ANSI/ITU SCCP Conversion feature must be enabled before the network type of the CPC broadcast group can be different from the network type of the point code.

The mated PC/SSN must not already exist in the MAP table.

The DPCs of the primary subsystem and the mate subsystem must be full PCs.

The format of the pcn or mpcn parameter must match the format assigned with the npcfmti parameter of the `chg-stpopts` command.

If the mpc parameter is specified, the mssn and materc parameters must be specified.

A maximum of 32 mated applications is allowed per MAP set.

The sso parameter cannot be specified with a PC that is the system true PC.

A true PC can have only one mate.

A true PC cannot be routed to itself.

If the mssn or materc parameter is specified, the mpc parameter must be specified.

The PC must already exist in the CPC group.

The specified CSPC broadcast list group name must already exist.

If the mpc parameter is specified, then the mssn parameter must be specified.

The number of MPC Subsystem entries must not exceed the table capacity.

A maximum of 1024 unique remote point codes are allowed.

If a remote MPC is specified, then the remote MPC must exist in the Routing table.

If the Flexible GTT Load Sharing feature is not enabled, then the mapset parameter must not be specified. If the Flexible GTT Load Sharing feature is enabled, then the mapset parameter must be specified.

The specified MAP set must exist in the database.

The specified PC/SSN/MAP set must already be provisioned in the MAP table.

The EAGLE true PC can be provisioned only in the default MAP set.

The Weighted GTT Loadsharing feature must be turned on before the wt, mwt, eswt, grpwt, or thr parameters can be specified.

If the eswt, grpwt, or thr parameter is specified, the mpc parameter cannot be specified.

If the eswt, grpwt, and thr parameters are specified, the rc, wt, mrc, srm, sso, and grp parameters cannot be specified.

The eswt and grpwt parameters cannot be specified together in the command.

If the eswt=none parameter is specified, the thr parameter cannot be specified.

If the mwt parameter is specified, the mpc parameter must be specified.

The mpc parameter value must be a full point code.

If the mpc parameter is specified for a weighted entity set, the mwt parameter must be specified.

If the mpc parameter is specified for a non-weighted entity set, the mwt parameter cannot be specified.

The eswt=none parameter cannot be specified for a non-weighted entity set.

The grpwt and thr parameters cannot be specified for a non-weighted entity set.

If the `chg-sid:pctype=ansi` command is entered, a value of *ni=000* cannot be specified.

If the `chg-sid:pctype=ansi` command is entered, and a value of *ni=001 – 005* is specified, a value of *nc=000* cannot be specified.

The mate point code in the command cannot exceed the maximum number of entries in the MAP table.

The MAP table contains the maximum number of possible entries for the specified True Point Code. Maximum entries for the ANSI, ITU-I, and ITU-N point codes are:

- ANSI—2 (ANS41 AIQ and LNP), 4 (ANSI41 AIQ, ATINPQ, INP, and V-FLEX)
- ITU-I—4 (ANSI41 AIQ, ATINPQ, EIR, and V-FLEX)
- ITU-N—5 (ANSI41 AIQ, ATINPQ, EIR, INP, and V-FLEX)

Note: LNP is mutually exclusive with ATINPQ and V-FLEX, unless the Dual ExAP Config feature is enabled.

The true point code in the entity set must be the primary PC/SSN for that entity set. The rc parameter value for the specified point code cannot be changed, and a new point code cannot be added that causes the true point code to no longer be the primary PC/SSN.

If the pc parameter value is a true point code, the subsystem must have a lower RC than all other mated subsystems in the RC group.

If the mpc parameter value is a true point code, the subsystem must have a lower RC than all other mated subsystems in the RC group.

The eswt, grpwt, and thr parameters cannot be specified for solitary or dominant entity sets.

The AINPQ, EIR, INP, or V-Flex feature must be turned on or the ANSI41 AIQ or ATINP feature must be enabled before the value specified for the mpcn parameter can be a true point code.

The force=yes parameter must be specified before the rc parameter can be specified in the same command with the srm, mrc, or wt parameter.

The force parameter can be used only to specify the rc parameter and the srm, mrc, or wt parameter in the same command.

If the pcn or mpcn parameter is specified, then the format of the parameter must match the format dictated by the `chg-stpopts:npcfmti` command.

The values specified for the pc and mpc parameters cannot be associated with proxy point codes.

The EIR or V-Flex feature must be turned on or the ANSI41 AIQ or ATINP feature must be enabled before the value specified for the mpci parameter can be a true point code.

The LNP, V-Flex, EIR, or INP feature must be turned on or the ANSI41 AIQ or ATINP feature must be enabled before the value specified for the mpca parameter can be a true point code.

The GTT LS ARI feature must be enabled before the mrnset and mrnpc parameters can be specified.

The value specified for the mrnpc parameter must be a full point code.

The value specified for the mrnset parameter must already exist in the MRN table.

The point codes and alternate RI Mate point codes must have compatible network types as shown:

- ITUI, ITU-N, ITU-I spare, ITU-N-spare—ITUI, ITU-N, ITU-I spare, ITU-N-spare
- ANSI—ANSI
- ITUN-24—ITUN-24
- ITUN-16---ITUN-16

The value specified for the mrnpc parameter must already exist in the specified MRN Set.

If the mrnset parameter is specified, then the mrnpc/mrnpca/mrnpci/mrnpcn/mrnpcn24/mrnpcn16 parameter must be specified.

If the eswt, grpwt, or thr parameter is specified, then the mrnpc parameter cannot be specified.

The mrnset parameter cannot be specified if the MAP Set specified by the mapset parameter contains a True Point Code.

The chg-map command will reject provisioning of local subsystem for ITUN16 SID, so that ITUN16 MSUs will not be forwarded to Local Subsystems.

Notes

When the ANSI/ITU SCCP Conversion feature is enabled, the Concerned Point Code (CSPC) Group's network type can be of a different network than the mated application's network type. For example, the mated application's network type could be ANSI and the CSPC Group could be ITU or mixed with ANSI, ITU, and ITUN concerned point codes.

Multiplicity Modes

For the `-map` commands, an entity set consists of a group of PC/SSNs that are used for traffic distribution, and an RC group consists of PC/SSNs within an entity set that have the same RC. In *loadsharing* mode, an entity set contains 1 RC group. In *combined loadsharing/dominant* mode, an entity set can contain multiple loadsharing groups.

Note: For *dominant* and *combined loadsharing/dominant* modes, the PC/SSN in the MAP table where traffic distribution initializes is determined by the result of GTT translation and is referred to as the preferred PC/SSN. The preferred PC/SSN may not be the lowest cost entry.

The EAGLE supports the following multiplicity modes for nodes/subsystems:

- When a PC/SSN pair is not replicated, the pair is in *solitary* (SOL) mode. The subsystem acts as the only application, with no backup. If this subsystem fails, messages routed to it are discarded and SCCP management returns "Subsystem Unavailable" messages to the originator.
- A group of replicated PC/SSN pairs are in *dominant* (DOM) mode if each PC/SSN pair in the group has a unique RC. The preferred PC/SSN acts as the primary subsystem while the higher cost systems act as backups.
- A group of replicated PC/SSN pairs are in *load sharing* (SHR) mode if each PC/SSN pair in the group has the same RC. All messages are evenly distributed at the SCCP level to all nodes/subsystems in the group. If failure occurs, the non-affected subsystem assumes the load of its failed mate.
- The *combined load sharing/dominant* (COM) mode supports a combination of load sharing and dominant mode. A group of PC/SSN pairs are in COM mode when at least two of the PC/SSN pairs have the same RC and another node subsystem in the group has a different RC.

The sso parameter changes the initialization of the subsystem status ("prohibited" or "allowed") for PC/SSN MAP entries. The system previously marked the subsystem status "allowed" (OFF) for each PC/SSN entry. The sso option marks the subsystem status "prohibited" for each entry that has sso=on. This causes the EAGLE to generate an SST to the remote PC when an MTP-RESUME is received. Upon reception of an SSA, the subsystem status is marked "allowed".

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (*s*-).

When the Flexible GTT Load Sharing feature is turned on, MAP Load-Sharing Sets are supported. Each MAP set is identified by a new mapset parameter.

When the Weighted GTT Loadsharing feature is turned on, weighted entity sets and RC groups are supported, and threshold values can be assigned to each PC/SSN in a weighted entity set.

Output

```
chg-map:pc=1-1-0:ssn=10:mpc=1-1-3:mssn=10:materc=40:mapset=362
```

```
    tekelecstp 11-03-22 12:29:22 EST  EAGLE 44.0.0
    chg-map:pc=1-1-0:ssn=10:mpc=1-1-3:mssn=10:materc=40:mapset=362
    Command entered at terminal #4.
    CHG-MAP: MASP A - MESSAGE: EXTENDED PROCESSING REQUIRED
    CHG-MAP: MASP A – COMPLTD
;
```

```
chg-map:pc=1-1-1:ssn=100:mrc=no:srm=no
```

```
    tekelecstp 11-03-22 12:29:22 EST  EAGLE 44.0.0
    chg-map:pc=1-1-1:ssn=100:mrc=no:srm=no
    Command entered at terminal #4.
    CHG-MAP: MASP A - MESSAGE: EXTENDED PROCESSING REQUIRED
    CAUTION: THE VALUE OF SRM IS EFFECTIVE WHEN MULT IS COM OR DOM AND
    THE VALUE OF MRC IS EFFECTIVE WHEN MULT IS DOM.
    CHG-MAP: MASP A - COMPLTD
;
```

Related Commands

dlt-map, *ent-map*, *rtrv-map*

chg-meas

Change Measurements

Use this command to change both the report and collecting status of the OAM based measurement subsystem.

Note: After the Measurements Platform collection function has been enabled, the collect=on/off parameter controls only the output of reports to the UI. The parameter has no effect on enabling and disabling collection and report generation for the Measurements Platform. Report generation for the Measurements Platform is controlled by the`rept-ftp-meas`and `chg-measopts`commands.

Parameters

collect (optional)

Activates or deactivates the reporting of scheduled measurements to the UI when the E5-OAM Integrated Measurements feature is on. This parameter does not affect measurements collection and generation for the Measurements Platform.

Range:

on

off

Default:

No change to value

System Default:

off

complink (optional)

Activates or deactivates scheduled measurement report for links.

Range:

on

off

Default:

Current value

complnkset (optional)

Activates or deactivates scheduled measurement report for linksets.

Range:

on

off

Default:

Current value

gtwylnkset (optional)

Activates or deactivates the scheduled GTWY measurement report for the linkset.

Range:

on

off

Default:

Current value

gtwylsfltr (optional)

Filters the linksets included in the GTWY report.

Range:

both

Only gateway linksets are included in the report to the terminal and SEAS.

stp

Only gateway linksets are included in the report to the terminal. All defined linksets are included in the report to SEAS.

seas

All defined linksets are included in the report to the terminal. Only gateway linksets are included in the report to SEAS.

none

All defined linksets are included in the report to the terminal and SEAS

gtwystp (optional)

Activates or deactivates the scheduled GTWY measurement report for the STP.

Range:

on

off

Default:

Current value

systotstp (optional)

Activates or deactivates scheduled measurement report for STP system totals.

Range:

on

off

Default:

Current value

systotstplan (optional)

Activates or deactivates scheduled measurement report for the STPLAN feature system totals.

Range:

on

off

Default:

Current value

systottt (optional)

Activates or deactivates scheduled measurement report for translation type system totals.

Range:

on

off

Default:

Current value

Example

```
chg-meas:collect=on
chg-meas:complink=on:complnkset=on:systottt=off:systotstp=off:collect=on
chg-meas:gtwylsfltr=both
```

Dependencies

At least one optional parameter must be specified.

If the 15 Minute Measurements and Measurements Platform collection functions are provisioned (see the `chg-measopts` command), then the collect=on parameter cannot be specified.

At least one SLK or SIP/DEIR connection must be configured before the collect=on parameter is specified.

If the Integrated Measurements feature is turned on and the link count exceeds 700 links, then the systotstp=on, systottt=on, systotstplan=on, complnkset=on, complink=on, gtwystp=on, or gtwylnkset=on parameter cannot be specified.

Notes

Activated scheduled reports print at serial ports configured for traffic-related unsolicited messages (the traf=yes parameter of the `chg-trm` command).

When the Measurements Platform is not enabled, the daily maintenance scheduled reports are always allowed and cannot be inhibited.

Maintenance Guide provides detailed information on measurements and measurement reports.

Output

```
chg-meas:complink=on:complnkset=on:systottt=off:systotstp=off:collect=on
```

```
    rlghncxa03w 04-01-18 17:02:57 EST  EAGLE 31.3.0
    CHG-MEAS: MASP A - COMPLTD
;
```

Related Commands

copy-meas, *rept-ftp-meas*, *rept-meas*, *rtrv-meas-sched*

chg-measopts

Change Measurements Options

Use this command to:

- turn on the collection function for Integrated Measurements and Measurements Platform,
- turn the collection function for 15 Minute Measurements on or off
- turn on and off the unchannelized link label for high-speed MTP2 links
- turn the CLLI-based file name option for measurements reports files on or off
- activate or de-activate automatic generation and FTP transfer of scheduled measurements reports to the FTP server

Note: After the Measurements Platform or Integrated Measurements collection function has been enabled, it cannot be disabled with this command.

Caution: Do not execute the`chg-measopts:platformenable=on`or`chg-measopts:oamhcmeas=on`command near a collection starting boundary. The best times for executing these commands are xx07, xx17, xx37 and xx47, where*xx*is any hour, from 00-23.

Parameters

Note: As of Release 45.0, the all, avldlink, avllink, avlstplan, cllibasedname, collect15min, complink, complnkset, compsctpasoc, compsctpcard, compua, gtwylnkset, gtwylsdestni, gtwylsonismt, gtwylsorigni, gtwyorigni, gtwyorigninc, gtwystp, nmlink, nmlnkset, nmstp, systotstp, systotstplan, systottt, and systotsip parameters can be set using the individual parameters or as options for the on and off parameters.

Note: The options for the on and off parameters are described in the Notes section.

all (optional)

Activates or deactivates the automatic generation and FTP transfer of all scheduled measurements reports.

Note: The all parameter does not change the setting of the platformenable, cllibasedname, collect15min, unchlinklabel, and oamhcmeas parameters.

Range:

on

off

Default:

No change to the current value

avldlink (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily availability measurement report for links.

Range:

on

off

Default:

No change to the current value

System Default:

off

avllink (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly availability measurement report for links.

Range:

on

off

Default:

No change to the current value

System Default:

off

avlstplan (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly availability measurement report for STPLAN.

Range:

on

off

Default:

No change to the current value

System Default:

off

cllibasedname (optional)

Enable or disable CLLI-based measurements report file name option.

Range:

on

off

Default:

No change to the current value

System Default:

off

collect15min (optional)

Turns on or off the 15 Minute Measurements collection function.

Range:

on

off

Default:

No change to the current value

System Default:

off

complink (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled component measurement report for links.

Range:

on

off

Default:

No change to the current value

System Default:

off

complnkset (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled component measurement report for linksets.

Range:

on

off

Default:

No change to the current value

System Default:

off

compsctpasoc (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled component measurement report for per association SCTP data.

Range:

on

off

Default:

No change to the current value

compsctpcard (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled component measurement report for per card SCTP data.

Range:

on

off

Default:

No change to the current value

compua (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled component measurement report for M3UA and SUA application server/association pairs.

Range:

on

off

Default:

No change to the current value

gtwylnkset (optional)

Activates or deactivates the automatic generation and FTP transfer of scheduled GTWY measurement report for linksets.

Range:

on

off

Default:

No change to the current value

System Default:

off

gtwylsdestni (optional)

Activates or deactivates the automatic generation and FTP transfer of scheduled GTWY link set measurement report for destination NI

Range:

on

off

Default:

No change to the current value

System Default:

off

gtwylsonismt (optional)

Activates or deactivates the automatic generation and FTP transfer of scheduled GTWY linkset measurement report for ISUP message type per linkset per originating NI

Range:

on

off

Default:

No change to the current value

System Default:

off

gtwylsorigni (optional)

Activates or deactivates the automatic generation and FTP transfer of scheduled GTWY link set measurement report for originating NI

Range:

on

off

Default:

No change to the current value

System Default:

off

gtwyorigni (optional)

Activates or deactivates the automatic generation and FTP transfer of scheduled GTWY link measurement report for originating NI.

Range:

on

off

Default:

No change to the current value

System Default:

off

gtwyorigninc (optional)

Activates or deactivates the automatic generation and FTP transfer of scheduled GTWY link measurement report for originating NI and NC.

Range:

on

off

Default:

No change to the current value

System Default:

off

gtwystp (optional)

Activates or deactivates the automatic generation and FTP transfer of scheduled GTWY measurement report for STP.

Range:

on

off

Default:

No change to the current value

System Default:

off

nmlink (optional)

Activates or deactivates automatic generation and FTP transfer of the scheduled network management measurement report for links.

Range:

on

off

Default:

No change to the current value

System Default:

off

nmlnkset (optional)

Activates or deactivates automatic generation and FTP transfer of the scheduled network management measurement report for link sets.

Range:

on

off

Default:

No change to the current value

System Default:

off

nmstp (optional)

Activates or deactivates automatic generation and FTP transfer of scheduled network management measurement report for STP.

Range:

on

off

Default:

No change to the current value

System Default:

off

oamhcmeas (optional)

Turns on the Integrated Measurements collection function on the E5-OAM card.

This function cannot be turned off after it has been turned on.

Range:

on

Default:

No change to the current value.

System Default:

off

off (optional)

This parameter turns off the specified options. Up to 8 comma-separated unique options can be specified.

Range:

all

avldlink

avllink

avlstplan

cllibasedname

collect15min

complink

complnkset

compsctpasoc

compsctpcard

compua

gtwylnkset

gtwylsdestni

gtwylsonismt

gtwylsorigni

gtwyorigni

gtwyorigninc

gtwystp

nmlink

nmlnkset

nmstp

systotidpr

systotsip

systotstp

systotstplan

systottt

unchlinklabel

on (optional)

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

Range:

all

avldlink

avllink

avlstplan

cllibasedname

collect15min

complink

complnkset

compsctpasoc

compsctpcard

compua

gtwylnkset

gtwylsdestni

gtwylsonismt

gtwylsorigni

gtwyorigni

gtwyorigninc

gtwystp

nmlink

nmlnkset

nmstp

oamhcmeas

platformenable

systotidpr

systotsip

systotstp

systotstplan

systottt

unchlinklabel

platformenable (optional)

Turns on the Measurements Platform collection function.

This parameter cannot be turned off after it has been turned on.

Range:

on

Default:

No change to the current value

System Default:

off

systotsip (optional)

Activates or deactivates automatic generation and FTP transfer of scheduled measurement report for SIP system totals.

Range:

on

off

Default:

No change to the current value

System Default:

off

systotstp (optional)

Activates or deactivates automatic generation and FTP transfer of scheduled measurement report for STP system totals.

Range:

on

off

Default:

No change to the current value

System Default:

off

systotstplan (optional)

Activates or deactivates automatic generation and FTP transfer of the scheduled measurement report for the STPLAN feature system totals.

Range:

on

off

Default:

No change to the current value

System Default:

off

systottt (optional)

Activates or deactivates automatic generation and FTP transfer of scheduled measurement report for translation type system totals.

Range:

on

off

Default:

No change to the current value

System Default:

off

unchlinklabel

Turns on a link label that identifies unchannelized (high speed) MTP2 links.

Range:

on

off

Example

```
chg-measopts:platformenable=on
```

```
chg-measopts:platformenable=on:complink=on:
complnkset=on:systottt=off:systotstp=off
```

```
chg-measopts:on=complink,complnkset,systottt,systotidpr:
off=gtwylsonismt,compua,nmlink,nmstp
```

```
chg-measopts:systotsip=on
```

Dependencies

The Measurements Platform feature must be turned on before the platformenable=on parameter can be specified.

An MCPM card must be in the IS-ANR Restrict state before the Measurements Platform collection option can be enabled.

The 15 Minute Measurements feature must enabled and turned on before the 15 Minute Measurements collection option can be turned on.

The platformenable=on or oamhcmeas=on parameter must be specified before the cllibasedname=on parameter can be specified.

This command is not allowed while in upgrade mode.

Half-hour collection and report processing cannot be in progress when collect15min=on is specified.

Quarter-hour collection and report processing cannot be in progress when collect15min=off is specified.

At least one SLK or SIP/DEIR connection must be configured, before the platformenable=on or oamhcmeas=on parameter is specified.

The oamhcmeas or platformenable parameter cannot be specified if an OAM/OAMHC to MCP or MCP to OAMHC transition is in progress.

The Integrated Measurements feature must be turned on before the oamhcmeas=on parameter can be specified.

The Integrated Measurements or Measurements Platform feature must be turned on before this command can be entered.

The platformenable and oamhcmeas parameters cannot be specified together in the command.

The same option cannot be specified for the on and off parameters in the same command.

Parameters cannot be specified individually and as options for the on or off parameter in the same command.

Notes

Activated scheduled reports are generated and transferred to the customer's FTP server.

The `rept-ftp-meas` command can be used to manually generate and transfer one report at a time as needed.

The primary application of the `set-time` command is for Daylight Savings Time changes, setting the time forward or backward 1 hour. To reduce effects of `set-time` changes on measurements, the time change should be done within the first 15 minutes of any hour.

The*Maintenance Manual*provides detailed information on measurements and measurement reports.

CLLI-Based Measurements Report File Name

When the CLLI-based file name option (*cllibasedname*) is turned on, the CLLI is added to the measurements report file name, and the year is removed from the file name to ensure that the file name is equal to or fewer than 39 characters.

15 Minute Measurements

When the SEAS feature is turned on and 15 Minute Measurements collection is turned from off to on with the collect15min=on parameter, the message "Disabling SEAS Measurements..." is displayed at the UI.

When the SEAS feature is turned on and 15 Minute Measurements collection is running (collect15min=on), EAGLE measurements output to the SEAS interface is disabled.

When the SEAS feature is turned on and 15 Minute Measurements collection is turned from on to off with the *collect15min=off* parameter, EAGLE measurements output to the SEAS interface is enabled again.

Note: If SEAS reporting is turned on, for the 24 hours after the 15 Minute Measurements option is turned from on to off, 30-minute demand SEAS reports for time periods prior to the option status change will contain only 15 minutes of data, and SEAS will not support reporting at the xx15 and xx45 times.

Some quarter-hour measurements data might not be available for 24 hours after turning 15 Minute Measurements collection on. This condition exists for quarter-hour intervals for which 15 Minute Measurements collection has not yet occurred. Data that was collected on a 30-minute basis is available

for reporting for up to 24 hours after it is collected. After the 15 Minute Measurements collection option is turned on, this data remains available on a half-hour basis (xx00 and xx30) but is not available on a quarter-hour basis (xx15 and xx45) because no data was collected on the quarter hours. After the 15 Minute Measurements collection option has been turned on for 24 hours, all 15-minute measurements data is available on a quarter-hour basis (xx00, xx15, xx30, and xx45).

In addition, full 30-minute data coverage will not be available until 24 hours after turning off the 15 Minute Measurements collection option. Reports for specific periods will always contain the amount of data collected for that period.

The action of turning 15-minute measurements feature control status on using the `chg-ctrl-feat` command also has an impact on the generation of measurements reports for period=active. Specifically, if the feature control status of 15-minute measurements is turned on and a report is requested for the active interval prior to the next scheduled measurements collection (based on the current 15-minute measurements status), the starting time for the period shown in the report will be incorrect. As soon as the next scheduled collection occurs, active reports will show the correct starting time. For example, if 15-minute feature control status is turned on with the `chg-ctrl-feat` command at 13:03, and the 15-minute measurements collection option is turned on using the `chg-measopts` command at 13:05, and a comp-link report for period=active is requested at 13:10, that report will contain an incorrect interval start time. If the same report is requested at 13:20, the start time shown in the report will be correct, because a collection occurred at 13:15.

A similar limitation exists for period=last. If the feature control status of 15-minute measurements is turned on and a report is requested for the last interval prior to the next scheduled measurements collection (based on the current 15-minute measurements status), the start and end times for the period shown in the report will be incorrect. The data presented in the report will correspond to the start and end times. As soon as the next scheduled collection occurs, then period=last reports will show the correct start and end times and the corresponding data for that interval. To generate measurements from the last collected interval before the first collection with feature control status on, a period=specific report will need to be entered. In the example given in the previous paragraph, the first report requested at 13:10 would not give the last interval, but the data given would correspond to the interval shown in the report. The second report requested at 13:20 would show correct start and end times and the data would correspond to the interval.

If the 15 Minute Measurements collection option is turned from on to off in the first 15 minutes of a half-hour (xx00-xx15 or xx30-xx45) and a demand report is requested in the second 15 minutes of a half-hour (xx15-xx30 or xx45-xx60) for period=last or period not specified, the report that is displayed will be the last 15-minute interval (xx00-xx15 or xx30-xx45), not the last collected 15-minute interval (xx45-xx00 or xx15-xx30). Collection did not occur during this 15-minute period, and the message "Measurements data not current" will be displayed. To report the last collected 15-minute interval, period=specific must be specified in the command with the correct qh/hh value.

The time interval in each measurements report shows which collection option was on when the measurements were collected. (This might not be the option that is currently on if the option was changed in the last 24 hours).

- xx00-xx15—None. 15 minutes of data will be collected for the quarter-hour xx15.
- xx15-xx30—The xx15 interval will contain no data. The xx30 interval will contain 30 minutes of data.
- xx30-xx45—None. 15 minutes of data will be collected for the quarter-hour xx15.
- xx45-xx00—The xx45 interval will contain no data. The xx00 interval will contain 30 minutes of data.

on/off options

- *all* —Allows automatic generation and FTP transfer of all scheduled measurements reports. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This parameter does not change the setting of the platformenable, cllibasedname, collect15min, unchlinklabel, and oamhcmeas parameters. This option has a default of OFF
- *avldlink* —Allows automatic generation and FTP transfer of the scheduled daily availability measurement report for links. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *avllink* —Allows automatic generation and FTP transfer of the scheduled hourly availability measurement report for links. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *avlstplan* —Allows automatic generation and FTP transfer of the scheduled hourly availability measurement report for STPLAN. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *cllibasedname* —CLLI-based measurements report file name option. This option has a default of OFF.
- *collect15min* —15 Minute Measurements collection function. This option has a default of OFF.
- *complink* —Allows automatic generation and FTP transfer of the scheduled component measurement report for links. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *complnkset* —Allows automatic generation and FTP transfer of the scheduled component measurement report for linksets. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *compsctpasoc* —Allows automatic generation and FTP transfer of the scheduled component measurement report for per association SCTP data. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *compsctpcard* —Allows automatic generation and FTP transfer of the scheduled component measurement report for per card SCTP data. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *compua* —Allows automatic generation and FTP transfer of the scheduled component measurement report for M3UA and SUA application server/association pairs. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *gtwylnkset* —Allows automatic generation and FTP transfer of scheduled GTWY measurement report for linksets. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *gtwylsdestni* —Allows automatic generation and FTP transfer of scheduled GTWY link set measurement report for destination NI. If the 15 Minute Measurements feature is turned on and the, *collect15min* parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *gtwylsonismt* —Allows automatic generation and FTP transfer of scheduled GTWY linkset measurement report for ISUP message type per linkset per originating NI. If the 15 Minute

Measurements feature is turned on and the, *collect15min* parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.

- *gtwylsorigni* —Allows automatic generation and FTP transfer of scheduled GTWY link set measurement report for originating NI. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *gtwyorigni* —Allows automatic generation and FTP transfer of scheduled GTWY link measurement report for originating NI. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *gtwyorigninc* —Allows automatic generation and FTP transfer of scheduled GTWY link measurement report for originating NI and NC. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *gtwystp* —Allows automatic generation and FTP transfer of scheduled GTWY measurement report for STP. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *nmlink* —Allows automatic generation and FTP transfer of the scheduled network management measurement report for links. This option has a default of OFF.
- *nmlnkset* —Allows automatic generation and FTP transfer of the scheduled network management measurement report for link sets. This option has a default of OFF.
- *nmstp* —Allows automatic generation and FTP transfer of scheduled network management measurement report for STP. This option has a default of OFF.
- *oamhcmeas* —Turns ON the Integrated Measurements collection function on the E5-OAM card. This option cannot be turned OFF.
- *platformenable* —Turns ON the Measurements Platform collection function. This option cannot be turned OFF.
- *systotidpr* —Allows scheduled reports for IDPR Measurement Pegs on FTP to be generated every 30 minutes. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *systotsip* — Allows automatic generation and FTP transfer of scheduled measurement report for SIP system totals. If the 15 Minute Measurements feature is turned on and the collect 15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *systotstp* —Allows automatic generation and FTP transfer of scheduled measurement report for STP system totals. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *systotstplan* —Allows automatic generation and FTP transfer of the scheduled measurement report for the STPLAN feature system totals. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.
- *systottt* —Allows automatic generation and FTP transfer of scheduled measurement report for translation type system totals. If the 15 Minute Measurements feature is turned on and the collect15min parameter is specified, then scheduled reports on FTP can be generated every 15 minutes. This option has a default of OFF.

- *unchlinklabel* —Turns ON/OFF a link label that identifies unchannelized (high-speed) MTP2 links. This option has a default of OFF.

Output

`chg-measopts:platformenable=on:comlink=on:complnkset=on:systottt=off:systotstp=off`

```
    tekelecstp 08-06-01 14:31:25 EST  EAGLE 44.0.0
    CHG-MEASOPTS: MASP A - COMPLTD
;
```

`chg-measopts:on=systotidpr,systottt,complnkset,comlink:off=avldlink,avllink,avlstplan`

```
    tekelecstp 10-12-01 12:15:25 EST  EAGLE 44.0.0
    CHG-MEASOPTS: MASP A – COMPLTD
;
```

`chg-measopts:systotsip=on`

```
tekelecstp 12-07-26 14:41:09 EST EAGLE 45.0.0
chg-measopts:systotsip=on
Command entered at terminal #4.
CHG-MEASOPTS: MASP A - COMPLTD
;
```

Related Commands

chg-ftp-serv, *chg-meas*, *chg-mtc-measopts*, *chg-netopts*, *dlt-ftp-serv*, *ent-ftp-serv*, *rept-ftp-meas*, *rept-meas*, *rept-stat-meas*, *rtrv-ftp-serv*, *rtrv-measopts*, *rtrv-mtc-measopts*, *rtrv-netopts*

chg-mrn

Change Mated Relay Node

Use this command to add new point codes, modify existing point codes and relative costs, and add or modify Alternate RI Mate data in the Mated Relay Node (MRN) table. The Intermediate GTT Load-Sharing (IGTTLS) feature must be on to enter this command. The GTT Load Sharing with Alternate Routing Indicator Feature (GTT LS ARI) must be enabled to provision an Alternate RI Mate.

If the IGTTLS feature is on, and the Flexible GTT Load Sharing feature (FGTTLS) is enabled, then entries are added to or changed in existing MRN sets in the MRN table.

If the IGTTLS feature is on, and the FGTTLS feature is not enabled, then the MRN table can contain a maximum of 3000 entries. If both the IGTTLS and FGTTLS features are on, then the MRN table can contain a maximum of 6000 entries.

Caution: If any entries are provisioned in the SCCP-SERV table, the maximum number of entries that the MRN table can contain is reduced by that amount. Enter the `rtrv-sccp-serv` command to see if entries exist in the SCCP-SERV table. See the Notes section for additional information on multiplicity modes.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Note: The mapset, mappc, and mapssn parameters indicate whether an Alternate RI Mate search is performed in the MAP table if all PCs provisioned in a given MRN Set are unavailable or congested.

pc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (mandatory)

Post-GTT-translated point code.

pci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (mandatory)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un--000--127

sna--000--15

mna--000--31

eswt (optional)

Entity set weight. The weight assigned to each PC in a weighted entity set.

Note: This parameter cannot be specified when adding PCs to a weighted entity set or when modifying RC or weight values for an individual PC.

Range:

1 - 99, none

none —Changes a weighted entity set to a non-weighted entity set.

force (optional)

This parameter must be specified to modify the rc, rc1, rc2, rc3, or rc4 parameter and the wt, wt1, wt2, wt3, or wt4 parameter in the same command.

Modification of the wt, wt1, wt2, wt3, or wt4 parameters depends on the parameter's current multiplicity state, which depends on the RC value. Changing the rc parameter value can change the multiplicity state, which can then cause any of the weight parameter values to become invalid.

Range:

yes

grpwt (optional)

Group weight. The weight assigned to each PC in a weighted RC group.

Note: This parameter cannot be specified when adding PCs to a weighted entity set or when modifying RC or weight values for an individual PC.

Range:

1 - 99

mappc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

mappca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Default:

000

mappc/mappca/mappci/mappcn/mappcn24/mappcn16 (optional)

Alternate RI Mate point code.

mappci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Default:

0-000-0

mappcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

Default:

00000

mappcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

Default:

000

mappcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Default:

000

mapset (optional)

Alternate RI Mate MAP Set ID. The MAP set where Alternate Routing Indicator searches are performed.

Range:

1 - 36000, dflt

dflt—Default MAP Set

If the mappc and mapssn parameters are specified, and the mapset parameter is not specified, then the mapset parameter is automatically set to a value of *dflt*.

Default:

No change to the current value

mapssn (optional)

Alternate RI Mate Subsystem Number. The subsystem number used for the Alternate Routing Indicator search.

Range:

*2 - 255, *, none*

If the mapssn=* parameter is specified, then the values specified for the mapset and mappc parameters must already exist in the MAP table.

Default:

No change to the current value

mrnset (optional)

MRN set ID.

Range:

1 - 3000, dflt

dflt -default MRN set

pc1 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca1

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc1/pca1/pci1/pcn1/pcn241/pcn161 (optional)

Alternate post-GTT-translated point code.

pc2 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca2

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc2/pca2/pci2/pcn2/pcn242/pcn162 (optional)

Alternate post-GTT-translated point code.

pc3 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca3

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc3/pca3/pci3/pcn3/pcn243/pcn163 (optional)

Alternate post-GTT-translated point code.

pc4 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca4

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc4/pca4/pci4/pcn4/pcn244/pcn164 (optional)

Alternate post-GTT-translated point code.

pci1 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci2 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci3 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci4 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn161 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn162 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn163 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn164 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna)*.

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn1 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn2 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn241 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn242 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn243 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn244 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn3 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the

`chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn4 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

rc (optional)

Relative cost. The relative cost of the route for the primary PC.

Range:

0 - 99

rc1 (optional)

Relative cost 1. The relative cost of the route for mate PC 1.

Range:

0 - 99

rc2 (optional)

Relative cost 2. The relative cost of the route for mate PC 2.

Range:

0 - 99

rc3 (optional)

Relative cost 3. The relative cost of the route for mate PC 3.

Range:

0 - 99

rc4 (optional)

Relative cost 4. The relative cost of the route for mate PC 4.

Range:

0 - 99

thr (optional)

Threshold. The in-service threshold of all PCs in a weighted entity set or RC group.

This parameter cannot be specified when adding PCs to a weighted entity set or RC group or when modifying RC or weight values for an individual PC.

If this parameter is not specified, a value of 1% is assigned to each weighted PC.

Range:

1 - 100

wt (optional)

Weight. The new weight assigned to the primary PC.

Note: This parameter cannot be specified when adding PCs to a weighted entity set.

Range:

1 - 99

wt1 (optional)

Weight 1. The weight assigned to the mate PC 1 that is being added to the weighted entity set.

Range:

1 - 99

wt2 (optional)

Weight 2. The weight assigned to the mate PC 2 that is being added to the weighted entity set.

Range:

1 - 99

wt3 (optional)

Weight 3. The weight assigned to the mate PC 3 that is being added to the weighted entity set.

Range:

1 - 99

wt4 (optional)

Weight 4. The weight assigned to the mate PC 4 that is being added to the weighted entity set.

Range:

1 - 99

Example

In this example, the system searches the MRN table for a point code of 1-1-0. If the point code is found, its relative cost is set to 40.

```
chg-mrn:pc=1-1-0:rc=40
```

In this example, the system searches the MRN table for point code 1-1-0. Having found it, the system searches the entity set for 1-1-10. If 1-1-10 is not in the entity set, the command adds point code 1-1-10 is added to the entity set and assigned a relative cost of 30.

```
chg-mrn:pc=1-1-0:pc1=1-1-10:rc1=30
```

In this example, the system searches the MRN table for a point code of 1-1-0. Having found it, the system searches for each of the specified associated point codes in the entity set. If neither associated point code is found, the specified point codes and their relative costs are inserted into the entity set in the MRN table.

```
chg-mrn:pc=1-1-0:pc1=1-1-1: rc1=10:pc2=1-1-10:rc2=20
```

These examples include spare point codes.

```
chg-mrn:pcn=s-1-1-1-123-aa:rc=1:pcn1=s-1-1-1-235-aa:rc1=2:pcn2=s-1-1-1-235-aa:rc2=3
```

```
chg-mrn:pci=s-2-2-1:rc=20:pci1=s-2-2-2:rc1=21:pci2=s-2-100-1:rc2=22
```

```
chg-mrn:pc=1-1-1:rc=30:mrnset=dflt
```

```
chg-mrn:pc=1-1-1:rc=20:pc1=2-2-2:rc1=20:mrnset=111
```

```
chg-mrn:pc=1-1-1:pc1=3-3-3:rc1=30:mrnset=111
```

This example changes a non-weighted entity set to a weighted entity set.

```
chg-mrn:pc=1-1-1:eswt=30
```

```
chg-mrn:pc=1-1-1:eswt=30:thr=50
```

This example changes a weighted entity set to a non-weighted entity set.

```
chg-mrn:pc=1-1-1:eswt=none
```

This example assigns a weight value to each PC in a weighted RC group within a weighted entity set.

```
chg-mrn:pc=1-1-1:grpwt=20
```

This example assigns a threshold value to each PC in the RC group within a weighted entity set.

```
chg-mrn:pc=1-1-1:thr=70
```

This example assigns a weight and threshold to each PC in an RC group within a weighted entity set.

```
chg-mrn:pc=1-1-1:grpwt=20:thr=70
```

This example assigns PC 1 a weight of 30.

```
chg-mrn:pc=1-1-1:wt=30
```

This example adds PC 1 to the weighted entity set containing PC 1 and assigns PC 1 an RC of 30 and a weight of 20.

```
chg-mrn:pc=1-1-0:pc1=1-1-10:rc1=30:wt1=20
```

This example assigns specified PCs and their associated RCs and weights to the weighted entity set that contains the point code 1.

```
chg-mrn:pc=1-1-0:pc1=1-1-1:rc1=10:wt1=35:pc2=1-1-10:rc2=20:wt2=20
```

This example modifies both RC values and weights for PCs in an existing weighted entity set.

```
chg-mrn:pc=1-1-0:rc=30:wt=10:pc1=1-1-10:rc1=20:pc2=1-1-2:wt2=5:force=yes
```

This example modifies only weights for PCs in an existing weighted entity set.

```
chg-mrn:pc=1-1-0:wt=10:pc1=1-1-10:wt1=20:pc2=1-1-2:wt2=5
```

```
chg-mrn:pc=1-1-1:mrnset=111:mapset=dflt:mappc=2-1-1:mapssn=10
```

```
chg-mrn:pc=1-1-1:mrnset=111:mapssn=*
```

```
chg-mrn:pc=1-1-1:mrnset=111:mapset=1:mappc=2-1-2:mapssn=12
```

```
chg-mrn:pci=1-002-1:mrnset=10:mapset=2:mappcn=00126:mapssn=12
```

Example for 16 bit PC entry:

```
chg-mrn:pcn16=1-14-0:rc=10:wt=30:pcn161=45-1-0:rc1=10:wt1=10:mrnset=dflt
```

Dependencies

The Intermediate Global Title Translation Load Sharing feature must be turned on before this command can be entered.

The apca and pcn24/pcn16 parameters cannot be specified for the same MRN set.

When a new point code is specified, its relative cost (rc) must be specified; a new point code and its relative cost must be entered together in the command.

A new point code that is specified in the command must not already exist in the MRN table.

The point codes cannot have the same value as the EAGLE SID.

The same point code value cannot be entered more than once in the MRN table.

Each point code group can contain a maximum of 32 point codes.

ITU-N point codes must be in the format set by the npcfmti parameter of the `chg-stpopts` command. (Use the `rtrv-stpopts` command to display the STP option settings).

Mate remote point codes must already exist as destinations in the Ordered Route entity set or reside in a cluster destination for which ordered routes are specified.

To change the relative cost for a point code, the point code must already exist in the MRN table.

The Flexible GTT Loadsharing feature must be enabled before the mrnset parameter can be specified.

If the Flexible GTT Loadsharing feature is enabled, the specified PC must already exist in the specified MRN set.

The specified MRN set must already exist in the MRN table.

If the IGTTLS feature is on, and the FGTTLS feature is not enabled, then the MRN table can contain a maximum of 3000 entries. If both the IGTTLS and FGTTLS features are on, then the MRN table can contain a maximum of 6000 entries.

The Weighted GTT Loadsharing feature must be turned on before the wt/wt1/wt2/wt3/wt4, eswt, grpwt, or thr parameter can be specified.

If the rc parameter is not specified, the wt parameter cannot be specified.

The eswt and grpwt parameters cannot be specified together in the command.

If the eswt=none parameter is specified, the thr parameter cannot be specified.

If the eswt, grpwt, or thr parameters are specified, the rc/rc1/rc2/rc3/rc4 and wt/wt1/wt2/wt3/wt4 parameters cannot be specified.

If the Weighted GTT Loadsharing feature is enabled, and individual PCs are being modified, the wt or rc parameter must be specified for each PC.

Alternate point codes cannot be specified when modifying an entity set or RC group.

If the pc1/pc2/pc3/pc4 parameter is specified for a weighted entity set, a corresponding wt1/wt2/wt3/wt4 parameter must be specified.

If the pc1/pc2/pc3/pc4 parameter is specified for a non-weighted entity set, the wt1/wt2/wt3/wt4 parameter cannot be specified.

The eswt=none parameter cannot be specified for non-weighted entity sets.

The grpwt and thr parameters cannot be specified for non-weighted entity sets.

At least one additional point code must be specified.

If the wt/wt1/wt2/wt3/wt4 parameter is specified, the corresponding pc/pc1/pc2/pc3/pc4 parameter must be specified.

The pc/pc1/pc2/pc3/pc4 parameter values must be full point codes.

At least one optional parameter must be specified.

If the Weighted GTT Loadsharing feature is not enabled, and individual PCs are being modified, the rc parameter must be specified for each PC.

The eswt, grpwt, and thr parameters cannot be specified for solitary or dominant entity sets.

If the `chg-sid:pctype=ansi` command is entered, a value of *ni=000* cannot be specified.

If the `chg-sid:pctype=ansi` command is entered, and a value of *ni=001 – 005* is specified, a value of *nc=000* cannot be specified.

The force=yes parameter must be specified before the rc, rc1, rc2, rc3, or rc4 parameter can be specified in the same command with the wt, wt1, wt2, wt3, or wt4 parameter.

The force parameter can be used only to specify the rc, rc1, rc2, rc3, or rc4 parameter and the wt, wt1, wt2, wt3, or wt4 parameter in the same command.

The value specified for the pc/pc1/pc2/pc3/pc4 parameter cannot be associated with a proxy point code.

The GTT LS ARI feature must be enabled before the mapset, mappc, or mapssn parameter can be specified.

The value specified for the mappc parameter must be a full point code.

The point codes and alternate RI Mate point codes must have compatible network types as shown:

- ITUI, ITU-N, ITU-I spare, ITU-N-spare—ITUI, ITU-N, ITU-I spare, ITU-N-spare
- ANSI—ANSI
- ITUN-24—ITUN-24
- ITUN-16---ITUN-16

The value specified for the mapset parameter must already exist in the MAP table.

The values specified for the mappc and mapssn parameters must already exist in the specified MAP Set.

The values specified for the mapset and mappc parameters must already exist in the MAP table.

The value specified for the mappc parameter cannot match an existing STP point code.

The mappc and mapssn parameters must be specified together in the command.

Notes

For MRN commands, an entity set consists of a group of PCs that are used for traffic distribution, and an RC group consists of PCs within an entity set that have the same RC. In loadsharing mode, an entity set contains 1 RC group. In combined/dominant loadsharing mode, an entity set can contain multiple loadsharing groups.

All of the point codes that are specified in one command must exist in the same point code group in the MRN table.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

The EAGLE supports the following multiplicity modes for nodes/subsystems.

- A group of replicated PCs are in *dominant* mode if each PC in the group has a unique RC. The specified subsystem with the lowest RC acts as the primary subsystem, while the mate subsystem acts as a backup. In the event of congestion, messages route to the mate subsystem. When the congestion subsides, messages are again routed to the primary (dominant) subsystem.
- A group of replicated PCs are in *load sharing* mode if each PC in the group has the same RC. All messages are evenly distributed at the SCCP level to all nodes/subsystems in the group. In the event of congestion or failure, the non-affected subsystem assumes the load of its failed or congested mate.
- The *combined load sharing/dominant* mode supports a combination of load sharing and dominant mode. A group of PCs are in combined load sharing/dominant mode when at least two of the PCs have the same RC and another node subsystem in the group has a different RC. A combination of node accessibility and RC determines the preferred PC.

When the Weighted GTT Loadsharing feature is turned on, weighted entity sets and RC groups are supported, and threshold values can be assigned to each PC.

When the GTT LS ARI feature is enabled, the Alternate RI Mate for an MRN Set can be provisioned.

Output

```
chg-mrn:pci=1-1-2:mrnset=111:mapset=10:mappc=1-1-1:mapssn=*
```

```
    tekelecstp 11-03-22 15:43:00 EST  EAGLE 44.0.0
    chg-mrn:pci=1-1-2:mrnset=111:mapset=10:mappc=1-1-1:mapssn=*
    Command entered at terminal #4.
    CHG-MRN: MASP A - MESSAGE: EXTENDED PROCESSING REQUIRED
    CHG-MRN: MASP A - COMPLTD
;
```

Related Commands

dlt-mrn, *ent-mrn*, *rtrv-mrn*

chg-mtc-measopts

Change Maintenance Measurements Options

Use this command to enable or disable the automatic generation and FTP transfer of scheduled maintenance measurements reports to the FTP server.

Parameters

Note: As of Release 45.1, the mtcdaiq, mtcdatinpq, mtcdeir, mtcdgttapath, mtcdlink, mtcdlnkset, mtcdlnp, mtcdmap, mtcdnp, mtcdsctpasoc, mtcdsctpcard, mtcdsip, mtcdstp, mtcdstplan, mtcdua, mtcdvflex, mtchaiq, mtchatinpq, mtcheir, mtchgttapath, mtchlnp, mtchmap, mtchnp, mtchvflex, mtcddeir and mtchdeir parameters can be specified individually or as options for the on and off parameters.

Note: The options for the on and off parameters are specified in the Notes section.

mtcdaiq (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report for ANSI41 AnalyzedInformation Query (ANSI41 AIQ).

Range:

on

off

Default:

No change to the current value.

System Default:

off

mtcdatinpq (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report for ATI Number Portability Query (ATINP).

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdeir (optional)

Activates or deactivates the automatic generation and FTP transfer of the daily maintainenance measurement reports for Equipment Identity Register (EIR).

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdenum (optional)

Activates or deactivates the automatic generation and FTP transfer of the daily ENUM NP maintenance measurement reports.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdgttapath (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report for GTT Action per path measurements.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdlink (optional)

Activates or deactivates the automatic generation and FTP transfer of the daily maintenance measurement report for links.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdlnkset (optional)

Activates or deactivates the automatic generation and FTP transfer of the daily maintenance measurement report for link sets.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdlnp (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report for LNP.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdmap (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report per GSM MAP Screening server entry.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdnp (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report for INP.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdsctpasoc (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report for per association SCTP data.

Range:

on

off

Default:

No change to the current value

mtcdsctpcard (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report for per card SCTP data.

Range:

on

off

Default:

No change to the current value

mtcdsip (optional)

Activates or deactivates the automatic generation and FTP transfer of the daily maintenance measurement report for SIP.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdstp (optional)

Activates or deactivates the automatic generation and FTP transfer of the daily maintenance measurement report for STP.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdstplan (optional)

Activates or deactivates the automatic generation and FTP transfer of the daily maintenance measurement report for STPLAN.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdua (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled daily maintenance measurement report for M3UA and SUA application server/association pairs.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcdvflex (optional)

Activates or deactivates the automatic generation and FTP transfer of the daily maintenance measurement report for V-Flex (Voice Mail Router).

Range:

on

off

Default:

No change to the current value

System Default:

off

mtchaiq (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly maintenance measurement report of ANSI41 AnalyzedInformation Query (ANSI41 AIQ).

Range:

on

off

Default:

No change to the current value.

System Default:

off

mtchatinpq (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly maintenance measurement report of Any Time Interrogation (ATI) Number Portability (NP) Queries.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtchdeir (optional)

Activates or deativates the automatic generation and FTP transfer of the hourly S13 EIR maintenance measurement reports.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtcheir (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for Equipment Identity Register (EIR).

Range:

on

off

Default:

No change to the current value

System Default:

off

mtchenum (optional)

Activates or deactivates the automatic generation and FTP transfer of the hourly ENUM NP maintenance measurement reports.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtchgttapath (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for GTT Action per path measurements.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtchlnp (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for LNP.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtchmap (optional)

Activates or deactivates the automatic generation and FTP transfer of scheduled hourly maintenance measurement report per GSM MAP Screening server entry.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtchnp (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for INP.

Range:

on

off

Default:

No change to the current value

System Default:

off

mtchvflex (optional)

Activates or deactivates the automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for V-Flex (Voice Mail Router).

Range:

on

off

Default:

No change to the current value

System Default:

off

off (optional)

This parameter turns off the specified options. Up to 8 comma-separated unique options can be specified.

Range:

mtcdaiq

mtcdatinpq

mtcddeir

mtcdeir

mtcdenum

mtcdgttapath

mtcdlink

mtcdlnkset

mtcdlnp

mtcdmap

mtcdnp

mtcdsctpasoc

mtcdsctpcard

mtcdsip

mtcdstp

mtcdstplan

mtcdua

mtcdvflex

mtchaiq

mtchatinpq

mtchdeir

mtcheir

mtchenum

mtchgttapath

mtchlnp

mtchmap

mtchnp

mtchvflex

on (optional)

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

Range:

mtcdaiq

mtcdatinpq

mtcddeir

mtcdeir

mtcdenum

mtcdgttapath

mtcdlink

mtcdlnkset

mtcdlnp

mtcdmap

mtcdnp

mtcdsctpasoc

mtcdsctpcard

mtcdsip

mtcdstp

mtcdstplan

mtcdua

mtcdvflex

mtchaiq

mtchatinpq

mtchdeir

mtcheir

mtchenum

mtchgttapath

mtchlnp

mtchmap

mtchnp

mtchvflex

Example

```
chg-mtc-measopts:mtcdeir=off:mtcheir=on
chg-mtc-measopts:mtchvflex=on:mtcdvflex=on
chg-mtc-measopts:mtchaiq=on:mtcdaiq=on
chg-mtc-measopts:on=mtcdaiq,mtcdatinpq,mtcdeir,
mtcdgttapath,mtcdlink,mtcdlnkset,mtcdlnp,mtcdmap
chg-mtc-measopts:off=mtcdsctpcard,mtcdstp,mtcdstplan,
mtcdua,mtcdvflex,mtchaiq:on=mtchlnp,mtchmap
chg-mtc-measopts:mtcdsip=on
chg-mtc-measopts:on=mtchdeir,mtcddeir
chg-mtc-measopts:mtchdeir=on:mtcddeir=on
chg-mtc-measopts:on=mtcdenum,mtchenum
chg-mtc-measopts:mtchenum=on:mtcdenum=off
```

Dependencies

The LNP feature must be turned on before the mtchlnp=on or mtcdlnp=on parameter can be specified.

The GSM Map Screening (GSMSCR) feature must be turned on before the mtcdmap=on parameter or the mtchmap=on parameter can be specified.

The Equipment Identity Register (EIR) feature must be turned on before the mtcheir=on parameter or the mtcdeir=on parameter can be specified.

This command is not allowed while in upgrade mode.

The V-Flex feature must be turned on before the mtchvflex=on parameter or the mtcdvflex=on parameter can be specified.

The ATINP feature must be enabled before the mtchatinpq=on parameter or the mtcdatinpq=on parameter can be specified.

The A-Port, G-Port, IS41 GSM Migration, MO SMS IS41-to-GSM Migration, MO-based GSM SMS NP, MO-based IS41 SMS NP, Prepaid SMS Intercept Ph1, TIF ASD, TIF GRN, TIF Number Portability, or TIF Simple Number Substitution feature must be enabled, or the INP feature must be turned on before the mtchnp=on parameter or the mtcdnp=on parameter can be specified.

The ANSI41 AIQ feature must be enabled before the mtchaiq=on or mtcdaiq=on parameter can be specified.

The Integrated Measurements or Measurements Platform feature must be turned on before this command can be entered.

The GTT Action - DISCARD, GTT Action - FORWARD, or GTT Action - DUPLICATE feature must be enabled before the mtchgttapath=on or mtcdgttapath=on parameter can be specified.

The same option cannot be specified for the on and off parameters in the same command.

Parameters cannot be specified individually and as options for the on or off parameter in the same command.

The Diameter S13/S13' Interface for EIR feature (DEIR) must be turned on before the mtchdeir=on parameter or the mtcddeir=on parameter can be specified.

At least one ENUM card must be provisioned before the mtchenum=on or mtcdenum=on parameter can be specified.

Notes

Activated scheduled reports are generated and transferred to the customer's FTP server

The `rept-ftp-meas` command can be used to manually generate and transfer one report at a time as needed.

Maintenance Guide provides detailed information on measurements and measurement reports.

on/off options

mtcdaiq

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for ANSI41 AnalyzedInformation Query (ANSI41 AIQ). The option has a default of OFF.

mtcdatinpq

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for ATI Number Portability Query (ATINP). The option has a default of OFF.

mtcddeir

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for S13 EIR. The option has a default of OFF.

mtcdeir

Allows automatic generation and FTP transfer of the daily maintenance measurement report for Equipment Identity Register (EIR). The option has a default of OFF.

mtcdenum

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for ENUM NP. The option has a default of OFF.

mtcdgttapath

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for GTT Action per path measurements. The option has a default of OFF.

mtcdlink

Allows automatic generation and FTP transfer of the daily maintenance measurement report for links. The option has a default of OFF.

mtcdlnkset

Allows automatic generation and FTP transfer of the daily maintenance measurement report for link sets. The option has a default of OFF.

mtcdlnp

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for LNP. The option has a default of OFF.

mtcdmap

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report per GSM MAP Screening server entry. The option has a default of OFF.

mtcdnp

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for INP. The option has a default of OFF.

mtcdsctpasoc

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for per association SCTP data. The option has a default of OFF.

mtcdsctpcard

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for per card SCTP data. The option has a default of OFF.

mtcdsip

Allows automatic generation and FTP transfer of the daily maintenance measurement report for SIP. The option has a default of OFF.

mtcdstp

Allows automatic generation and FTP transfer of the daily maintenance measurement report for STP. The option has a default of OFF.

mtcdstplan

Allows automatic generation and FTP transfer of the daily maintenance measurement report for STPLAN. The option has a default of OFF.

mtcdua

Allows automatic generation and FTP transfer of the scheduled daily maintenance measurement report for M3UA and SUA application server/association pairs. The option has a default of OFF.

mtcdvflex

Allows automatic generation and FTP transfer of the daily maintenance measurement report for V-Flex (Voice Mail Router). The option has a default of OFF.

mtchaiq

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report of ANSI41 AnalyzedInformation Query (ANSI41 AIQ). The option has a default of OFF.

mtchatinpq

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report of Any Time Interrogation (ATI) Number Portability (NP) Queries. The option has a default of OFF.

mtchdeir

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for S13 EIR. The option has a default of OFF.

mtcheir

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for Equipment Identity Register (EIR). The option has a default of OFF.

mtchenum

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for ENUM NP. The option has a default of OFF.

mtchgttapath

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for GTT Action per path measurements. The option has a default of OFF.

mtchlnp

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for LNP. The option has a default of OFF.

mtchmap

Allows automatic generation and FTP transfer of scheduled hourly maintenance measurement report per GSM MAP Screening server entry. The option has a default of OFF.

mtchnp

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for INP. The option has a default of OFF.

mtchvflex

Allows automatic generation and FTP transfer of the scheduled hourly maintenance measurement report for V-Flex (Voice Mail Router). The option has a default of OFF.

Output

```
chg-mtc-measopts:mtchgttapath=on:mtcdgttapath=on
```

```
    tekelecstp 10-02-11 14:31:25 EST  EAGLE 44.0.0
    CHG-MTC-MEASOPTS: MASP A - COMPLTD
;
```

```
chg-mtc-measopts:on=mtcdaiq,mtcdatinpq,mtcdeir,
mtcdgttapath,mtcdlink:off=mtcheir,mtchgttapath,mtchlnp
```

```
    tekelecstp 10-02-11 14:31:25 EST  EAGLE 44.0.0
    CHG-MTC-MEASOPTS: MASP A - COMPLTD
;
```

```
chg-mtc-measopts:mtcdsip=on
```

```
    tekelecstp 12-07-26 14:55:58 EST EAGLE 45.0.0
    chg-mtc-measopts:mtcdsip=on
    Command entered at terminal #4.
    CHG-MTC-MEASOPTS: MASP A - COMPLTD.
;
```

```
chg-mtc-measopts:mtchdeir=on:mtcddeir=on
```

```
    tekelecstp 13-03-15 14:55:58 EST EAGLE 45.1.0
    chg-mtc-measopts:mtchdeir=on:mtcddeir=on
    Command entered at terminal #4.
```

```
    CHG-MTC-MEASOPTS: MASP A - COMPLTD
;
```

```
chg-mtc-measopts:mtchenum=on:mtcdenum=off
```

```
    tekelecstp 14-05-18 14:55:58 EST EAGLE 46.1.0
    chg-mtc-measopts:mtchenum=on:mtcdenum=off
    Command entered at terminal #4.
    CHG-MTC-MEASOPTS: MASP A - COMPLTD
;
```

Related Commands

chg-ftp-serv, *chg-meas*, *chg-measopts* , *chg-netopts*, *dlt-ftp-serv*, *ent-ftp-serv*, *rept-ftp-meas*, *rept-meas*, *rept-stat-meas*, *rtrv-ftp-serv*, *rtrv-measopts*, *rtrv-mtc-measopts*, *rtrv-netopts*

chg-netopts

Change Network Options

Use this command to change the Private Virtual Network (PVN) address and PVN subnet mask values for the IP networks and the network address and subnet mask values for the Fast Copy networks used by the system.

Caution: Ensure that the configured addresses do not conflict with the DHCP IP addresses leased to STC cards (see the mode=full report generated by the `rept-stat-card` command). Conflicting IP addresses can adversely affect the EAGLE 5 Integrated Monitoring Support feature.

Parameters

fcna (optional)

Fast Copy Network A. The network address for the Fast Copy A network.

Note: This parameter consists of a classless Inter Domain Routing (Supernet) address with a network prefix of up to 23 bits.

Range:

0.0.2.0-255.255.253.0

The last 9 bits are zero (0) and are reserved for the Host ID.

Default:

No change to the current value

System Default:

172.21.48.00

fcnb (optional)

Fast Copy Network B. The network address for the Fast Copy B network.

Note: This parameter consists of a classless Inter Domain Routing (Supernet) address with a network prefix of up to 23 bits.

Range:

0.0.2.0-255.255.253.0

The last 9 bits are zero (0) and are reserved for the Host ID.

Default:

No change to the current value

System Default:

172.22.48.00

pvn (optional)

Private Virtual Network address for the EAGLE. The value must be valid for a Class B network IP address. The host portion of the PVN address must be 0 based on the PVNMASK.

Range:

128.0.0.0-191.255.255.0

4 numbers separated by dots in the range 128.0.0.0 - 191.255.255.0

Default:

No change to the current value

System Default:

172.20.48.00

pvnmask (optional)

A subnet mask for the EAGLE PVN.

Range:

The value must be valid for a Class B network IP address

- 255.255.0.0
- 255.255.128.0
- 255.255.192.0
- 255.255.224.0
- 255.255.240.0
- 255.255.248.0
- 255.255.252.0
- 255.255.254.0
- 255.255.255.0

Default:

No change to the current value

System Default:

255.255.252.00

Example

```
chg-netopts:pvn=170.120.50.1:pvnmask=255.255.252.0
chg-netopts:fcna=170.120.50.0
chg-netopts:fcnb=172.121.50.0
```

Dependencies

At least one pair of optional parameters must be specified in the command (i.e. pvn and pvnmask or fcna and fcnb).

The pvn and pvnmask IP addresses cannot have the same value.

The pvn and pvnmask parameters must be specified together in the command.

The IP network address specified by the pvn/pvnmask or fcna/fcnb parameters cannot be the same as, overlap, or include any IP network or host addresses assigned to any Ethernet interface for any IP card.

The IP Network address specified by the pvn and pvnmask parameters or the fcna and fcnb parameters cannot have an existing route in the IP Route table.

The E5IS feature must be turned on before this command can be specified.

The value specified for the fcna parameter must be a classless Inter Domain Routing (Supernet) address with a 23-bit network prefix.

The value specified for the fcnb parameter must be a classless Inter Domain Routing (Supernet) address with a 23-bit network prefix.

If the fcmode=fcopy parameter is specified (see the `chg-eisopts` command) for an IPSG or IPGHC GPL, then the fcna and fcnb parameters cannot be specified.

The eiscopy=off parameter must be specified (see the `chg-eisopts` command) before the pvn or pvnmask parameter can be specified.

The same value cannot be specified for the pvn, fcna, and fcnb parameters.

The same value cannot be specified for the fcna and fcnamask parameters.

The same value cannot be specified for the fcnb and fcnbmask parameters.

The value specified for the pvn parameter must be a valid Class B network IP address.

The host portion of the value specified for the pvn parameter must be 0.0.0.0 based on the value specified for the pvnmask parameter.

The value specified for the pvnmask parameter must be a valid subnet IP address.

Notes

Fast Copy Cards

E5-ENET or E5-ENET-B cards running the IPSG or IPGHC GPL are considered to be *FC- capable*. A card running the IPGHC GPL must be in the IS-NR State before the card can be considered *FC- capable*. This restriction does not apply to cards running the IPSG GPL. An *FC- capable* card is considered *FC-enabled* when Fast Copy monitoring is enabled for the respective GPL.

Output

chg-netopts:fcna=170.120.50.0

```
    tekelecstp 10-12-09 16:00:29 EST  EAGLE 43.0.0
    chg-netopts:fcna=170.120.50.0
    Command entered at terminal #4.
    CAUTION: Ensure that configured PVN/FCNA/FCNB addresses do not conflict
    with the DHCP IP addresses leased to STC cards.

    CHG-NETOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-netopts

chg-npp-as

Change an NPP Action Set

Use this command to change a Numbering Plan Processor (NPP) Action Set (AS). An AS is used by the NPP to assist with digit string filtering, conditioning, and encoding for selected EAGLE applications. An AS is a collection of NPP Conditioning Actions (CAs), Service Actions (SAs), and Formatting Actions (FAs).

Parameters

Note: CAs and FAs are processed in the order that they are specified in the comma-separated list.

Note: SAs are processed in order of high-to-low precedence and must be specified in high-to-low precedence order in the comma-separated list. The SAs cannot be duplicated in the list. If multiple SAs have the same precedence, then the SAs are processed in the order in which they appear in the list.

Note: The ac*, dn*, sn*, and cc* values refer to all CAs that begin with *ac*, *dn*, *sn*, or *cc*, respectively.

Note: To change the value of a single CA, FA, or SA within an AS, all of the associated parameters that were specified for that CA, FA, or SA for the AS must be entered.

Note: Refer to *Numbering Plan Processor (NPP) User's Guide* and to the Feature Manual for the feature of interest for more information on provisioning Action Sets and for definitions for the CA, FA, and SA values.

Note: The sa(X)dgts parameters are currently not supported by any feature.

Note: The sa(X)val parameters are used by the TIF Range CgPN Blacklist, TIF Subscriber CgPN Blacklist, and TIF Selective Screening features. Up to 2 numerical values can be specified in each list.

Note: If an sa(X) value is changed or removed, then any associated sa(X)val and sa(X)dgts parameters are set to *none* unless a new value is specified in the command.

Note: Support of a numerical values list (sa(X)val parameter) is specific to the Service and Service Action.

asn (mandatory)

Action set name. This parameter specifies the name of the AS.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

ca (optional)

Conditioning Action list. A comma-separated CA list that can be applied to an incoming digit string. Up to 12 CAs can be specified in the list. The CAs are processed in the order they are specified in the list.

Range:

ac1, ac2, ac3, ac4, ac5, ac6, ac7, ac8, accgpn, accgpn1, accgpn2, accgpn3, accgpn4, accgpn5, accgpn6, accgpn7, accgpn8, acdef, aclac, cc1, cc2, cc3, ccdef, cccgpn, dn1, dn2, dn3, dn4, dn5, dn6, dn7, dn8, dn9, dn11, dn12, dn13, dn14, dn15, dnx, fpfx, ign1, ign2, ign3, ign4, ign5, ign6, ign7, ign8, ign9, ign10, pfxa1, pfxa2, pfxa3, pfxa4, pfxa5, pfxa6, pfxa7, pfxa8, pfxb1, pfxb2, pfxb3, pfxb4, pfxb5, pfxb6, pfxb7, pfxb8, pfxc1, pfxc2, pfxc3, pfxc4, pfxc5, pfxc6, pfxc7, pfxc8, pfxd1, pfxd2, pfxd3, pfxd4, pfxd5, pfxd6, pfxd7, pfxd8, pfxe1, pfxe2, pfxe3, pfxe4, pfxe5, pfxe6, pfxe7, pfxe8, pfxf1, pfxf2, pfxf3, pfxf4, pfxf5, pfxf6, pfxf7, pfxf8, sn1, sn2, sn3, sn4, sn5, sn6, sn7, sn8, sn9, sn10, sn11, sn12, sn13, sn14, sn15, snx, znx

fa (optional)

Formatting Action list. A comma-separated FA list that can be applied to the outgoing digit string. Up to 12 FAs can be specified in the list. The FAs are processed in the order they are specified in the list and cannot be duplicated.

Range:

ac, asd, asdother, cc, dlma, dlmb, dlmc, dlmd, dlme, dlmf, dlmg, dlmh, dlmi, dlmj, dlmk, dlml, dlmm, dlmn, dlmo, dlmp, dn, fpfx, grn, grnother, orig, pfxa, pfxb, pfxc, pfxd, pfxe, pfxf, rn, rnospodn, rnosposn, rnospozn, sn, sp, sfrimsi, vmid, zn, none

none-deletes all FAs from the specified FA list

fatype (optional)

Formatting Action List Type. The Formatting Action list used to format digits in response messages on a per message basis. The lists are updated by values specified for the fa parameter.

Range:

dflt

digits are formatted using the TTROPTS:CDDRA and TTROPTS:CGDRA parameters

fane

Formatting Action list to format digits when neither the SP nor the RN network entity is associated with the DN in the RTDB

fanf

Formatting Action list to format digits when the DN is not present in the RTDB

farn

Formatting Action list to format digits when the RN network entity is associated with the DN in the RTDB

fasp

Formatting Action list to format digits when the SP network entity is associated with the DN in the RTDB

fascrcd

Formatting Action list to format ISUP CdPN digits when CdPN is Screened by SELSCR SA and SA(X)VAL is none.

fascrcg

Formatting Action list to format ISUP CgPN digits when CdPN is Screened by SELSCR SA and SA(X)VAL is none.

ofnai (optional)

Outgoing filter nature of address indicator. The filter nature of address indicator (FNAI) class of the outgoing digit string.

Range:

intl

intl value provisioned in the `chg-npp-serv` command

natl

natl value provisioned in the `chg-npp-serv` command

nai1

nai1 value provisioned in the `chg-npp-serv` command

nai2

nai2 value provisioned in the `chg-npp-serv` command

nai3

nai3 value provisioned in the `chg-npp-serv` command

unkn

unkn value provisioned in the `chg-npp-serv` command

inc

NAI of the incoming digit string

sa (optional)

Service Action list. A comma-separated SA list that can be applied to an incoming digit string. Up to 8 SAs can be specified in the list. The SAs must be specified in high-to-low precedence order in the list, and cannot be duplicated in the list.

Range:

asdlkup, blklstqry, blklstrly, blnfndrls, blrls, cdial, ccncchk, cdpnnp, cgpnasdrqd, cgpngrnrqd, cgpnnp, cgpnrtg, cgpnsvcrqd, crp, fpfxrls, fraudchk, fwdscs, grnlkup, inprtg, lacck, migrate, nocgpnrls, npnrls, nprelay, nprls, nscgpn, nscdpn, pprelay, rtdbtrn, rtdbtsp, rtdbtrnsp, skgtartg, snscgpn

none— Deletes ALL SAs from the Action Set.

sa1dgts (optional)

Service Action 1 digit string. A digit string that can be used with the first SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

none –Deletes digit string for this SA

sa1val (optional)

Service Action 1 numerical values list. A comma-separated numerical values list that can be used with the first SA.

Range:

0 - 65534, none

none —Deletes all numerical values for this SA from list

sa2dgts (optional)

Service Action 2 digit string. A digit string that can be used with the second SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none –Deletes digit string for this SA

sa2val (optional)

Service action 2 numerical values list. A comma-separated numerical values list that can be used with the second SA.

Range:

0 - 65534, none

none—Deletes all numerical values for this SA from list

sa3dgts (optional)

Service Action 3 digit string. A digit string that can be used with the third SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—Deletes digit string for this SA

sa3val (optional)

Service Action 3 numerical values list. A comma-separated numerical values list that can be used with the third SA.

Range:

0 - 65534, none

none-Deletes all numerical values for this SA from list

sa4dgts (optional)

Service Action 4 digit string. A digit string that can be used with the fourth SA.

Range:

1-8 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*

none—Deletes digit string for this SA

sa4val (optional)

Service Action 4 numerical values list. A comma-separated numerical values list that can be used with the fourth SA.

Range:

0 - 65534, none

none—Deletes all numerical values for this SA from list

sa5dgts (optional)

Service Action 5 digit string. A digit string that can be used with the fifth SA.

Range:

1-8 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*

none—Deletes digit string for this SA

sa5val (optional)

Service Action 5 numerical values list. A comma-separated numerical values list that can be used with the fifth SA.

Range:

0 - 65534, none

none —Deletes all numerical values for this SA from list

sa6dgts (optional)

Service Action 6 digit string. A digit string that can be used with the sixth SA.

Range:

1-8 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*

none—Deletes digit string for this SA

sa6val (optional)

Service Action 6 numerical values list. A comma-separated numerical values list that can be used with the sixth SA.

Range:

0 - 65534, none

none—Deletes all numerical values for this SA from list

sa7dgts (optional)

Service Action 7 digit string. A digit string that can be used with the seventh SA.

Range:

1-8 hexadecimal digits, *none*.

Valid digits are *0-9, a-f, A-F*

none—Deletes digit string for this SA

sa7val (optional)

Service Action 7 numerical values list. A comma-separated numerical values list that can be used with the seventh SA.

Range:

0 - 65534, none

none—Deletes all numerical values for this SA from list

sa8dgts (optional)

Service Action 8 digit string. A digit string that can be used with the eighth SA.

Range:

1-8 hexadecimal digits, *none*.

Valid digits are *0-9, a-f, A-F*

none—Deletes digit string for this SA

sa8val (optional)

Service Action 8 numerical values list. A comma-separated numerical values list that can be used with the eighth SA.

Range:

0 - 65534, none

none—Deletes all numerical values for this SA from list

Example

```
chg-npp-as:asn=asn7:ca=ign1,ac1,cc3,sn2:fa=cc,sn,ac
chg-npp-as:asn=asn7:ca=cc1,dn1:fa=cc,dn
chg-npp-as:asn=asn1:ca=znx:fa=asd:sa=cgpnasdrqd
chg-npp-as:asn=asn8:ca=cc2,dnx:fa=cc,rnospodn
chg-npp-as:asn=asn9:sa=migrate,asdlkup
chg-npp-as:asn=asn6:ca=znx:fa=zn:sa=nscdpn,nscgpn
chg-npp-as:asn=set10:sa=blrls,blnfndrls,nscgpn:sa1val=101,102:sa2val=77,88
```

```
chg-npp-as:asn=asn9:ca=znx:sa=inprtg=skgtartg
chg-npp-as:asn=set32:ca=ccdef,accgpn2,snx
chg-npp-as:asn=asn1:fa=cc,ac,grn,sn:fatype=fane
chg-npp-as:asn=asn1:fa=none:fatype=fasp
chg-npp-as:asn=tif5557:fa=dlma,zn:fatype=fascrd
chg-npp-as:asn=tif1:fa=dlma,zn:sa1va1=10,none:sa1dgt=ff:fatype=fascrcd
```

Dependencies

One of the following combinations of Conditioning Actions must be specified:

- znx
- cc*, dn*
- cc*, ac*, sn*

The existing or new Formatting Actions specified for the AS must contain the corresponding Formatting Action that a Conditioning Action will populate or load.

The AS must contain a CA that can load or populate all the Formatting Action lists configured in the AS.

The CAs within an AS cannot condition more than 32 digits.

The AS cannot contain CAs that load or populate the same FA.

Conditioning Actions must be specified for inclusion in an individual Action Set using valid number conditioning rules:

- If the ZNX Conditioning Action is specified, then the CC*, AC*, SN*, DN*, and DNX Conditioning Actions cannot be specified.
- If the CC* AND DN* or DNX Conditioning Actions are specified, then the AC*, SN*, SNX, and ZNX Conditioning Actions cannot be specified.
- If the CC*, AC*, AND SN* or SNX Conditioning Actions are specified, then the DN*, DNX, and ZNX Conditioning Actions cannot be specified.

The AS cannot contain the following combinations of FAs:

- If the DN Formatting Action is specified, then the AC, SN, and ZN Formatting Actions cannot be specified.
- If the ZN Formatting Action is specified, then the AC, CC, SN, and DN Formatting Actions cannot be specified.
- If the SN Formatting Action is specified, then the ZN and DN Formatting Actions cannot be specified.
- If the RNOSPODN, RNOSPOSN, or RNOSPOZN Formatting Action is specified, then the RN, SP, SN, DN, and ZN Formatting Actions cannot be specified.
- The RNOSPODN, RNOSPOSN, and RNOSPOZN Formatting Actions cannot be specified together.

Note: This rule is applicable for FA lists FANE, FANF, FARN, and FASP as well.

If specified, the FPFX CA must be the first value (*fpfx*) in the ca value list.

If specified, the ZNX, SNX, or DNX CA must be the final value (*znx*, *snx*, or *dnx*) in the ca value list.

If rules that reference an AS exist, then the AS cannot be changed.

The fa parameter must be specified before the fatype parameter can be specified.

The AS specified by the asn parameter must already exist.

If no Service Actions are provisioned, then only a value of *none* can be specified for the sa1val parameter.

If less than 2 Service Actions are provisioned, then only a value of *none* can be specified for the sa2val parameter.

If less than 3 Service Actions are provisioned, then only a value of *none* can be specified for the sa3val parameter.

If less than 4 Service Actions are provisioned, then only a value of *none* can be specified for the sa4val parameter.

If less than 5 Service Actions are provisioned, then only a value of *none* can be specified for the sa5val parameter.

If less than 6 Service Actions are provisioned, then only a value of *none* can be specified for the sa6val parameter.

If less than 7 Service Actions are provisioned, then only a value of *none* can be specified for the sa7val parameter.

If less than 8 Service Actions are provisioned, then only a value of *none* can be specified for the sa8val parameter.

If no Service Actions are provisioned, then only a value of *none* can be specified for the sa1dgts parameter.

If less than 2 Service Actions are provisioned, then only a value of *none* can be specified for the sa2dgts parameter.

If less than 3 Service Actions are provisioned, then only a value of *none* can be specified for the sa3dgts parameter.

If less than 4 Service Actions are provisioned, then only a value of *none* can be specified for the sa4dgts parameter.

If less than 5 Service Actions are provisioned, then only a value of *none* can be specified for the sa5dgts parameter.

If less than 6 Service Actions are provisioned, then only a value of *none* can be specified for the sa6dgts parameter.

If less than 7 Service Actions are provisioned, then only a value of *none* can be specified for the sa7dgts parameter.

If less than 8 Service Actions are provisioned, then only a value of *none* can be specified for the sa8dgts parameter.

Notes

None.

Output

```
chg-npp-as:asn=asn7:ca=cc1,dn1:fa=cc,dn
```

```
    tekelecstp 09-08-18 13:57:06 EST  EAGLE 41.1.0
    NPP-AS   table is (5 of 1024) 1% full.

    CHG-NPP-AS: MASP A - COMPLTD
;
```

Related Commands

ent-npp-as, *dlt-npp-as*, *rtrv-npp-as*

chg-npp-serv

Change NPP Service Data

Use this command to change a Numbering Plan Processor (NPP) service entry. An NPP service is any EAGLE feature that uses the NPP to assist with the processing of digit strings.

Note: This command can be used to enter values for the dlma - dlmc parameters. However, if these parameters have a value other than *none* in the `tifopts:dlma - dlmc` or `ttropts:dlma - dlmc` commands, then those values will overwrite the values that were entered for the parameters using the `chg-npp-serv` command for the TIF and IDPR services, respectively.

Note:

- The intl, natl, nai1, nai2, nai3, and unkn parameters are used to change the FNAI class to NAI mappings for a service.
- A value of *incoming* must be specified for the `ttropts:snai` parameter before the intl, natl, nai1, nai2, nai3, and unkn parameters can be changed to non-default values for the IDPRCDPN(X) service.
- A value of *incoming* must be specified for the `ttropts:cgsnai` parameter before the intl, natl, nai1, nai2, nai3, and unkn parameters can be changed to non-default values for the IDPRCGPN service.
- A value of *nai* must be specified for the `is41smsopts:mosmsnai` parameter before the intl, natl, nai1, nai2, nai3, and unkn parameters can be changed to non-default values for the MOSMSICDPN service.
- A value of *nai* must be specified for the `gsmsmsopts:mosmsnai` parameter before the intl, natl, nai1, nai2, nai3, and unkn parameters can be changed to non-default values for the MOSMSGCDPN service.

Parameters

srvn (mandatory)

Service name. The name of the NPP Service.

Range:

nppt

NPP Test Service

idprcdpn

IDPRCDPN Service

idprcgpn
IDPRCGPN Service

tif
TIF Service

tif2
TIF2 Service

tif3
TIF3 Service

mosmsicgpn
MOSMSICGPN Service

mosmsicdpn
MOSMSICDPN Service

mosmsgcgpn
MOSMSGCGPN Service

mosmsgcdpn
MOSMSGCDPN Service

iarcdpn
IARCDPN Service

iarcgpn
IARCGPN Service

idprcdpn2
IDPRCDPN2 Service

idprcdpn3
IDPRCDPN3 Service

idprcdpn4
IDPRCDPN4 Service

tifcgpn
TIFCGPN Service

tifcgpn2
TIFCGPN2 Service

tifcgpn3
TIFCGPN3 Service

dlma (optional)
A delimiter that is used to format the outgoing dialed number.

Range:
1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmb (optional)

A delimiter that is used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmc (optional)

A delimiter that is used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmd (optional)

A delimiter that is used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none —deletes the current value of the delimiter

Default:

none

dlme (optional)

This parameter specifies a delimiter that is used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmf (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmg (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmh (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmi (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmj (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none —deletes the current value of the delimiter

Default:

none

dlmk (optional)

A delimiter used to format the outgoing dialed number.

Range:

1 - 16, none

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none —deletes the current value of the delimiter

Default:

none

dlml (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none —deletes the current value of the delimiter

Default:

none

dlmm (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none —deletes the current value of the delimiter

Default:

none

dlmn (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmo (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none—deletes the current value of the delimiter

Default:

none

dlmp (optional)

A delimiter used to format the outgoing dialed number.

Range:

1-16 digits, *none*

1-16 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

none —deletes the current value of the delimiter

Default:

none

intl (optional)

International. This parameter maps an International FNAI class to the NAI of the incoming digit string.

Range:

0 - 255, none

none—A rule with an FNAI or OFNAI of *intl* cannot be provisioned

Default:

No change to the current value

System Default:

1 —IARCDPN, IARCGPN services and all MOSMS services

4 —NPPT, TIF, TIF2, TIF3, IDPRCDPN, IDPRCDPN2, IDPRCDPN3, IDPRCDPN4 and IDPRCGPN services

nai1 (optional)

This parameter maps an NAI-1 FNAI class to the NAI of the incoming digit string.

Range:

0 - 255, none

none—A rule with an FNAI or OFNAI of *nai1* cannot be provisioned

Default:

No change to the current value

System Default:

none

nai2 (optional)

This parameter maps an NAI-2 FNAI class to the NAI of the incoming digit string.

Range:

0 - 255, none

none—A rule with an FNAI or OFNAI of *nai2* cannot be provisioned

Default:

No change to the current value

System Default:

none

nai3 (optional)

This parameter maps an NAI-3 FNAI class to the NAI of the incoming digit string.

Range:

0 - 255, none

none—A rule with an FNAI or OFNAI of *nai3* cannot be provisioned

Default:

No change to the current value

System Default:

none

natl (optional)

This parameter maps a National FNAI class to the NAI of the incoming digit string.

Range:

0 - 255, none

none—A rule with an FNAI or OFNAI of *natl* cannot be provisioned

Default:

No change to the current value

System Default:

0

IARCDPN, IARCGPN, MOSMSICDPN and MOSMSICGPN services

System Default:

2—MOSMSGCDPN and MOSMSGCGPN services

3—NPPT, TIF, TIF2, TIF3, IDPRCDPN, IDPRCDPN2, IDPRCDPN3, IDPRCDPN4, and IDPRCGPN services

status (optional)

This parameter specifies whether the service can be processed by the NPP.

Range:

off

The service cannot be processed by the NPP.

on

The service can be processed by the NPP.

The status=on parameter must be specified before a service can be processed by the NPP.

Default:

off

unkn (optional)

This parameter maps an Unknown FNAI class to the NAI of the incoming digit string.

Range:

0 - 255

Default:

No change to the current value

System Default:

0—NPPT, TIF, TIF2, TIF3, IDPRCDPN, IDPRCDPN2, IDPRCDPN3, IDPRCDPN4, IDPRCGPN, MOSMSGCDPN and MOSMSGCGPN services

2—IARCDPN, IARCGPN, MOSMSICDPN and MOSMSICGPN services

Example

```
chg-npp-serv:srvn=nppt:status=on
chg-npp-serv:srvn=nppt:status=on:nai3=6:intl=15:natl=50
chg-npp-serv:srvn=nppt:status=on:nai3=6:intl=15
chg-npp-serv:srvn=tif:dlma=1234567890abcdef:
dlmb=aaaaabbbbbcccccd:dlmc=102030405
```

Dependencies

The service specified by the srvn parameter must have associated rules before the status=on parameter can be specified.

If the service specified by the srvn parameter references any NPP rules, then the intl, natl, nai1, nai2, and nai3 parameters cannot have a value of *none*.

Output

```
chg-npp-serv:srvn=nppt:status=on:nai3=6:intl=15:natl=50
```

```
    tekelecstp 08-05-17 15:55:35 EAGLE  39.0.0
    chg-npp-serv:srvn=nppt:status=on:nai3=6:intl=15:natl=50
    CHG-NPP-SERV: MASP A - COMPLTD
;
```

Related Commands

chg-npp-srs, *dlt-npp-srs*, *ent-npp-srs*, *rtrv-npp-serv*, *rtrv-npp-srs*

chg-npp-srs

Change an NPP Service Rule Set

Use this command to change the Action Set (AS) that is associated with a Numbering Plan Processor (NPP) Rule. An NPP Rule is an association between a single NPP filter and an AS.

Note: The contents of the AS are configured using the `ent/chg-npp-as` commands.

Parameters

fdl (mandatory)

Filter digit length. The number of digits on the incoming digit string that is filtered by the NPP.

Range:

*1 - 32, **

*—multiple lengths of digit strings can be filtered

fnai (mandatory)

Filter nature of address indicator. The filter Nature of Address Indicator (NAI) class.

Range:

intl

filter messages with NAI=INTL

natl

filter messages with NAI=NATL

nai1

filter messages with NAI=NAI1

nai2

filter messages with NAI=NAI2

nai3

filter messages with NAI=NAI3

unkn

filter messages with NAI=UNKN

Note: The `chg-npp-serv` command is used to assign values to the various FNAI classes.

fpfx (mandatory)

Filter prefix. The prefix used to filter incoming digit strings.

Range:

1 - 16, *, *?*

1 - 16 hexadecimal digits inclusive of single digit wildcard (?); or wildcard (*) matching the entire digit string; valid digits are *?, *, 0-9, a-f, A-F*.

srvn (mandatory)

The name of the NPP Service.

Range:

nppt

NPP Test Service

idprcdpn

IDPRCDPN Service

idprcgpn

IDPRCGPN Service

tif

TIF Service

tif2

TIF2 Service

tif3

TIF3 Service

mosmsicgpn

MOSMSICGPN Service

mosmsicdpn

MOSMSICDPN Service

mosmsgcgpn

MOSMSGCGPN Service

mosmsgcdpn

MOSMSGCDPN Service

iarcdpn

IARCDPN Service

iarcgpn
IARCGPN Service

idprcdpn2
IDPRCDPN2 Service

idprcdpn3
IDPRCDPN3 Service

idprcdpn4
IDPRCDPN4 Service

tifcgpn
TIFCGPN Service

tifcgpn2
TIFCGPN2 Service

tifcgpn3
TIFCGPN3 Service

asn (optional)
Action set name.

Range:
ayyyyyyyyy
1 alphabetic character followed by up to 9 alphanumeric characters

Default:
No change to the current value

invkserv (optional)
Invoke service name. The name of the NPP service to be invoked.

Note: As of Release 44.0, only the *tifcgpn*, *tifcgpn2*, *tifcgpn3*, and *none* values are supported.

Range:
nppt
NPP Test Service

idprcdpn
IDPRCDPN Service

idprcgpn
IDPRCGPN Service

tif
TIF Service

tif2
TIF2 Service

tif3
TIF3 Service

mosmsicgpn
MOSMSICGPN Service

mosmsicdpn
MOSMSICDPN Service

mosmsgcgpn
MOSMSGCGPN Service

mosmsgcdpn
MOSMSGCDPN Service

iarcdpn
IARCDPN Service

iarcgpn
IARCGPN Service

idprcdpn2
IDPRCDPN2 Service

idprcdpn3
IDPRCDPN3 Service

idprcdpn4
IDPRCDPN4

tifcgpn
TIFCGPN

tifcgpn2
TIFCGPN2

tifcgpn3
TIFCGPN3

none
no additional NPP services are invoked

Default:
No change to the current value

System Default:
none

Example

```
chg-npp-srs:srvn=nppt:fpfx=a:fdl=16:fnai=intl:asn=asn3
chg-npp-srs:srvn=tif:fnai=intl:fpfx=9090:fdl=*:asn=set1:invkserv=tifcgpn
```

```
chg-npp-srs:srvn=idprcdpn4:fpfx=91:fnai=intl:asn=asn9:fdl=12
```

Dependencies

The AS specified by the asn parameter must already exist in the NPP AS table.

The AS specified by the asn parameter cannot contain Conditioning Actions that are not supported by the service specified by the srvn parameter.

The AS specified by the asn parameter cannot contain Service Actions that are not supported by the service specified by the srvn parameter.

The AS specified by the asn parameter cannot contain Formatting Actions that are not supported by the service specified by the srvn parameter.

The AS specified by the asn parameter cannot contain Service Actions that do not conform to the precedence order that is supported by the service specified by the srvn parameter.

The Conditioning Actions in the AS specified by the asn parameter cannot condition more digits than allowed by the fdl parameter.

If the fdl=* parameter is specified, then the AS specified by the asn parameter must contain Conditioning Actions that support variable digit string conditioning.

The NPP Rule that is specified by the fdl, fnai, fpfx, and srvn parameters must already exist in the NPP Rule table.

All of the features associated with the Service Actions in the AS specified by the asn parameter must be turned on before the AS can be used.

The Service Actions in the AS specified by the asn parameter cannot violate mutual exclusivity rules defined by the service specified by the srvn parameter. Refer to the Feature Manual for the feature of interest for additional information.

The AS specified by the asn parameter cannot contain an OFNAI class with a value of *none*.

At least one TIF feature must be turned on before an AS containing the CDIAL Service Action can be specified as a value for the asn parameter.

The TIF SCS Forwarding feature must be turned on before an AS containing the FWDSCS Service Action can be specified as a value for the asn parameter.

The TIF Simple Number Substitution feature must be turned on before an AS containing the SNSCGPN Service Action can be specified as a value for the asn parameter.

The TIF Number Portability feature must be turned on before an AS containing the CRP, NPNRLS, CGPNNPRQD, NPRELAY, or NPRLS Service Action can be specified as a value for the asn parameter.

The IDPR ASD feature must be enabled before an AS containing the ASDLKUP or CPGNASDRQD Service Action can be specified as a value for the asn parameter with the IDPRCDPN(X) or IDPRCGPN service.

The IDPR GRN feature must be enabled before an AS containing the GRNLKUP or CGPNGRNRQD Service Action can be specified as a value for the asn parameter with the IDPRCDPN(X) or IDPRCGPN service.

An AS containing the ASDLKUP and CGPNASDRQD Service Actions cannot be specified as a value for the asn parameter.

An AS containing the GRNLKUP and CGPNGRNRQD Service Actions cannot be specified as a value for the asn parameter.

If a value of *tif*, *tif2*, or *tif3* is specified for the servn parameter, then the TIF ASD feature must be enabled before an AS containing the ASDLKUP or CGPNASDRQD Service Action can be specified as value for the asn parameter.

The TIF GRN feature must be enabled before an AS containing the GRNLKUP or CGPNGRNRQD Service Actions can be specified as a value for the asn parameter with the TIF services.

If a value of *mosmsgcdpn*, *mosmsgcgpn*, *mosmsicdpn*, or *mosmsicgpn* is specified for the servn parameter, then the MO SMS ASD feature must be enabled before an AS containing the ASDLKUP or CGPNASDRQD Service Action can be specified as a value for the asn parameter.

If a value of *mosmsgcdpn*, *mosmsgcgpn*, *mosmsicdpn*, or *mosmsicgpn* is specified for the servn parameter, then the MO SMS GRN feature must be enabled before an AS containing the CGPNGRNRQD or GRNLKUP Service Action can be specified as a value for the asn parameter.

If a rule contains an FPFX with a wildcard value, then the rule cannot also contain an AS where the FPFX Condtioning Action is specified.

The TIF Number Substitution feature must be enabled before an AS containing the NSCGPN or NSCDPN Service Action can be specified as a value for the asn parameter.

The AS specified by the asn parameter cannot contain both the NSCGPN and SNSCGPN Service Actions.

If a value of *mosmsgcdpn* or *mosmsgcgpn* is specified for the servn parameter, then the Prepaid SMS Intercept Ph1 feature must be enabled before an AS containing the PPRELAY Service Action can be specified as a value for the asn parameter.

If the servn=mosmsgcgpn parameter is specified, then the Portability Check for MO SMS feature must be enabled before an AS containing the FRAUDCHK Service Action can be specified as a value for the asn parameter.

If the servn=mosmsicdpn parameter is specified, then the MO SMS IS41-to-GSM Migration feature must be enabled before an AS containing the MIGRATE Service Action can be specified as a value for the asn parameter.

If the servn=mosmsicdpn parameter is specified, then the MO-based IS41 SMS NP feature must be enabled before an AS containing the CDPNNP Service Action can be specified as a value for the asn parameter.

If the servn=mosmsgcdpn parameter is specified, then the MO-based GSM SMS NP feature must be enabled before an AS containng the CDPNNP Service Action can be specified as a value for the asn parameter.

The IDP A-Party Routing feature must be enabled before the AS specified by the asn parameter can contain the CGPNRTG Service Action.

The IDP A-Party Blacklist feature must be enabled before the AS specified by the asn parameter can contain the BLKLSTQRY or BLKLSTRLY Service Action.

If the AS specified by the asn parameter contains the BLKLSTQRY Service Action, then the AS cannot contain any other Service Actions.

If the srvn=idprcdpn(X) parameter is specified, then the Action Set specified by the asn parameter cannot contain both the ACCGPN* and CCCGPN Conditioning Actions.

If a value of *iarcdpn* or *iarcgpn* is specified for the servn parameter, then the IAR Base feature must be enabled before an AS containing the CCNCCHK, CDIAL, or CPGNSRVRQQD Service Action can be specified as a value for the asn parameter.

If a value of *iarcdpn* or *iarcgpn* is specified for the servn parameter, then the IAR NP feature must be enabled before an AS containing the CDPNNP or CGPNNP Service Action can be specified as a value for the asn parameter.

If a value of *iarcdpn* or *iarcgpn* is specified for the servn parameter, then the IAR ASD feature must be enabled before an AS containing the ASDLKUP or CGPNASDRQD Service Action can be specified as a value for the asn parameter.

If a value of *iarcdpn* or *iarcgpn* is specified for the servn parameter, then the IAR GRN feature must be enabled before an AS containing the GRNLKUP or CGPNGRNRQD Service Action can be specified as a value for the asn parameter.

If the NPP Service specified by the srvn parameter does not support invoking another NPP Service, then only a value of *none* can be specified for the invkserv parameter.

If the NPP Service specified by the srvn parameter can invoke the TIFCGPN NPP Service, then only a value of *tifcgpn* or *none* can be specified for the invkserv parameter.

If the NPP Service specified by the srvn parameter can invoke the TIFCGPN3 NPP Service, then only a value of *tifcgpn3* or *none* can be specified for the invkserv parameter.

If the AS specified by the asn parameter contains the ASDOTHER or GRNOTHER Formatting Action, then the invkserv=none parameter cannot be specified.

If the AS specified by the asn parameter contains the CGPNASDRQD, CGPNGRNQD, CGPNSVCRQD, NSCGPN, or SNSCGPN Service Action, then only a value of *none* can be specified for the invkserv parameter.

The TIF Range CgPN Blacklist feature must be enabled before:

- an AS containing the NOCGPNRLS Service Action can be specified as a value for the asn parameter and a value of *tif, tif2*, or *tif3* can be specified for the srvn parameter
- an AS containing the FPFXRLS Service Action can be specified as a value for the asn parameter and a value of *tifcgpn, tifcgnp2*, or *tifcgpn3* can be specified for the srvn parameter

If the AS specified by the asn parameter contains the FPFXRLS Service Action, then no other Service Action can be specified in the AS.

If the AS specified by the asn parameter contains the FPFXRLS Service Action, then the AS must also contain a numerical values list with 2 numerical values.

If the AS specified by the asn parameter contains the FPFXRLS Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127.

If the AS specified by the asn parameter contains the NOCGPNRLS Service Action, then the AS must also contain a numerical values list with 2 numerical values.

If the AS specified by the asn parameter contains the NOCGPNRLS Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127.

The TIF Subscr CgPN Blacklist feature must be enabled before an AS containing the BLRLS or BLNFNDRLS Service Action can be specified as a value for the asn parameter, and a value of *tifcgpn, tifcgpn2*, or *tifcgpn3* can be specified as a value for the srvn parameter.

If the AS specified by the asn parameter contains the BLRLS Service Action, then the AS must also contain a numerical values list with 2 numerical values.

If the AS specified by the asn parameter contains the BLRLS Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127.

If the AS specified by the asn parameter contains the BLNFNDRLS Service Action, then the AS must also contain a numerical values list with 2 numerical values.

If the AS specified by the asn parameter contains the BLNFNDRLS Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127.

If the Service specified by the srvn parameter does not support a numerical value list for the first Service Action in the AS specified by the asn parameter, then the sa1val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the second Service Action in the AS specified by the asn parameter, then the sa2val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the third Service Action in the AS specified by the asn parameter, then the sa3val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the fourth Service Action in the AS specified by the asn parameter, then the sa4val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the fifth Service Action in the AS specified by the asn parameter, then the sa5val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the sixth Service Action in the AS specified by the asn parameter, then the sa6val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the seventh Service Action in the AS specified by the asn parameter, then the sa7val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the eighth Service Action in the AS specified by the asn parameter, then the sa8val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the first Service Action in the AS specified by the asn parameter, then the sa1dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the second Service Action in the AS specified by the asn parameter, then the sa2dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the third Service Action in the AS specified by the asn parameter, then the sa3dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the fourth Service Action in the AS specified by the asn parameter, then the sa4dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the fifth Service Action in the AS specified by the asn parameter, then the sa5dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the sixth Service Action in the AS specified by the asn parameter, then the sa6dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the seventh Service Action in the AS specified by the asn parameter, then the sa7dgts parameter in the AS can only have a value of none.

If the NPP Service specified by the srvn parameter can invoke the TIFCGPN2 NPP Service, then only a value of *tifcgpn2* or *none* can be specified for the invkserv parameter.

If the Service specified by the srvn parameter does not support a digit string for the eighth Service Action in the AS specified by the asn parameter, then the sa8dgts parameter in the AS can only have a value of *none*.

At least one optional parameter must be specified.

A new value must be specified for the asn or invkserv parameter.

The TIF Selective Screening feature must be enabled before an AS containing the SELSCR, FPFXRLS, BLRLS, or BLNFNDRLS Service Action can be specified as a value for the **asn** parameter, and a value of *tif*, *tif2*, or *tif3* can be specified as a value for the **srvn** parameter.

If the AS specified by the **asn** parameter contains the SELSCR Service Action, then no TIF Number Substitution (NSCGPN or NSCDPN) Service Action can be specified in the AS.

If the AS specified by the **asn** parameter contains the SELSCR Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127 or none.

Only one call type can be specified for the SELSCR Service Action in the TIF NPP service rule. If the AS specified by the **asn** parameter contains the SELSCR Service Action, the corresponding SA Digit String specified must be between none or 1-FF.

The CGPNSVCRQD and NPNRLS Service Actions cannot exist within the same Action Set.

Notes

None.

Output

```
chg-npp-srs:srvn=tif:fnai=intl:fpfx=9090:fdl=*:asn=set1
```

```
    tekelecstp 09-04-05 15:45:28 EST  EAGLE 41.0.0
    NPP-SRS  table is (1 of 8192) 1% full.
    CHG-NPP-SRS: MASP A - COMPLTD
;
```

Related Commands

chg-npp-as, *dlt-npp-srs*, *ent-npp-as*, *ent-npp-srs*, *rtrv-npp-as*, *rtrv-npp-srs*

chg-pid

Change Password ID

Use this command to change your password.

When this command is executed, you are prompted to enter your current password. This prevents anyone but you from changing your password.

Parameters

This command has no parameters.

Example

```
chg-pid
```

Dependencies

This command cannot be entered from a terminal that is configured as an OAP terminal.

The password can contain up to 12 characters.

The password must contain at least the number of characters specified by the minlen parameter in the `chg-secu-dflt` command.

The password must contain at least the number of alphabetic characters specified by the alpha parameter in the `chg-secu-dflt` command.

The password must contain at least the number of numeric characters specified by the num parameter in the `chg-secu-dflt` command.

The password must contain at least the number of punctuation characters specified by the punc parameter in the `chg-secu-dflt` command.

The password cannot contain the associated User ID.

The number of days specified by the minintrvl parameter in the `chg-secu-dflt` command must pass between password changes.

The password must contain fewer duplicate characters from the existing password than the number specified by the pchreuse parameter in the `chg-secu-dflt` command.

The password cannot be the same as a previous password if the limit in the password history, specified by the preuse parameter of the `chg-secu-dflt` command, has been reached.

The current password cannot be entered as the new password.

The OA&M IP Security Enhancements feature must be turned on before passwords can be created or modified from a telnet terminal (terminal IDs 17-40).

The value entered for password verification must match the value entered for the password.

Notes

When a new system is shipped, both the user ID and password are set to the system. Change these immediately to ensure system security.

Output

chg-pid

```
    rlghncxa03w 10-03-07 09:10:41 EST  EAGLE 42.0.0
    CHG-PID: MASP A - COMPLTD
;
```

Enter Old Password : <old password> Enter New Password : <new password>

```
If secu-dflt parameter preuse is non zero and pchreuse is non zero:
    New password must contain:
      - between 8 and 12 characters
      - at least 1 alphabetic character(s) ('a'-'z')
      - at least 1 numeric character(s) ('0'-'9')
      - at least 1 punctuation character(s) (e.g. $%@#)
    New password must:
      - be unique from the old password
      - be unique from the last 2 historical password(s)
      - not reuse more than 4 character(s) from the old password

If secu-dflt parameter preuse is non zero and pchreuse is zero:
    New password must contain:
      - between 8 and 12 characters
      - at least 1 alphabetic character(s) ('a'-'z')
      - at least 1 numeric character(s) ('0'-'9')
      - at least 1 punctuation character(s) (e.g. $%@#)
    New password must:
      - be unique from the old password
      - be unique from the last 2 historical password(s)

If secu-dflt parameter preuse is zero and pchreuse is non zero:
    New password must contain:
      - between 8 and 12 characters
      - at least 1 alphabetic character(s) ('a'-'z')
      - at least 1 numeric character(s) ('0'-'9')
      - at least 1 punctuation character(s) (e.g. $%@#)
    New password must:
      - be unique from the old password
      - not reuse more than 4 character(s) from the old password

If secu-dflt parameter preuse is zero and pchreuse is zero:
    New password must contain:
      - between 8 and 12 characters
      - at least 1 alphabetic character(s) ('a'-'z')
      - at least 1 numeric character(s) ('0'-'9')
      - at least 1 punctuation character(s) (e.g. $%@#)
    New password must:
      - be unique from the old password
```

Related Commands

act-user, *chg-secu-dflt*, *chg-user*, *dact-user*, *dlt-user*, *ent-user*, *login*, *logout*, *rept-stat-user*, *rtrv-secu-dflt*, *rtrv-secu-user*, *rtrv-user*

chg-ppsopts

Change Prepaid SMS Options

Use this command to enter Prepaid Short Message Service options (PPSOPTS) in the database. This command updates the PPSOPTS Table with entries that correspond to Intelligent Network (IN) platforms.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Note: If the CgPA GTA matches the value of the gta, gta1, gta2, or gta3 parameter during message screening, then the message falls through to GTT instead of receiving PPSMS screening.

bpartychk (optional)

MO SMS B-Party PPSMS Check. This parameter specifies whether a prepaid check on the B-Party is performed on an incoming MO SMS message.

Range:

off

Prepaid Check on B-Party is not performed

on

Prepaid Check on B-Party is performed

Default:

No change to current value

System Default:

off

gta (optional)

Global title address. The entity address for an IN platform. Determines whether an incoming message receives PPSMS screening.

Range:

1-15 digits

Valid digits are *0-9, A-F, a-f*.

Default:

No change to current value

gta1 (optional)

Global title address. The entity address for an IN platform. Determines whether an incoming message receives PPSMS screening.

Range:

1-15 digits

Valid digits are *0-9, A-F, a-f*

Default:

No change to current value.

gta2 (optional)

Global title address. The entity address for an IN platform. Determines whether an incoming message receives PPSMS screening.

Range:

1-15 digits

Valid digits are *0-9, A-F, a-f*

Default:

No change to current value.

gta3 (optional)

Global title address. This parameter specifies the entity address for an IN platform. Determines whether an incoming message receives PPSMS screening.

Range:

1-15 digits

Valid digits are *0-9, A-F, a-f*

Default:

No change to current value.

ngta (optional)

New global title address. An entity address that replaces an existing entity address for an IN platform.

Range:1-15 digits, *none*

Valid digits are *0-9, A-F, a-f*

none —Deletes the current value

Default:

No change to current value.

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm).*

Synonym:

pca

Range:

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

p-, 000-255, none

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid for *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

Default:

No change to current value.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

Enter *none* to delete the point code.

The point code *0-000-0* is not a valid point code.

Default:

No change to current value.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

Enter *none* to delete the point code.

Default:

No change to current value.

ppt (optional)

Prepaid portability type. The IN platform where the incoming message is sent.

Range:

1 - 32

ri (optional)

Routing indicator. The IN platform routing indicator.

Range:

gt

Routes on the GT value.

ssn

Routes on the SSN value.

Default:

No change to current value.

setid (optional)

Set ID. The MAP set ID (if the ri=ssn parameter is specified) or the MRN set ID (if the ri=gt parameter is specified) that is used by a loadsharing IN platform.

Note: If the FGTTLS feature is not enabled, lookup is performed in the default set of the MAP table or MRN table.

Range:

1 - 36000, none, dflt

1 - 36000, none, dflt —MAP table

1 - 3000 —MRN table

none —Lookup is not performed. This value applies only to the MRN table.

dflt —Lookup is performed in the default MAP set or MRN set.

Default:

No change to current value.

ssn (optional)

Subsystem number

Range:

2 - 255

Default:

none

Example

This command provisions a single GTA in the PPSOPTS table.

```
chg-ppsopts:gta=1234
```

This command provisions four GTAs in the PPSOPTS table.

```
chg-ppsopts:gta=1101:gta1=1102:gta2=1103:gta3=1104
```

This command replaces an existing GTA with a new GTA.

```
chg-ppsopts:gta=1101:ngta=4567
```

This command deletes a specified GTA from the PPSOPTS table.

```
chg-ppsopts:gta=1102:ngta=none
```

This command deletes the *pc*, *ri*, and *setid* values for a specified IN platform.

```
chg-ppsopts:ppt=1:pci=none
```

This example provisions a loadsharing set for a specified IN platform.

```
chg-ppsopts:ppt=2:setid=2
```

This example provisions point code, routing indicator, and set ID values for a specified IN platform and loadsharing set.

```
chg-ppsopts:ppt=1:pci=1-1-1:ri=gt:setid=1
```

This example provisions the prepaid check on B-Party.

```
chg-ppsopts:bpartychk=on
```

This example provisions ANSI point code, routing indicator, and set ID values for a specified IN platform and loadsharing set.

```
chg-ppsopts:ppt=2:pca=2-2-1:ri=ssn:setid=4
```

Dependencies

At least one parameter must be specified.

The PPSMS, IDP A-Party Routing, or IDP Service Key Routing feature must be enabled and turned on before this command can be entered.

If the ngta parameter is specified, then the gta parameter must be specified.

The gta, gta1, gta2, and gta3 parameters cannot have a value of *none*.

If the ngta parameter is specified, the gta parameter value must already exist in the database.

The ngta parameter value cannot already exist in the database.

The value specified for the pc/pca/pci/pcn parameter cannot be the same as the STP True Point Code.

The value specified for the pc/pca/pci/pcn parameter cannot be the same as the STP Capability Point Code.

If the pc, ri, ssn, or setid parameter is specified, then the ppt parameter must be specified.

If the gta1, gta2, or gta3 parameter is specified, then the ngta parameter cannot be specified.

The Flexible GTT Load Sharing (FGTTLS) feature must be enabled before the setid parameter can be specified.

If the ri=gt parameter is specified, then the value of the setid parameter cannot exceed the value of the maximum MRN set ID.

The value specified for the pc/pca/pci/pcn parameter must already exist in the Routing Indicator table.

The value of the gta, gta1, gta2, or gta3 parameter cannot already exist in the database unless the ngta parameter is specified.

The pc/pca/pci/pcn parameter and the ri parameter must be specified together in the command, or a value of *none* must be specified for the pc/pca/pci/pcn parameter.

The gta, gta1, gta2, and gta3 parameters cannot have the same value.

A maximum of 32 GTA values (for 32 IN platforms) can be defined in the database.

If the Flexible GTT Load Sharing (FGTTLS) feature is enabled, and if the ri=ssn parameter is specified, then the values specified for the pc/pca/pci/pcn and ssn parameters must exist in the MAP table in the MAP set specified by the setid parameter, or in the default MAP set if the setid parameter is not specified.

If the ri=gt parameter is specified, then the value specified for the pc/pca/pci/pcn parameter must exist in the MRN table.

If the ri=ssn parameter is specified, then the setid=none parameter cannot be specified.

The pc/pca/pci/pcn, ri, setid, and ssn parameters must be specified before the ppt parameter can be specified.

The pc/pca/pci/pcn parameter must be provisioned for the prepaid type specified by the ppt parameter before the setid parameter can be specified.

If a value of none is specified for the pc/pca/pci/pcn parameter, then the ri or setid parameter cannot be specified.

If the Flexible GTT Load Sharing (FGTTLS) feature is not enabled, and if the ri=ssn parameter is specified, then the value specified for the pc/pca/pci/pcn parameter must exist in the default MAP set of the MAP table.

The value specified for the pc/pca/pci/pcn parameter cannot be associated with a proxy point code.

If the ssn parameter is specified, then the pc/pca/pci/pcn parameter must be specified.

Notes

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes.

The GTA digits are used during message screening to determine whether an incoming message should receive PPSMS screening. If the CgPA GTA matches the value of any of the GTA parameters, then the message falls through to GTT instead of receiving PPSMS screening.

The point code and routing indicator values (pc/pca/pci/pcn and ri parameters) are used to route messages from prepaid subscribers to the correct IN for credit checking.

Output

```
chg-ppsopts:ppt=1:pci=1-1-1:ri=gt:setid=1
```

```
    tekelecstp 06-06-25 09:04:14 EST  EAGLE 37.0.0
    CHG-PPSOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-ppsopts

chg-prefix

Change Prefix

Use this command to enter the name of a feature, the value of a prefix used by the feature, and a prefix number that is used to refer to the prefix from another table.

Parameters

feature (mandatory)

Feature Name. The name of an enabled controlled feature supported by this command. The parameter value must match the feature name as it is displayed in the `rtrv-ctrl-feat` command output.

Range:

*a*zzzzzzzzzzzzzzzzzzzzzzzz

1 alphabetic character and up to 24 optional alphanumeric characters and spaces, enclosed in double quotation marks

The parameter value is not case-sensitive; upper case or lower case or both can be entered.

Part or all of the feature name can be entered. If part of the feature name is specified, the entry must start with the first letter of the name, and must contain enough of the name to uniquely identify the feature. For example, there are two feature names that begin with “GSM MAP.” Enough additional characters to identify which GSM MAP feature is being entered (at least “GSM MAP SR” to identify the “GSM MAP SRI Redirect” feature). This command supports the following controlled features:

- GSM MAP SRI Redirect
- ISUP NP for EPAP

prefix (mandatory)

Prefix Value. Prefix table entries for the GSM MAP SRI Redirect and ISUP NP with EPAP features.

Range:

1-15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

Current value

prefixnum (mandatory)

Prefix Number. The prefix value to use for the specified feature name.

Range:

1 - 7

1 - 32

GSM MAP SRI Redirect feature prefix values

1 - 5

ISUP NP with EPAP feature prefix values

6

ISUP NP with EPAP feature Insertion Country Code

7

ISUP NP with EPAP feature Deletion Condition value

Default:

No change to the current value

Example

Define a prefix with prefix number *1* for the ISUP NP with EPAP feature.

```
chg-prefix:feature="isup np with epap":prefix=1004:prefixnum=1
```

Define a prefix with prefix number *2* and specify part of the GSM MAP SRI Redirect feature name.

```
chg–prefix:feature="GSM MAP SRI":prefix=104:prefixnum=2
```

Define a prefix with prefix number *6* and specify part of the GSM MAP SRI Redirect feature name.

```
chg-prefix:feature=”GSM MAP SRI Redirect”:prefix=1006:prefixnum=6
```

Dependencies

The specified feature name value (feature parameter) must be enclosed in double quotation marks (" ").

The G-Port feature must be turned on before a prefix can be defined for the GSM MAP SRI Redirect feature.

The GSM MAP SRI Redirect feature must be enabled before a GSM MAP SRI Redirect prefix can be defined.

The ISUP NP with EPAP feature must be enabled before an ISUP NP with EPAP prefix can be defined.

The specified prefix value must contain a number of digits that is equal to or greater than the minimum number of digits required by the specified feature.

The specified prefix value must contain a number of digits that is equal to or less than the maximum number of digits required by the specified feature.

The prefix value *none* is not valid for GSM MAP SRI Redirect prefixes.

The specified prefix number (prefixnum) must be valid for the specified feature.

The maximum number of prefixes that can be defined is:

- 32 for the GSM MAP SRI Redirect feature
- 5 values, 1 Insertion Country Code, and 1 Deletion Condition for the ISUP NP with EPAP feature

The specified feature name must be the name of an enabled controlled feature as it is displayed in the `rtrv-ctrl-feat` command output. The specified feature must be the GSM MAP SRI Redirect or ISUP NP for EPAP feature.

The FEATPFX table cannot be full when a new entry is added.

Notes

The Prefix table contains different groups of entries based on the features that are turned on. For the GSM MAP SRI Redirect for Serving HLR feature, the entries are referenced by the VendID table, based on a Vendor Number matching a Prefix Number. For the ISUP NP with EPAP feature, the entries are referenced by the SubnetID table, based on a Subnet Number matching a Prefix Number. The Prefix table for the ISUP NP with EPAP feature also reserves Prefix Number 6 for the Insertion Country Code value, and reserves Prefix Number 7 for the Deletion Condition value. *Figure 11: Prefix Table References* illustrates the references to the Prefix table.

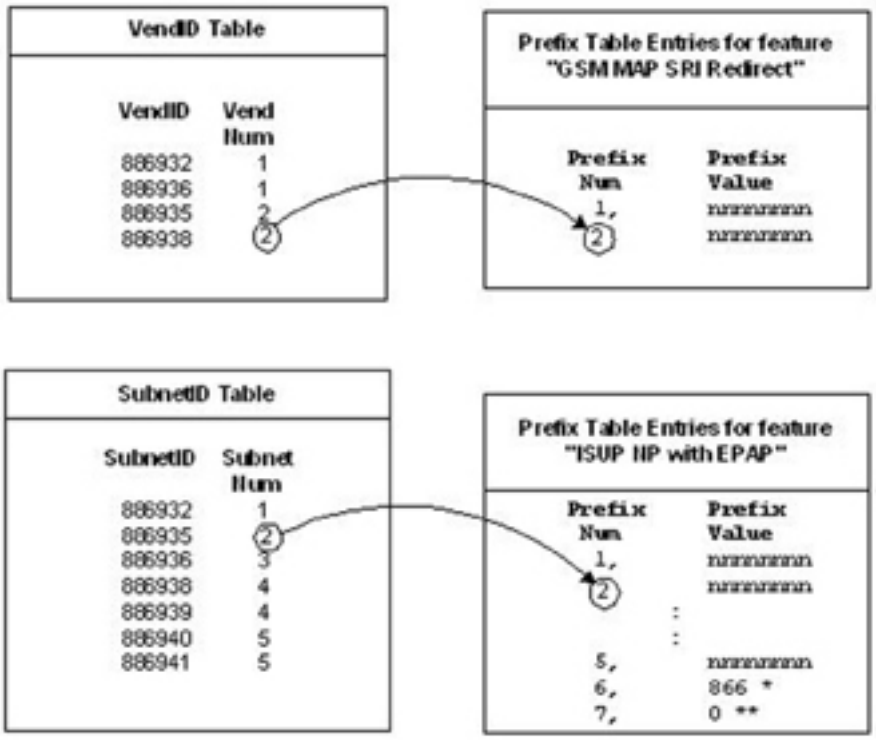

Figure 11: Prefix Table References

* Reserved for the ISUP NP with EPAP feature Insertion Country Code value

** Reserved for the ISUP NP with EPAP feature Deletion Condition value

For the ISUP NP with EPAP feature:

- When the Insertion Country Code (prefix number 6) is defined, the following information message appears:

  ISUP NP with EPAP, Insertion Country Code value is now defined

- When the Deletion Condition (prefix number 7) is defined, the following information message appears:

  ISUP NP with EPAP, Deletion Condition value is now defined

Output

```
chg-prefix:feature="isup np with epap":prefix=1004:prefixnum=1
```

```
    rlghncxa03w 04-09-20 09:04:14 EST  EAGLE 31.11.0
    CHG-PREFIX: MASP A - COMPLTD
;
```

```
chg-prefix:feature="gsm map sri redirect":prefix=1205:prefixnum=18
```

```
    tekelecstp 14-05-30 16:44:50 EST  EAGLE 46.1.0
    CHG-PREFIX: MASP A - COMPLTD
;
```

Related Commands

dlt-prefix, *rtrv-ctrl-feat*, *rtrv-prefix*

chg-rte

Change Route

Use this command to change the "cost," or priority of a route. The cost is based on whether this route is first choice, second choice, and so on. Prioritize routes in such a way that the most direct route (fewest intermediate signaling points) is highest priority.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

lsn (mandatory)

Linkset name. The name of the linkset associated with the route.

Note: The linkset name must be unique.

Range:

ayyyyyyyyy

1 alphabetic character followed by 9 alphanumeric characters

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code.

Range:

p-, 000-127

Specify a valid value for each subfields of the point code, and separate the subfields with a dash (-).

prefix--p

un--000--127

sna--000--15

mna--000--31

force (optional)

This parameter allows the NLSN to be same as the ILSN in the exception routes of the destination or allows APC to be same as OPC in the exception routes of the destination.

Range:

yes

nlsn (optional)

New linkset name. The new linkset name associated with the route.

Range:

ayyyyyyyyy

1 alphabetic character followed by 9 alphanumeric characters

Default:

The current value

rc (optional)

Relative cost (priority) for the route. Zero (0) is the highest priority, 99 the lowest.

Range:

0 - 99

Default:

The current value

Example

```
chg-rte:lsn=rlgh03:rc=0:dpc=244-003-001
```

```
chg-rte:dpc=25-*-*:lsn=myls:rc=10
```

This example changes route for DPCN 4084-aa using linkset E1M2ITUN to relative cost of 30:

```
chg-rte:dpcn=4085-aa:lsn=e1m2itun:rc=30
```

This example changes route for DPCN24, 10-100-14 using linkset WE123624 to a relative cost of 2:

```
chg-rte:dpcn24=10-100-14:lsn=we123624:rc=25
```

This example changes route for private point code DPC p-1-1-1 using linkset WE123642 to relative cost of 50:

```
chg-rte:dpc=p-1-1-1:lsn=we123642:rc=50
```

This example changes route for spare point code DPCN s-4085-aa using linkset E1M2ITUN to relative cost of 30:

```
chg-rte:dpc=s-4085-aa:lsn=e1m2itun:rc=30
```

This example changes route for private point code DPCN24 p-1-100-1 using linkset WE123624 to relative cost of 25:

```
chg-rte:dpcn24=p-1-100-1:lsn=we123624:rc=25
```

This example changes route for private and spare point code DPCI ps-1-104-1 using linkset E1M2ITUI to relative cost of 30:

```
chg-rte:dpci=ps-1-104-1:lsn=e1m2itui:rc=30
```

This example changes route for DPCN16, 121-10-15 using linkset WE123624 to a relative cost of 10:

```
chg-rte:dpcn16=10-100-14:lsn=we123624:rc=10
```

Dependencies

The 6-Way Loadsharing on Routesets feature must be turned on before more than 2 routes can be provisioned with the same relative cost.

If the ipgwapc=yes parameter is specified, then the associated dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot have a cluster route assigned.

If the identity of a route is being changed because of a change in the linkset name, the database must not already contain the new linkset name and destination address.

If the nlsn parameter is specified, the link set must already exist in the database and at least one link must be assigned to the link set.

If a new linkset name (nlsn parameter) is specified for an existing destination network address (*ni*-*-*), or destination network cluster address (*ni-nc*-*), the linkset type used in the route (see the `chg-ls` command) must be *b*, *c*, or *d*.

If the specified destination address is a full point code address (*ni-nc-ncm*) and is a member of a provisioned cluster (*ni-nc*-*), whether the attributes of the ordered routes assigned to the cluster can

be changed is determined by the destination address's NCAI (Nested Cluster Allowed Indicator). The NCAI is set with the ncai parameter of the `ent/chg-dstn` commands.

- If the ncai=no parameter is specified, the cluster point code is not a nested cluster point code and the attributes of the ordered routes assigned to the cluster cannot be changed.
- If the ncai=yes parameter is specified, the specified destination address is a member of a provisioned nested cluster where the attributes of the ordered routes assigned to the cluster can be changed.

If the specified destination address is a network cluster address (*ni-nc-**), how the attributes of the specified ordered route are changed is determined by the setting of the destination address's NCAI.

- If the ncai=no parameter is specified, the attributes of the specified ordered route are changed for each signaling point code having the same network identifier (*ni*) and network cluster (*nc*) codes.
- If the ncai=yes parameter is specified, the specified destination address is a nested cluster where changing the attributes of the ordered routes for the cluster does not affect the attributes of the ordered routes of the provisioned members.

The route destination's type must match the route's linkset adjacent point code or the route's linkset secondary adjacent point code type.

Only IPGW routes are allowed for private point codes.

If the dpcn parameter is specified, its format must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

Network routing is valid only if the NRT feature is on.

When using network routing, if the destination point code has a value of * in the *nc* field, the *ncm* field must also be * (for example, dpc=21-*-*).

The nda, nz, nlsn, or nrc parameter must be specified.

The current destination address must be a full or a cluster point code.

All linksets that are currently assigned to a route set must still be equipped.

The linkset specified by the lsn parameter must exist in the routeset of the destination table entry.

If a new link set (nlsn parameter) is specified in the command, that link set name must exist in the active LINK SET entity.

The specified DPC must be in the database.

Only a single route is allowed for an APC or SAPC for an IPGWx linkset. The changed route must include the APC or SAPC's IPGWx linkset with the destination equal to the APC or SAPC.

If a proxy linkset is used, then the nlsn parameter cannot be specified.

If a proxy linkset is used, then the value specified for the dpc parameter cannot be a network cluster address (*ni-nc-**) or network address (*ni-*-*).

The network type of the routeset must be same as the network type of the destination point code.

The value specified for the rc parameter must differ from the original routing cost of the associated linkset.

If the value specified for the dpc parameter refers to a Proxy Point Code in the Destination table, then the nlsn parameter cannot be specified.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Output

```
chg-rte:lsn=rlgh03:rc=0:dpc=244-003-001
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    CHG-RTE: MASP A - COMPLTD
;
```

Related Commands

chg-dstn, *dlt-dstn*, *dlt-rte*, *ent-dstn*, *ent-rte*, *rept-stat-dstn*, *rept-stat-rte*, *rtrv-dstn*, *rtrv-rte*

chg-rtx

Change Exception Route

Use this command to change an exception route entry in the Routing table.

Parameters

At least one of the following optional parameters must be specified: opc, ilsn, si, or cic.

dpc (mandatory)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (mandatory)

Destination point code.

dpci (mandatory)

Destination Point Code. ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (mandatory)

Destination Point Code. ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUPUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The prefix subfield indicates a spare point code, private point code or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (mandatory)

Destination Point Code. 24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (mandatory)

Destination Point Code. 16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un---000---127

sna---000---15

mna---000---31

lsn (mandatory)

The name of the linkset associated with the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters.

cic (optional)

Starting Circuit Identification Code. This parameter is used alone or with the ecic parameter as exception routing criteria for the specified exception route.

Range:

1 - 16383

ecic (optional)

Ending Circuit Identification Code. This parameter and the cic parameter define the CIC range that is used as exception routing criteria for the specified exception route.

Range:

0 - 16383

force (optional)

This parameter must be specified when the ilsn parameter value is the same as the nlsn parameter value.

Range:

yes

ilsn (optional)

The name of the incoming/originating linkset. This parameter is used as part of the exception routing criteria for the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

nlsn (optional)

The new linkset name that replaces the linkset name associated with the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

opc (optional)

ANSI origination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Originating Point Code

opci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUPUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The prefix subfield indicates a spare point code, private point code or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un---000---127

sna---000---15

mna---000---31

rc (optional)

The relative cost associated with the specified exception route.

Range:

0 - 99

si (optional)

Service indicator. This parameter is used as part of the exception routing criteria for the specified exception route.

Range:

3 - 15

Example

This example changes the relative cost of an existing exception route.

```
chg-rtx:dpca=1-1-1:opca=2-3-3:lsn=lset1:rc=30
```

This example changes the linkset associated with the exception route.

```
chg-rtx:dpca=1-2-1:si=3:lsn=lset2:nlsn=lset3
```

This example changes the linkset and relative cost of the exception route.

```
chg-rtx:dpca=1-3-1:ilsn=lset2:lsn=lset3:nlsn=lset4:rc=20
```

```
chg-rtx:dpci=2-100-1:ilsn=lset2:lsn=lset4:rc=10
```

```
chg-rtx:dpci=2-100-1:si=5:lsn=lset5:rc=50
```

```
chg-rtx:dpcn16=121-10-15:si=5:lsn=lset5:rc=50
```

Dependencies

Only one of the opc, ilsn, cic, or si parameters can be specified for an exception route entry.

If the ecic parameter is specified, the cic parameter must be specified.

The ecic parameter value cannot be less than the cic parameter value.

The opc/opca/opci/opcn/opcn24/opcn16 parameter value cannot be the same as the dpc parameter value.

The Origin-Based MTP Routing feature must be turned on before this command can be entered.

The specified combination of exception route parameter conditions must already exist.

The linkset name, as defined by the ilsn, lsn, or nlsn parameter, must exist.

The 6-Way Loadsharing on Routesets feature must be turned on before more than 2 routes can be provisioned with the same relative cost for a given exception route criteria.

The network domain of the adjacent point code in the linkset or in the routes in the specified routeset must be the same as the network domain of the specified destination point code or its alias.

The APC/SAPC type and group code in the linkset specified by the lsn parameter must match the value specified by the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter.

The nlsn parameter value cannot be the same as the lsn parameter value.

Either the nlsn parameter, the rc parameter, or both parameters must be specified.

The value specified for the destination point code must be a full point code and not a cluster or network point code.

The point code specified by the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must exist in the destination table.

If the ilsn and lsn parameter have the same value, or if the value specified for the opc/opca/opci/opcn/opcn24/opcn16 parameter is the same as the APC of the linkset specified by the lsn parameter, then the force=yes parameter must be specified.

The route cost specified by the rc parameter must differ from the existing route cost for the linkset specified by the lsn parameter.

The route associated with the linkset specified by the lsn parameter must already exist in the specified exception route.

The route associated with the linkset specified by the nlsn parameter cannot already exist in the specified exception route.

The value specified for the opc/opca/opci/opcn/opc24/opcn16 parameters cannot be the same as the adjacent point code of the linkset specified by the lsn parameter.

The J7 Support feature must be enabled before the dpcn16/opcn16 parameter can be specified.

Output

```
chg-rtx:dpca=1-1-1:opc=2-3-3:lsn=lset1:rc=30
```

```
stdcfg2b 06-05-19 18:20:11 EST  EAGLE  35.0.0
CHG-RTX: MASP A - COMPLTD
```

Related Commands

dlt-rtx, *ent-rtx*, *rept-stat-rtx*, *rtrv-rtx*

chg-sccp-msg

Change SCCP Message

Use this command to revise an SCCP message.

Parameters

Note: The nature of address indicator, numbering plan, and TCAP package indicator can be specified by mnemonic or numeric values (cdnai/cdnaiv, cdnp/cdnpv, and tcappkg/tcappkgv respectively).

msgn (mandatory)

Message number. The number of the SCCP message.

Range:

1 - 10

active (optional)

This parameter specifies whether the SCCP message should be sent to the network card for processing.

Range:

yes

The message is sent to the network card.

no

The message is not sent to the network card.

Default:

yes

cdgta (optional)

CdPA GTA. The Called Party Address for the SCCP message.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

1234567890

cdgti (optional)

CdPA GTI. The Called Party Global Title Indicator for the SCCP message.

Range:

0 - 4

cdnai (optional)

CdPA NAI. The Called Party Nature of Address Indicator for the SCCP message.

Range:

sub

rsvd

natl

intl

Default:

sub

cdnaiv (optional)

CdPA NAIV. The Called Party Nature of Address Indicator Value for the SCCP message.

Range:

0 - 127

Default:

1

cdnp (optional)

CdPA NP. The Called Party Numbering Plan for the SCCP message.

Range:

e164

generic

x121

f69

e210

e212

e214

private

Default:

e164

cdnpv (optional)

CdPA NPV. The Called Party Numbering Plan Value for the SCCP message.

Range:

0 - 15

Default:

1

cdpc (optional)

ANSI Called Party point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

Default:

10

ANSI 10-10-10

cdpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cdpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cdpcn24 (optional)

24-bit ITU national CdPA point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

cdpcn16 (optional)

16-bit ITU national CdPA point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

p-, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix-p

un -000-127

sna -000-15

mna -000-31

cdssn (optional)

CdPA SSN. The Called Party Subsystem Number for the SCCP message.

Range:

0 - 255

Default:

6

cdtt (optional)

CdPA TT. The Called Party Translation Type for the SCCP message.

Range:

0 - 255

Default:

0

cggta (optional)

CgPA GTA. The Calling Party Address for the SCCP message.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

1234567890

cggti (optional)

CgPA GTI. The Calling Party Global Title Indicator for the SCCP message.

Range:

0 - 4

cgnai (optional)

CgPA NAI. The Calling Party Nature of Address Indicator for the SCCP message.

Range:

sub

rsvd

natl

intl

cgnaiv (optional)

CgPA NAIV. The Calling Party Nature of Address Indicator Value for the SCCP message.

Range:

0 - 127

Default:

1

cgnp (optional)

CgPA NP. The Calling Party Numbering Plan for the SCCP message.

Range:

e164

generic

x121

f69

e210

e212

e214

private

cgnpv (optional)

CgPA NPV. The Calling Party Numbering Plan Value for the SCCP message.

Range:

0 - 15

Default:

1

cgpc (optional)

ANSI CGPA point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

Default:

20

ANSI 20-20-20

cgpci (optional)

ITU international CgPA point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cgpcn (optional)

ITU national CgPA point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cgpcn24 (optional)

24-bit ITU national CgPA point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

cgpcn16 (optional)

16-bit ITU national CgPA point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

p-, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix-p

un -000-127

sna -000-15

mna -000-31

cgssn (optional)

CgPA SSN. The Calling Party Subsystem Number for the SCCP message.

Range:

0 - 255

Default:

8

cgtt (optional)

CgPA TT. The Calling Party Translation Type for the SCCP message.

Range:

0 - 255

Default:

0

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

Default:

20

ANSI 20-20-20

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Point Code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national destination point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix-p

un -000-127

sna -000-15

mna -000-31

eaglegen (optional)

This parameter specifies whether the message is an EAGLE-generated message.

Range:

no

the message is not an EAGLE-generated message

yes

the message is an EAGLE-generated message

lsn (optional)

Linkset name. The incoming linkset name for the SCCP message.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

Default:

10

ANSI 10-10-10

opci (optional)

ITU international originating point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix*

subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

p-, 000-255, none

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid for *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

opcn16 (optional)

16-bit ITU national originating point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un -000-127

sna -000-15

mna -000-31

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

selid (optional)

Selector ID. The Selector ID used in the first GTT selector search.

Range:

0 - 65534

tcapacn (optional)

TCAP application context name. The ITU TCAP *acn* field in the incoming MSU.

Range:

0 - 255, none

The *acn* field supports up to 7 subfields separated by a dash (e.g., *1-202-33-104-54-26-007*).

none —there is no ITU TCAP *acn* field in the incoming MSU

tcapfamily (optional)

The ANSI TCAP *family* field in the incoming MSU.

Range:

0 - 255, none

none —there is no ANSI TCAP *family* field in the incoming MSU

tcapopcode (optional)

The TCAP *opcode* field in the incoming MSU.

Range:

0 - 255, none

none —there is no TCAP *opcode* field in the incoming MSU

tcappkg (optional)

TCAP package. The ANSI TCAP and ITU TCAP package type.

Range:

ituuni

ITU unidirectional

qwp

Query with Permission

qwop

Query without Permission

resp

Response

cwp

Conversation with Permission

cwop

Conversation without Permission

bgn
Begin

end
End

cnt
Continue

ituabort
ITU abort

ansiabort
ANSI abort

ansiuni
ANSI unidirectional

ANSI TCAP Package Types—
ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort

ITU TCAP Package Types—
bgn, ituabort, ituuni, end, cnt

tcappkgv (optional)
TCAP package value. The TCAP package type value.

Range: ***0 - 255***

Example

```
chg-sccp-msg:msgn=1:cgtt=4:cdnp=generic:eaglegen=yes:cdpc=2-2-2
chg-sccp-msg:msgn=3:cdgta=324ab12:cdtt=6:cdnaiv=3:cgnai=rsvd
chg-sccp-msg:msgn=5:cdtt=10:opc=4-5-6:cgpcn=1234
chg-sccp-msg:msgn=1:tcappkg=bgn:tcapopcode=34
chg-sccp-msg:msgn=1:cdtt=12:dpci=1-101-1:cgpci=1-101-2
chg-sccp-msg:msgn=5:cdtt=10:opcn16=2-14-0:cgpcn16=2-14-1
```

Dependencies

At least one optional parameter must be specified.

The cdnp and cdnpv parameters and the cgnp and cgnpv parameters cannot be specified together in the command.

The cdnai and cdnaiv parameters and the cgnai and cgnaiv parameters cannot be specified together in the command.

A TOBR quantity feature must be turned on before the tcapacn, tcappkg, tcappkgv, tcapopcode, or tcapfamily parameter can be specified.

The tcappkg and tcappkgv parameters cannot be specified together in the command.

The values 1 and 3 cannot be specified for the cdgti and cggti parameters.

The GTT feature must be turned on before this command can be entered.

The J7 Support feature must be enabled before the cgpcn16/cdpcn16/opcn16/dpcn16 parameters can be specified.

Notes

There is no J7 FAK dependency on ANSI/N24 point code parameters, i.e., cgpcn24/cdpcn24/opcn24/dpcn24/cgpca/cdpca/opca/dpca. The command can be entered successfully whether or not the J7 Support feature is enabled.

Output

```
chg-sccp-msg:msgn=1:tcapacn=7-8-9-0
```

```
    tekelecstp 09-03-02 16:07:33 EST  EAGLE 41.0.0
    Command entered at terminal #4.
    CHG-SCCP-MSG: MASP A - COMPLTD
;
```

Related Commands

rtrv-sccp-msg, *tst-msg*

chg-sccp-serv Change SCCP Service

Use this command to:

- Change the state of G-Flex and G-Port services to online or offline. Taking a service offline shifts the processing load to designated nodes.
- Add PCs to an existing service group for service re-route assignment, or change the relative cost (RC) of existing point codes in a group.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

serv (mandatory)

Service. The name of the service.

Range:

gflex

G-Flex (GSM Flexible Numbering)

gport

G-Port (GSM Mobile Number Portability)

mnp

Mobile Number Portability

gtt (optional)

GTT option indicator. This parameter specifies whether to use GTT as part of the re-routing procedure when the service is offline, and alternate PCs are not defined or not available.

Range:

no

Do not use GTT as part of the re-routing procedure.

yes

Use GTT as part of the re-routing procedure.

Default:

yes

pc1 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca1

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc1/pca1/pci1/pcn1/pcn241 (optional)

Alternate post-GTT-translated point code.

pc2 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca2

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc2/pca2/pci2/pcn2/pcn242 (optional)

Alternate post-GTT-translated point code.

pc3 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca3

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc3/pca3/pci3/pcn3/pcn243 (optional)

Alternate post-GTT-translated point code.

pc4 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca4

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc4/pca4/pci4/pcn4/pcn244 (optional)

Alternate post-GTT-translated point code.

pci1 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci2 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci3 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci4 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn1 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn2 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn241 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn242 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn243 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn244 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn3 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn4 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

rc1 (optional)

Relative cost 1. The relative cost of the route for alternate post-GTT-translated point code 1.

Range:

0 - 99

rc2 (optional)

Relative cost 2. The relative cost of the route for alternate post-GTT-translated point code 2.

Range:

0 - 99

rc3 (optional)

Relative cost 3. The relative cost of the route for alternate post-GTT-translated point code 3.

Range:

0 - 99

rc4 (optional)

Relative cost 4. The relative cost of the route for alternate post-GTT-translated point code 4.

Range:

0 - 99

state (optional)

The state of the service.

Note: Re-routing is performed when the service state is *offline*.

Range:

offline

online

Default:

offline

Example

```
chg-sccp-serv:serv=gport:state=online
```

```
chg-sccp-serv:serv=gport:pca1=1-1-1:rc1=10:
pca2=2-2-2:rc2=20:pca3=3-3-3:rc3=30:pca4=4-4-4:rc4=40
```

```
chg-sccp-serv:serv=gport:pci1=2-2-2:rc1=10:pci2=3-3-3:rc2=10
```

```
chg-sccp-serv:serv=gport:state=online:gtt=yes
```

Dependencies

The specified point code network type must match an existing point code network type.

The point code and relative cost parameter values must be specified together as a pair in the command.

The point code cannot match the existing site identification true point code.

The mate remote point code must already exist as destination in the Ordered Route entity set or reside in a cluster destination for which ordered routes are specified.

The SCCP Service table cannot be full when the command is entered. For each supported service (G-Port and G-Flex), up to 7 point codes can be specified for each network type (ANSI, ITU-I, S-ITU-I, ITU-N, S-ITU-N, and ITU-N24).

A maximum of 7 point codes can be allocated to a group or SCCP Service set.

The A-Port or IGM feature, G-Flex feature, and G-Port feature must be enabled before the serv=mnp, serv=gflex, and serv=gport parameter can be specified, respectively.

If the A-Port or IS41 GSM Migration (IGM) feature is enabled, the serv=gport parameter cannot be specified.

The A-Port or IGM feature must be enabled before the serv=mnp parameter can be specified.

At least one optional parameter must be specified.

At least one PC/RC pair (for example, the pc1 and rc1 parameters) must be specified.

The mated point code must be a full point code.

Each new point code (specified by the pc1, pc2, pc3, or pc4 parameter) must already exist in the destination table. See the `ent-dstn` command.

The same point code value cannot be entered more than once in the SCCP-SERV table.

New and existing point codes cannot be entered together in the same command.

The specified MRN set must already exist in the MRN table for the SCCP-SERV table.

If the Flexible GTT Loadsharing feature is enabled, the specified point code must already exist in the specified SCCP-SERV set in the MRN table.

Notes

The SCCP Service table is part of the MRN table.

When using this command to modify relative cost values, all of the point codes that are specified in one command must exist in the same group in the SCCP-SERV table.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

This command supports the assignment of point codes to SCCP Service point code groups used for service re-route assignment. It is used to add point codes to a service group or to change the relative cost (RC) of existing point codes in a service group.

SCCP Service groups are organized by service (G-Flex or G-Port) and PC network type (ANSI, ITU-I, Spare ITU-I, ITU-N, Spare ITU-N, or ITUN-24). Up to 7 point codes can be in a network type grouping for service re-route load sharing. Up to 4 point codes can be added or modified in one command.

The `-sccp-serv` commands differ from the `-mrn` commands in that the service name (serv parameter) is required instead of an existing PC in the set serving as the key.

When using this command to add new point codes, none of the point codes that are specified in one command can exist in the group in the SCCP-SERV table and must all be added to the same SCCP-SERV group.

Output

The following example changes the SCCP service for G-Port to provision the point code and relative cost values: `chg-sccp-serv:serv=gport:pca1=1-1-1:rc1=10:pc2=1-1-2:rc2=20`

```
    tekelecstp 05-12-20 08:35:15 EST  35.0.0
    CHG-SCCP-SRV : MASP A - COMPLTD
;
```

Related Commands

dlt-sccp-serv, *rtrv-sccp-serv*

chg-sccpopts

Change SCCP Options

Use this command to change the values of one or more of the SCCP option indicators maintained in the STP options table.

Parameters

aclen (optional)

Area code length. The length of the area code.

Note: This parameter is used with the CgPN.

Range:

0 - 8

Default:

No change to the current value

System Default:

0 - If the aclen parameter was provisioned in the `chg-tifopts` command, then the value from the `chg-tifopts` command is used as the initial value for the aclen parameter in the `chg-sccpopts` command.

cclen (optional)

Country code length. The length of the country code.

Note: This parameter is used with the CgPN.

Range:

0 - 3

Default:

No change to the current value

System Default:

0

class1seq (optional)

This parameter enables or disables Class 1 message sequencing.

Range:

on

Enabled; Class 1 messages are guaranteed to be sequenced, but the messages are not load shared.

off

Disabled; Class 1 message sequencing is not guaranteed, but the messages might be load shared (if appropriate configuration exists).

Default:

Current value

System Default:

off

cnvainat (optional)

The value of the called party/calling party address Reserved for National Use bit when the message is routed to the ITU national network.

When SCCP Conversion is performed on a LIM card, this option is applied only in cases of domain crossing.

When message processing is done on an SCCP card, this option is applied always, regardless of whether there was domain crossing or not.

Range:

0

The Reserved for National Use bit is not reserved for national use.

1

The Reserved for National Use bit is reserved for national use.

Default:

No change to the current value

System Default:

1

cnvclgitu (optional)

This parameter enables or disables the CgPA conversion for ITU-I/ITU-I Spare/ITU-N/ITU-N Spare domain crossing during SCCP conversion.

Range:

on

convert CgPA

off

do not convert CgPA

Default:

No change to the current value

System Default:

off

delccprefix (optional)

This parameter specifies how to apply the DELCCPREFIX digit action to a Called Party Global Title Address (CdPA GTA).

Default:

No change to the current value

Range:

pfxwcc

Apply the DELCCPREFIX digit action to the CdPA GTA only when the address has a International format. If this option is selected, then the Country Code is deleted and the GTA is prefixed with the Entity Id.

pfx4all

Apply the DELCCPREFIX digit action to the CdPA GTA in all cases. If this option is selected, then for an International format, the Country Code is deleted and the GTA is prefixed with the Entity Id. For a National format, the GTA is prefixed with the Entity ID.

dfltfallback (optional)

Default fallback option. This parameter specifies the action that is taken if the last translation doesn't match when performing GTT using a FLOBR-specific GTT mode.

Range:

no

GTT fails and the MSU is discarded

yes

GTT is performed based on the last matched entry

Default:

No change to the current value

System Default:

no

dfltgttmode (optional)

Default GTT mode. The system default value of the GTT mode hierarchy used by the EAGLE when performing GTT.

Range:

acdcd

Advanced CdPA GTT, CdPA GTT

acdcgcd

Advanced CdPA GTT, CgPA GTT, CdPA GTT

acdcdcg

Advanced CdPA GTT, CdPA GTT, CgPA GTT

cd

CdPA GTT only

cdcg

CdPA GTT, CgPA GTT

cg

CgPA GTT only

cgcd

CgPA GTT, CdPA GTT

cgacdcd

CgPA GTT, Advanced CdPA GTT, CdPA GTT

fcd

FLOBR CdPA only

fcg

FLOBR CgPA only

fcgfcd

FLOBR CgPA, FLOBR CdPA

fcdfcg

FLOBR CdPA, FLOBR CgPA

gmstcapce (optional)

This parameter enables and disables the processing of GSM Map Screening for TCAP_Continue and TCAP_End messages.

Range:

on

Enables GSM Map Screening for TCAP_Continue and TCAP_End messages

off

Disables GSM Map Screening for TCAP_Continue and TCAP_End messages

gttdist (optional)

This parameter specifies the type of card on which the GTT traffic will be distributed.

Range:

all

Distribute GTT traffic among SCCP cards irrespective of their data types

gtt

Distribute GTT traffic among SCCP cards of data type GTT

dn

Distribute GTT traffic among SCCP cards of data type DN

imsi

Distribute GTT traffic among SCCP cards of data type IMSI

epap

Distribute GTT traffic among SCCP cards of data type DN, IMSI or EPAP

elap

Distribute GTT traffic among SCCP cards of data type ELAP

System Default Value:

all

intlunknnai (optional)

This parameter specifies whether International NAIs (nai=intl) are included in Unknown NAIs (nai=unkn) and should be considered for country code CgPN (cccgpn) conditioning.

Range:

no

yes

Default:

No change to the current value

System Default:

no

itun16scmg (optional)

This parameter specifies whether sccp scmg meassages will be processed or not.

Range:

on

sccp scmg messages will be processed.

off

sccp scmg messages will not be processed.

Default:

No change to the current value

System Default:

off

mobrsccpopc (optional)

The OPC that is derived from the SCCP message that is used as an exception class.

Range:

sccp

The OPC exception class uses the point code within the CGPA, if the CGPA portion of the message is "route-on-dpcssn". If the option is "route-on-gt", the *sccp* option is not used and defaults to the mtp option.

mtp

The OPC exception class uses the original MTP OPC value as its criteria.

tpc

The OPC exception class uses the EAGLE true point code for the criteria.

mtprgtt (optional)

This parameter specifies whether GTT is performed on an MTP-routed MSU and the routing that is performed on the MSU after GTT.

Range:

off

GTT is not performed

usemtppc

GTT is performed and the MSU is then routed to the original DPC

fullgtt

GTT is performed and the MSU is then routed to a translated DPC

Default:

No change to the current value

System Default:

off

mtprgttfallbk (optional)

This parameter specifies whether an MTP-routed MSU is MTP-routed after GTT failure.

Range:

mtproute

perform MTP routing on the MSU if a failure occurs during GTT

gttfail

discard the MSU if a failure occurs during GTT. Send UDTS if required.”

Default:

No change to the current value

System Default:

mtproute

subdfrn (optional)

This parameter specifies whether S-Port Subscriber Differentiation is performed.

Range:

on

perform S-Port Subscriber Differentiation

off

do not perform S-Port Subscriber Differentiation

Default:

No change to the current value

System Default:

off

tgtt0 (optional)

This parameter enables or disables transaction-based GTT loadsharing for SCCP Class0 UDT, Class0 XUDT, UDTS, and XUDTS messages.

Range:

udt

Enables transaction-based GTT loadsharing for UDTS and Class0 UDT messages.

xudt

Enables transaction-based GTT loadsharing for XUDTS and Class0 XUDT messages.

both

Enables transaction-based GTT loadsharing for UDTS, XUDTS, Class0 UDT, and Class0 XUDT messages.

none

—Disables transaction-based GTT loadsharing for UDTS, XUDTS, Class0 UDT, and Class0 XUDT messages.

Default:

No change to current value

System Default:

none

tgtt1 (optional)

This parameter enables or disables transaction-based GTT loadsharing for SCCP Class1 UDT, Class1 XUDT, UDTS, and XUDTS messages.

Range:

udt

Enables transaction-based GTT loadsharing for UDTS and Class1 UDT messages.

xudt

Enables transaction-based GTT loadsharing for XUDTS and Class1 XUDT messages.

both

Enables transaction-based GTT loadsharing for UDTS, XUDTS, Class1 UDT, and Class1 XUDT messages.

none

Disables transaction-based GTT loadsharing for UDTS, XUDTS, Class1 UDT, and Class1 XUDT messages.

Default:

No change to current value

System Default:

none

tgttudtkey (optional)

The transaction parameter for incoming UDT(S) messages. Messages with this parameter are routed to the same load-shared PC within a MAPGROUP or MRNGROUP.

Range:

mtp

Transaction-based GTT loadsharing is performed using the mtp algorithm

tcap

Transaction-based GTT loadsharing is performed using the tcap algorithm

sccp

Transaction-based GTT loadsharing is performed using the sccp algorithm

enhmtp

Transaction-based GTT loadsharing is performed using the enhanced mtp algorithm

Default:

No change to current value

System Default:

mtp

tgttxudtkey (optional)

The transaction parameter for incoming XUDT(S) messages. Messages with this parameter are routed to the same load-shared PC within a MAPGROUP or MRNGROUP.

Range:

mtp

Transaction-based GTT loadsharing is performed using the mtp algorithm

sccp

Transaction-based GTT loadsharing is performed using the sccp algorithm

enhmtp

Transaction-based GTT loadsharing is performed using the enhanced mtp algorithm

Default:

No change to current value

System Default:

mtp

unqgttsel (optional)

This parameter specifies whether a GTT Selector search is performed on overlapped selectors.

Range:

bestmatch

search overlapped GTT selectors if non-overlapped GTT selectors are not found

exactmatch

search only non-overlapped GTT selectors

Example

```
chg-sccpopts:class1seq=on
chg-sccpopts:mobrsccpopc=sccp
chg-sccpopts:tgtt0=udt
chg-sccpopts:tgtt1=xudt
chg-sccpopts:tgttudtkey=mtp
chg-sccpopts:tgttxudtkey=sccp
chg-sccpopts:cclen=1:aclen=3
chg-sccpopts:dfltfallback=yes
chg-sccpopts:dfltgttmode=fcd
chg-sccpopts:mtprgttfallbk=gttfail
chg-sccpopts:unqgttsel=exactmatch
```

```
chg-sccpopts:gttdist=dn
chg-sccpopts:gttdist=epap
chg-sccpopts:itun16scmg=on
```

Dependencies

At least one optional parameter must be specified.

The Origin-based MTP Routing feature must be turned on before the mobrsccpopc parameter can be specified.

The Origin-based SCCP Routing feature must be turned on before the dfltgttmode parameter can have a value of *acdcd*, *cgacdcd*, *acdcgcd*, *acdcdcg*, *cgcd*, *cdcg*, or *cg*.

The Transaction-based GTT Loadsharing feature must be enabled before the tgtt0, tgtt1, tgttudtkey, or tgttxudkey parameters can be specified.

The GSM Map Screening feature must be turned on before the gmstcapce parameter can be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before the cnvainat or cnvclgitu parameter can be specified.

The FLOBR feature must be turned on before the dfltgttmode parameter can have a value of *fcd*, *fcg*, *fcgfcd*, or *fcdfcg* and before the dfltfallback parameter can be specified.

The MTP routed messages for SCCP Applications feature or the GWS Stop Action SCCP feature must be enabled before the mtprgtt or mtprgttfallbk parameter can be specified.

The S-Port Subscriber Differentiation feature must be enabled and turned on before the subdfrn parameter can be specified.

The ANSI/ITU SCCP Conversion feature must be ON before the cnvclgitu parameter can be specified.

The EPAP Data Split feature must be enabled before GTTDIST=DN/IMSI parameter can be specified.

The Dual ExAP Config feature must be enabled before GTTDIST=EPAP/ELAP parameter can be specified.

Either Dual ExAP Config or EPAP Data Split feature should be enabled before GTTDIST=GTT parameter can be specified.

The J7 Support feature must be enabled before the ITUN16SCMG parameter can be specified.

Notes

None.

Output

```
chg-sccpopts:mtprgtt=usemtppc
```

```
tekelecstp 10-02-10 20:09:11 EST  EAGLE 42.0.0
chg-sccpopts:mtprgtt=usemtppc
Command entered at terminal #4.
```

```
    CHG-SCCPOPTS: MASP A - COMPLTD
;
```

`chg-sccpopts:gttdist=elap`

```
    tekelecstp 12-07-11 14:47:02 EST  EAGLE 45.0.0
    chg-sccpopts:gttdist=elap
    Command entered at terminal #4.
    CHG-SCCPOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-sccpopts

chg-scr-aftpc

Change Allowed Affected Point Code

Use this command to change the attributes of a specific screening reference in the allowed affected point code category. Attributes that can be changed are the point code and the subsystem number.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number.

Range:

*0 - 255, **

* —the full range of values from 0–255

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see the `chg-gws-actset` and `rtrv-gws-actset` commands).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Remove an existing gateway screening stop action set from a gateway screening rule.

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range: *0 - 255, **

* —the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range: *0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31,**

*-the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range: *0 - 255, **

* —the full range of values from 000–255

narea (optional)

New ITU-international area value.

Range: *0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nc (optional)

Network cluster value. Specifies one or more *nc* values for the network indicator and network cluster member values specified by the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ncm (optional)

Network cluster member value. Specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ni (optional)

Network indicator value. Specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nid (optional)

New ITU-international ID value

Range:

*0 - 7, **

* —the full range of values from 0–7

Default:

No change to the current value

nmna (optional)

New 16-bit ITU national main number area. The new *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31,**

*-the full range of values from 0--31

nmsa (optional)

New 24-bit ITU-national main signaling area value. The new *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255,**

* —the full range of values from 0–255

nnc (optional)

New network cluster. Specifies one or more *nnc* values for the screening reference specified in the sr parameter. It specifies the new *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nncm (optional)

New network cluster member. Specifies one or more *ncm* values for the screening reference specified in the sr parameter. It specifies the new *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nni (optional)

New network identifier. Specifies one or more *nni* values for the screening reference specified in the sr parameter. It specifies the new *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nnpc (optional)

New ITU-national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number.If you use multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, **

* —the full range of values from 0–16383

Default:

No change to the current value

npc (optional)

ITU national point code.

Range:

*0 - 16383, **

* —the full range of values from 0–16383

npcst (optional)

New point code subtype. This parameter indicates whether the specified new ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

nsfi (optional)

The next screening category used in the gateway screening process. This parameter halts the gateway screening process, and the message then proceeds through normal routing.

Range:

stop

Default:

No change to the current value

nsna (optional)

New 16-bit ITU national sub number area. The new *sna* in the point code represented by *un-sna-mna*.

Range:

*0--15,**

*-the full range of values from 0--15

nsp (optional)

New 24-bit ITU national signaling point. The new *sp* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the specified screening category (*nsfi*) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

nssa (optional)

New 24-bit ITU national sub signaling area. The new *ssa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nssn (optional)

New subsystem number.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nun (optional)

New 16-bit ITU national unit number. The new *un* in the point code represented by *un-sna-mna*.

Range:

*0--127,**

*-the full range of values from 0--127

nzone (optional)

New ITU-international zone. The new *zone* for the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

Default:

No change to the current value

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU-national sub number area. The *sna* of the point code represented by *un-sna-mna*.

Range:

*0--15,**

*-the full range of values from 0-15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by the format *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127,**

*-the full range of values from 0-127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–255

Example

```
chg-scr-aftpc:sr=iec:ni=240:nc=010:ncm=010:ssn=254:nni=240:nnc=003:nncm=030
:nssn=253
```

```
chg-scr-aftpc:sr=iec:ni=240:nc=008:ncm=203:nssn=253:nsfi=stop:actname=copy
chg-scr-aftpc:sr=aft1:zone=1:area=2:id=3:nsfi=stop:ssn=1:pcst=s:npcst=none
chg-scr-aftpc:sr=aft2:un=1:sna=2:mna=1:nsfi=stop:ssn=1:nun=2:nsna=3:nmna=2
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the parameters gwsa=off and gwsm=on, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

A complete point code must be specified, and must be one and only one, of the five point code parameter combinations: *ni-nc-ncm*, *zone-area-id*, *msa-ssa-sp*, *un-sna-mna*, or *npc*.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The new affected point code and subsystem number to be changed cannot already exist in the affected point code entity set.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the *ACT NAME* field of the `rtrv-gws-actset` command output.

If the zone=* parameter is specified, the area=* and id=* parameters must be specified.

If the area=* parameter is specified, the id=* parameter must be specified.

If the msa=* parameter is specified, the ssa=* and sp=* parameters must be specified.

If the ssa=* parameter is specified, the sp=* parameter must be specified.

If the un=* parameter is specified, the sna=* and mna=* parameters must be specified.

If the sna=* parameter is specified, the mna=* parameter must be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range 0–255.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc=* paramter is specified, the ncm parameter must be specified as an asterisk or as the full range 0–255.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk (ni=*) or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range 0–255.

If the nsfi parameter is specified, the parameter value must be *stop*.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

The character*c*cannot be specified for the ni, nc, ncm, zone, area, id, msa, ssa, sp, un, sna, mna, and npc parameters.

The Gateway Screening Rules table can contain a maximum of 372,600 rules.

The specified screening reference (sr) must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N24 or ITU-N16 point codes.

The affected point code and subsystem number to be changed must already exist in the affected point code entity set.

The J7 support feature must be enabled before the un, sna, mna, nun, nsna, or nmna parameters are specified.

The J7 support feature must not be enabled before the msa, ssa, sp, nmsa, nssa, or nsp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk cannot be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-aftpc` command.

If the screen set reaches 100% capacity (indicated by the “100% full” message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to the card. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

A screening reference is assigned to screen sets using the `ent-scrset` command. A screening reference can belong to multiple screen sets.

The spare point code subtype prefix *s-* is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters i.e., ni, nc, ncm, nni, nnc or nncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
chg-scr-aftpc:sr=iec:ni=240:nc=010:ncm=010:ssn=254:nni=240:nnc=003:nncm=030
:nssn=253
```

```
    rlghncxa03w  04-01-07  11:43:04  EST  EAGLE 31.3.0
    CHG-SCR-AFTPC:  SCREEN SET AFFECTED - IEC  25% FULL
    CHG-SCR-AFTPC:  MASP A - COMPLTD
;
```

Related Commands

dlt-scr-aftpc, *ent-scr-aftpc*, *rtrv-scr-aftpc*

chg-scr-blkdpc Change Blocked DPC

Use this command to change the attributes of a specific screening reference in the blocked DPC category. Attributes that can be changed are the blocked destination point code, next screening function identifier, and the next screening reference.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Remove an existing gateway screening stop action set from a gateway screening rule.

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

* —the full range of values from 0–7

C —continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, *, C*

*--- the full range of values from 0--31

C--continue

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

narea (optional)

New ITU-international area value.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

Default:

No change to the current value

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

nid (optional)

New ITU-international ID value.

Range:

*0 - 7, *, C*

* —the full range of values from 0–7

C —continue

Default:

No change to the current value

nmna (optional)

New 16-bit ITU national main number area. The new *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, *, C*

*--- the full range of values from 0--31

C--continue

nmsa (optional)

New 24-bit ITU-national main signaling area value. The new *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

nnc (optional)

New network cluster. This parameter specifies one or more *nnc* values for the screening reference specified in the sr parameter. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

Default:

No change to the current value

nncm (optional)

New network cluster member. This parameter specifies one or more *ncm* values for the screening reference specified in the sr parameter. It specifies the new *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

Default:

No change to the current value

nni (optional)

New network identifier. This parameter specifies one or more nni values for the screening reference specified in the sr parameter. It specifies the new *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

Default:

No change to the current value

nnpc (optional)

New ITU-national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you use multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, *, C*

* —the full range of values from 0–16383

C —continue

Default:

No change to the current value

npc (optional)

ITU national point code.

Range:

*0 - 16383, *, C*

* —the full range of values from 0–16383

C —continue

npcst (optional)

New point code subtype. Indicates whether the specified new ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

cgpa

Allowed CGPA is the next screening category

fail

Discard the received message

destfld

Allowed destination field (DESTFLD) is the next screening category

isup

ISUP message type (ISUP) is the next screening category

stop

The gateway screening process ends and the message proceeds through normal routing

Default:

No change to the current value

nsna (optional)

New 16-bit ITU national sub number area. The new *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, *, C*

*--- the full range of values from 0--15

C--continue

nsp (optional)

New 24-bit ITU national signaling point. The new *sp* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–16383

C —continue

nsr (optional)

Next screening reference. Indicates which screening reference in the specified screening category (*nsfi*) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

nssa (optional)

New 24-bit ITU national sub signaling area. The new *ssa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

nun (optional)

New 16-bit ITU national unit number. The new *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, *, C*

*--- the full range of values from 0--127

C--continue

nzone (optional)

New ITU-international zone. The new *zone* for the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

* —the full range of values from 0–7

C —continue

Default:

No change to the current value

pcst (optional)

Point code subtype. zindicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, *, C*

*--- the full range of values from 0--15

C--continue

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by the format *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

un (optional)

16-bit ITU-national unit number. The *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, *, C*

*--- the full range of values from 0--127

C--continue

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

* —the full range of values from 0–255

C —continue

Example

```
chg-scr-blkdpc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=003:nncm=030
chg-scr-blkdpc:sr=iec:ni=c:nc=c:ncm=c:nsfi=cgpa:nsr=wrd2
chg-scr-blkdpc:sr=iec:ni=240:nc=010:ncm=010:nsfi=stop:actname=cr
chg-scr-blkdpc:sr=bdp1:npc=128:nsfi=fail:pcst=s:npcst=none
chg-scr-blkdpc:sr=iec:un=121:sna=10:mna=15:nun=50:nsna=5:nmna=10
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the parameters gwsa=off and gwsm=on, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc combination unless a value of *c* is specified.

A new point code entry must be specified by one and only one, of the five point code parameter combinations: nni-nnc-nncm, nzone-narea-nid, nun-nsna-nmna, nmsa-nssa-nsp, or nnpc. If the new point code entry is a different point code type than the existing point code entry, all subfields of the new point code type must be specified.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The blocked DPC specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or npc must already exist in the screening reference or within an existing range of DPCs.

The new blocked DPC or DPC range defined by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or npc cannot already exist in the screening reference or within an existing range of DPCs.

If an asterisk (*) is specified for the new blocked DPC, nothing that matches the specified range of DPCs can already exist in the DPC screening table for the screening reference.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and mna=* parameters must be specified.

If the msa=c parameter is specified, then the ssa and sp parameters must have a value of *c* or must not be specified. If the msa=c parameter is specified, and the ssa and sp parameters are not specified, then the ssa and sp parameters default to a value of *c*.

If the un=c parameter is specified, then the sna and mna parameters must have a value of*c*or must not be specified. If the un=c parameter is specified, and the sna and mna parameters are not specified, then the sna and mna parameters default to a value of*c*.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range (0–255)

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range (0–255).

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk (ni=*) or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range (0–255).

If the ni=c parameter is specified, then the nc and ncm parameters must have a value of *c* or must not be specified. If the ni=c parameter is specified, and the nc and ncm parameters are not specified, then the nc and ncm parameters default to a value of *c*.

If the specified ni-nc-ncm, zone-area-id, un-sna-mna, or msa-ssa-sp is not equal to c-c-c, or if the npc=c parameter is not specified, then the nsfi=fail parameter must be specified, and the nsr parameter cannot be specified.

If the nnc parameter is specified as a range, the nncm parameter must be specified as an asterisk or as the full range (0–255).

If the nnc parameter is specified as a single value or a range, a single value must be specified for the nni parameter.

If the nnc parameter is specified as an asterisk, the nnm parameter must be specified as an asterisk or as the full range (0–255).

If the nncm parameter is specified as a single value, or a range other than the full range of 0–255, the nni and nnc parameters must be specified with a single value.

If the nni parameter is specified as an asterisk or as a range, the nnc and nncm parameters must be specified as an asterisk or as the full range (0–255).

If the value of the nsfi parameter is not *stop* or *fail*, then the nsr parameter must be specified.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, npc, nun, nsna, and nmna parameters cannot have a value of *c*.

The specified screening reference (sr) must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The pcst and npcst parameters cannot be specified with *c* for a blocked screen reference (sr).

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU National point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the zone=* parameter is specified, then the area=* and id=* parameters must be specified.

If the zone=c parameter is specified, then the area and id parameters must have a value of *c* or must not be specified. If the zone=c parameter is specified, and the area and id parameters are not specified, then the area and id parameters default to a value of *c*.

The nsfi=fail parameter cannot be specified when changing a continue entry.

The nsfi and nsr parameters cannot be specified when changing a screening entry that is other than the continue entry (c-c-c).

The value of the nsfi parameter must be valid for the BLKDPC entity type.

If the specified ni-nc-ncm, zone-area-id,msa-ssa-sp, or un-sna-mna is equal to*c-c-c*or if the npc=c parameter is specified, the nsfi=fail parameter cannot be specified, and the nni, nnc, nncm, nzone, narea, nid, nmsa, nssa, nsp nun, nsna, nmna, and nnpc parameters cannot be specified. Point code*c-c-c*and npc=c cannot be changed to a numbered point code.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

The J7 support feature must be enabled before the un/sna/mna/nun/nsna/nmna parameters are specified.

The J7 support feature must not be enabled before the msa, ssa, sp, nmsa, nssa, or nsp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

When a blocked DPC screening reference is created, the first entry for a point code must be *c-c-c* or npc=c parameter. Subsequent entries must be specific point codes.

The character *c* is used in the blocked DPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the blocked DPC screens. When screening for a blocked DPC and the point code being screened does not match any of the point codes in the blocked DPC screens, the message is not rejected and the screening process continues.

There must be an entry in the blocked DPC screens to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr. The point code is npc=c or subfields equal to *c-c-c*. When the character *c* is specified, the nsfi and nsr parameters must be specified.

If the character *c* is specified for the parameters ni-nc-ncm, zone-area-id, un-sna-mna, or msa-ssa-sp, the character *c* is the only value that can be specified for all three parameters. No other values can be used. For example, a point code *c-c-255* is not allowed. The point code must be *c-c-c*. The asterisk (*) value cannot be used with the character *c* (for example, a point code *c-c-** is not allowed).

When the point code does not match any entries in the blocked DPC screens, the screening process is directed to the screening reference with the point code *c-c-c* or npc=c. The nsfi and nsr in this entry are examined to determine the next step in the screening process.

If the current ni-nc-ncm, zone-area-id, un-sna-mna, or msa-ssa-sp is equal to *c-c-c* or npc=c, only the nsfi and nsr can be changed. Otherwise, only the blocked DPC can be changed.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk cannot be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the `ent-scr-blkdpc` command.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to an LIM. Ensure that screen sets do not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The spare point code subtype prefix (*s-*) is supported only for ITU international and ITU national point codes. The pcst and npcst parameters indicate whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters i.e., ni, nc, ncm, nni, nnc, or nncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
chg-scr-blkdpc:sr=ss01:ni=240:nc=010:ncm=010:nni=240:nnc=003:nncm=030
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    CHG-SCR-BLKDPC:  SCREEN SET AFFECTED - SS01  25% FULL
    CHG-SCR-BLKDPC:  MASP A - COMPLTD
;
```

Related Commands

dlt-scr-blkdpc, *ent-scr-blkdpc*, *rtrv-scr-blkdpc*

chg-scr-blkopc Change Blocked OPC

Use this command to change the attributes associated with a screening reference in the blocked OPC category. Attributes that can be changed are the point code, next screening function identifier, and next screening reference.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Remove an existing gateway screening stop action set from a gateway screening rule

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–7

C —continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, *, C*

*--- the full range of values from 0--31

C--continue

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–7

C —continue

narea (optional)

New ITU-international area value.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

Default:

No change to the current value

nc (optional)

Network cluster value. This parameter specifies one or more nc values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

ncm (optional)

Network cluster member value. This parameter specifies one or more ncm values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

ni (optional)

Network indicator value. This parameter specifies one or more *ni*values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

nid (optional)

New ITU-international ID value.

Range:

*0 - 7, *, C*

* —the full range of values from 0–7

C —continue

Default:

No change to the current value

nmna (optional)

New 16-bit ITU national main number area. The new *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, *, C*

*--- the full range of values from 0--31

C--continue

nmsa (optional)

New 24-bit ITU-national main signaling area value. The new *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

nnc (optional)

New network cluster. This parameter specifies one or more nnc values for the screening reference specified in the sr parameter. It specifies the new *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

Default:

No change to the current value

nncm (optional)

New network cluster member. This parameter specifies one or more *ncm* values for the screening reference specified in the sr parameter. It specifies the new *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

Default:

No change to the current value

nni (optional)

New network identifier. This parameter specifies one or more *nni* values for the screening reference specified in the sr parameter. It specifies the new *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

Default:

No change to the current value

nnpc (optional)

New ITU-national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number.If you use multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, *, C*

* —the full range of values from 0–16383

C —continue

Default:

No change to the current value

npc (optional)

ITU national point code.

Range:

*0 - 16383, *, C*

* —the full range of values from 0–16383

C —continue

npcst (optional)

New point code subtype. Indicates whether the specified new ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

cgpa

Allowed CGPA

fail

Discard the received message.

stop

The gateway screening process ends and the message proceeds through normal routing.

sio

Allowed SIO

dpc

Allowed DPC

blkdpc

Blocked DPC

Default:

No change to the current value

nsna (optional)

New 16-bit ITU national sub number area. The new *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, *, C*

*--- the full range of values from 0--15

C--continue

nsp (optional)

New 24-bit ITU national signaling point. This parameter specifies the new *sp* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

nsr (optional)

Next screening reference. The parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

nssa (optional)

New 24-bit ITU national sub signaling area. The new *ssa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

nun (optional)

New 16-bit ITU national unit number. The new *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, *, C*

*--- the full range of values from 0--127

C--continue

nzone (optional)

New ITU-international zone. The new zone for the point code represented by*zone-area-id*.

Range:

*0 - 7, *, C*

* —the full range of values from 0–7

C —continue

Default:

No change to the current value

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, *, C*

*--- the full range of values from 0--15

C--continue

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

* —the full range of values from 0–255

C —continue

un (optional)

16-bit ITU-national unit number. The *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, *, C*

*--- the full range of values from 0--127

C--continue

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

* —the full range of values from 0–7

C —continue

Example

```
chg-scr-blkopc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=010:nncm=020
chg-scr-blkopc:sr=iec:ni=c:nc=c:ncm=c:nsfi=dpc:nsr=wrd1
chg-scr-blkopc:sr=iec:ni=c:nc=c:ncm=c:nsfi=stop:actname=none
chg-scr-blkopc:sr=bop1:npc=128:nsfi=fail:pcst=s:npcst=none
chg-scr-blkopc:sr=iec:un=121:sna=10:mna=15:nun=50:nsna=5:nmna=10
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the parameters gwsa=off and gwsm=on, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc combination unless a value of *c* is specified.

A new point code entry must be specified by one, and only one of the five point code parameter combinations: nni-nnc-nncm, nzone-narea-nid, nmsa-nssa-nsp, nun-nsna-nmna or nnpc. If the new point code entry is a different point code type than the existing point code entry, all subfields of the new point code type must be specified.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The blocked OPC specified by the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc parameter must already exist in the screening reference or within an existing range of OPCs.

The new blocked OPC or OPC range defined by the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc parameter must not already exist in the screening reference or within an existing range of OPCs.

If the actname parameter is specified, the nsr parameter cannot be specified.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and mna=* parameters must be specified.

If the msa=c parameter is specified, then the ssa and sp parameters must have a value of *c* or must not be specified. If the msa=c parameter is specified, and the ssa and sp parameters are not specified, then the ssa and sp parameters default to a value of *c*.

If the un=c parameter is specified, then the sna and mna parameters must have a value of*c*or must not be specified. If the un=c parameter is specified, and the sna and sp parameters are not specified, then the sna and mna parameters default to a value of*c*.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc=* parameter is specified, the ncm parameter must be specified as an asterisk or as the full range 0–255.

If the ncm parameter is specified as a single value, or a range other than the full range, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the ni=c parameter is specified, then the nc and the ncm parameters must have a value of *c* or must not be specified. If the ni=c parameter is specified, and the nc and the ncm parameters are not specified, then the nc and ncm parameters default to a value of *c*.

If the nnc parameter is specified as a range, the nncm parameter must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a single value or a range, a single value must be specified for the nni parameter.

If the nnc=* parameter is specified, the nnm parameter must be specified as an asterisk or as the full range.

If the nncm parameter is specified as a single value, or a range other than the full range of 0–255, the nni and nnc parameters must be specified with a single value.

If the nni parameter is specified as an asterisk or as a range, the nnc and nncm parameters must be specified as an asterisk or as the full range.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

When changing a screening entry, and the nsfi=fail parameter is specified, the nni, nnc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

If the specified ni-nc-ncm, zone-area-id, msa-ssa-sp, or un-sna-mna is equal to*c-c-c*or if the npc=c parameter is specified, the nsfi=fail parameter cannot be specified, and the nni, nnc, nncm, nzone, narea, nid, nmsa, nssa, nsp, nun, nsna, nmna, and nnpc parameters cannot be specified. Point code *c-c-c* and npc=c cannot be changed to a numbered point code.

If the specified ni-nc-ncm, zone-area-id, un-sna-mna, or msa-ssa-sp is not equal to *c-c-c*, or the npc=c parameter is not specified, the nsfi=fail parameter must be specified, and the nsr parameter cannot be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

The specified screening reference must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst and npcst parameters can be specified.

The pcst and npcst parameters cannot be specified if the sr=c parameter is specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N24 or ITU-N16 point codes.

If the zone=* parameter is specified, then the area=* and id=* parameters must be specified.

If the zone=c parameter is specified, then the area and id parameters must have a value of *c* or must not be specified. If the zone=c parameter is specified, and the area and the id parameters are not specified, then the area and id parameters default to a value of *c*.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

The value of the nsfi parameter must be valid for the BLKOPC entity type.

The nsr parameter cannot be specified if a stop action is specified.

If the specified ni-nc-ncm, zone-area-id, un-sna-mna, or msa-ssa-sp equals *c-c-c*, then the nsfi=fail parameter cannot be specified.

If the specified ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp is not equal to *c-c-c*, or if the npc=c parameter is not specified, then the nsfi=fail parameter must be specified, and the nsr parameter cannot be specified.

The nsfi and nsr parameters cannot be specified when changing a screening entry that is other than *c-c-c*.

The nsr parameter must be specified when the next screening function identifier (nsfi) is not equal to *stop* or *fail*.

The J7 Support feature must be enabled before the un/sna/mna/nun/nsna/nmna parameters are specified.

The J7 support feature must not be enabled before the msa, ssa, sp, nmsa, nssa, or nsp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

When a blocked OPC screening reference is created, the first entry for a point code must be *c-c-c* or *c* for the npc parameter. Subsequent entries must be specific point codes.

The character *c* is used in the blocked OPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the blocked OPC screens. When screening for a blocked OPC and the point code being screened does not match any of the point codes in the blocked OPC screens, the message is not rejected and the screening process continues. There must be an entry in the blocked OPC screens to allow the screening process to continue.

This entry consists of a screening reference, point code, nsfi, and nsr. The point code is npc=c or subfields equal to *c*. When the character *c* is specified, the nsfi and nsr parameters must be specified.

If the character *c* is specified for the parameters ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp, the character *c* is the only value that can be specified for all three parameters. No other values can be used. For example, a point code *c-c-255* is not allowed. The point code must be *c-c-c*. The asterisk (*) value cannot be used with the character *c* (for example, a point code *c-c-** is not allowed).

When the point code does not match any entries in the blocked OPC screens, the screening process is directed to the screening reference with the point code *c-c-c* or npc=c. The nsfi and nsr in this entry are examined to determine the next step in the screening process.

If the current ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp is equal to *c-c-c* or npc=c, only the nsfi and nsr can be changed. Otherwise, only the blocked OPC can be changed.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-blkopc` command.

If the screen set reaches 100% capacity (indicated by the “100% full” message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to the card. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst and npcst parameters indicate whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters i.e., ni, nc, ncm, nni, nnc, or nncm. The command can be entered successfully whether the J7 Support feature is enabled or not enabled.

Output

`chg-scr-blkopc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=010:nncm=020`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    CHG-SCR-BLKOPC:  SCREEN SET AFFECTED - IEC  25% FULL
    CHG-SCR-BLKOPC:  MASP A - COMPLTD
;
```

Related Commands

dlt-scr-blkopc, *ent-scr-blkopc*, *rtrv-scr-blkopc*

chg-scr-cdpa

Change Allowed Called Party Address

Use this command to change the attributes associated with a specific screening reference in the allowed called party address category. Attributes that can be changed are the point code, subsystem number, next screening function identifier, and next screening reference.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number.

Range:

*0 - 255, **

* —the full range of values from 0–255

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Remove an existing gateway screening stop action set from a gateway screening rule.

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

* —the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31, *

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

narea (optional)

New ITU-international area value. A

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters.It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nid (optional)

New ITU-international ID value.

Range:

*0 - 7, **

* —the full range of values from 0–7

Default:

No change to the current value

nmna (optional)

New 16-bit ITU national main number area. The new *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31, *

nmsa (optional)

New 24-bit ITU-national main signaling area value. The new *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nnc (optional)

New network cluster. This parameter specifies one or more *nnc* values for the screening reference specified in the sr parameter. It specifies the new *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nncm (optional)

New network cluster member. This parameter specifies one or more *ncm* values for the screening reference specified in the sr parameter. It specifies the new *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nni (optional)

New network identifier. This parameter specifies one or mor *nni* values for the screening reference specified in the sr parameter. It specifies the new *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nnpc (optional)

New ITU-national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you use multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, **

* —the full range of values from 0–16383

Default:

No change to the current value

npc (optional)

ITU national point code.

Range:

*0 - 16383, **

* —the full range of values from 0–16383

npcst (optional)

New point code subtype. Indicates whether the specified new ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

nscmgfid (optional)

New SCMG format ID

Range:

*1 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

aftpc

Allowed affected point code is the next screening category

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

No change to the current value

nsna (optional)

New 16-bit ITU national sub number area. The new *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15, *

nsp (optional)

New 24-bit ITU national signaling point. The new *sp* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

nssa (optional)

New 24-bit ITU national sub signaling area. The new *ssa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nssn (optional)

New subsystem number

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nun (optional)

New 16-bit ITU national unit number. The new *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127, *

nzone (optional)

New ITU-international zone. The new *zone* for the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–255

Default:

No change to the current value

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

scmgfid (optional)

SCCP management format ID. This parameter consists of a one-octet field and uniquely defines the function and format of each SCMG message. The following SCCP message types are screened against the Allowed CDPA table and all others are passed: UDT, UDTS, XUDT, XUDTS.

Range:

*1 - 255, **

* —the full range of values from 1–255

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15, *

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

0 - 255

* —the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127, *

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

0 - 7

* —the full range of values from 0–255

Example

```
chg-scr-cdpa:sr=cdp1:ni=5:nc=5:ncm=5:ssn=1:scmgfid=4:nsfi=stop:nni=6:nncm=3
:nssn=*
```

```
chg-scr-cdpa:sr=cdp1:ni=c:nc=c:ncm=c:ssn=1:scmgfid=3:nsfi=stop:actname=copy
```

```
chg-scr-cgpa:sr=cgpa:zone=1:area=2:id=3:ssn=1:sccpmt=9:ri=*:nsfi=stop:pcst=s
:npcst=none
```

```
chg-scr-cdpa:sr=cdp1:un=1:sna=2:mna=1:ssn=1:nun=2:nsna=3:nmna=2:nsfi=stop
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the parameters gwsa=off and gwsm=on, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

A complete point code must be specified, and must be one and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or npc, except in the special case of entering *c* for "continue."

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The CDPA point code, scmgfid, and ssn to be changed must already exist in the CDPA entity set.

The new CDPA point code, scmgfid, and ssn cannot already exist in the CDPA entity set.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc=* parameter is specified, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a range, the nncm parameter must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a single value or a range, a single value must be specified for the nni parameter.

If the nnc=* parameter is specified, the nnm parameter must be specified as an asterisk or as the full range.

If the nncm parameter is specified as a single value, or a range other than the full range of 0–255, the nni and the nnc parameters must be specified with a single value.

If the nni parameter is specified as an asterisk or as a range, the nnc and nncm parameters must be specified as an asterisk or as the full range.

If the nsfi=aftpc parameter is specified, the ssn=1 parameter must be specified.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

If the nsfi parameter is specified with a value other than stop, the nsr parameter must be specified.

The next screening function identifier (nsfi) and the next screening reference (nsr) must point to an existing screen, or the nsfi must be equal to stop and the nsr must not be specified.

The specified screening reference must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N24, or ITU-N16 point codes.

If the ssn parameter is specified with a value other than 1, the scmgfid parameter cannot be specified.

If the ssn=1 parameter is specified, the scmgfid parameter must be specified.

The specified value for the nsfi parameter is not valid for cdpa screen.

The J7 Support feature must be enabled before the un, sna, mna, nun, nsna, or nmna parameters are specified.

The J7 Support feature must not be enabled before the msa, ssa, sp, nmsa, nssa, or nsp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to a LIM. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

An asterisk can be specified for a parameter value in the `chg/dlt-scr-cdpa` commands only if that parameter value was specified as an asterisk in the `ent-scr-cdpa` command to define the parameter value.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters i.e., ni, nc, ncm, nni, nnc, or nncm. The command can be entered successfully whether the J7 Support feature is enabled or not enabled.

Output

```
chg-scr-cdpa:sr=cdp1:ni=5:nc=5:ncm=5:ssn=1:scmgfid=4:nsfi=stop:nni=6:nncm=3
:nssn=*
```

```
    rlghncxa03w 04-01-14 15:35:30 EST  EAGLE 31.3.0
    CHG-SCR-CDPA: MASP A - COMPLTD
;
```

Related Commands

dlt-scr-cdpa, *ent-scr-cdpa*, *rtrv-scr-cdpa*

chg-scr-cgpa

Change Allowed Calling Party Address

Use this command to change the attributes associated with a specific screening reference in the allowed calling party address category. Attributes that can be changed are the point code, subsystem number, routing indicator, next screening function identifier, and next screening reference.

Parameters

ri (mandatory)

Routing indicator. This parameter specifies routing instructions to the receiving signaling point. In gateway screening, messages may be screened based on the value of the routing indicator.

Range:

dpc

Allow a called party address with a routing indicator value of "DPC/SSN."

gt

Screening stops and gateway screening is bypassed as a forced pass.

*

Allow both routing indicator values.

sccpmt (mandatory)

SCCP message type.

Range:

9

UDT

10

UDTS

17

XUDT

18

XUDTS

*

full range of values

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number

Range:

*1 - 255, **

* —the full range of values from 1–255

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —remove an existing gateway screening stop action set from a gateway screening rule

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

* —the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31, *

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

narea (optional)

New ITU-international area value

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nid (optional)

New ITU-international ID value.

Range:

*0 - 7, **

* —the full range of values from 0–7

Default:

No change to the current value

nmna (optional)

New 16-bit ITU national main number area. The new *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31, *

nmsa (optional)

New 24-bit ITU-national main signaling area value. The new *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nnc (optional)

New network cluster. This parameter specifies one or more *nnc* values for the screening reference specified in the sr parameter. It specifies the new *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nncm (optional)

New network cluster member. This parameter specifies one or more *ncm* values for the screening reference specified in the sr parameter. It specifies the new *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nni (optional)

New network identifier. This parameter specifies one or more *nni* values for the screening reference specified in the sr parameter. It specifies the new *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nnpc (optional)

New ITU-national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you use multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, **

* —the full range of values from 0–16383

Default:

No change to the current value

npc (optional)

ITU national point code.

Range:

*0 - 16383, **

* —the full range of values from 0–16383

npcst (optional)

New point code subtype. This parameter indicates whether the specified new ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

nri (optional)

New routing indicator that provides routing instructions to the receiving signaling point. In gateway screening, messages may be screened based on the value of the routing indicator.

Range:

dpc

Allow a called party address with a routing indicator value of "DPC/SSN."

gt

Screening stops and gateway screening is bypassed as a forced pass.

***

both the *gt* and *dpc* values are accepted in the gateway screening process

Default:

No change to the current value

nsccpmt (optional)

New SCCP message type.

Range:

9

10

17

18

***

full range of values

Default:

No change to the current value

nsfi (optional)

This parameter specifies the next screening category used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

cdpa

Allowed called party address is the next screening category

stop

The gateway screening process ends and the message proceeds through normal routing

tt

Allowed translation type is the next screening category

Default:

No change to the current value

nsna (optional)

New 16-bit ITU national sub number area. The new *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15, *

nsp (optional)

New 24-bit ITU national signaling point. The new *sp* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

nssa (optional)

New 24-bit ITU national sub signaling area. The new *ssa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

nssn (optional)

New subsystem number

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

No change to the current value

nun (optional)

New 16-bit ITU national unit number. The new*un*in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127, *

nzone (optional)

New ITU-international zone. The new *zone* for the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

Default:

No change to the current value

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15, *

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by the format *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127, *

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

Example

```
chg-scr-cgpa:sr=iec:ni=240:nc=010:ncm=010:ssn=3:ri=dpc
chg-scr-cgpa:sr=iec:ni=240:nc=010:ncm=010:ssn=3:ri=dpc:nsfi=stop:actname=copy
chg-scr-cgpa:sr=cdp1:ni=5:nc=5:ncm=5:ssn=1:ri=dpc:sccpmt=009:nsfi=sdpa:nsr=cdp1
chg-scr-cgpa:sr=cgpa:zone=1:area=2:id=3:ssn=1:sccpmt=9:ri=*:nsfi=stop:pcst=s
:npcst=none
chg-scr-cgpa:sr=cgp1:un=1:sna=2:mna=1:ssn=1:sccpmt=9:nun=2:nsna=3:nmna=2:nsfi=stop:ri=*
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

A complete point code must be specified, and must be one, and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The CGPA point code or range of point codes, ri, sccpmt, and subsystem number or numbers to be changed must exist in the CGPA entity set.

The new CGPA point code and subsystem number cannot already exist in the CGPA entity set.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

The next screening function identifier (nsfi) and the next screening reference (nsr) must point to an existing screen, or the nsfi must be equal to *stop* and the nsr must not be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a range, the nncm parameter must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a single value or a range, a single value must be specified for the nni parameter.

If the nnc parameter is specified as an asterisk, the nnm parameter must be specified as an asterisk or as the full range.

If the nncm parameter is specified as a single value, or a range other than the full range of 0–255, the nni and nnc parameters must be specified with a single value.

If the nni parameter is specified as an asterisk or as a range, the nnc and nncm parameters must be specified as an asterisk or as the full range.

The nsfi=cdpa parameter can be specified only when the ri=* or the ri=dpc parameter is specified.

The nsfi=tt parameter can be specified only when the ri=* or the ri=gt parameter is specified.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

If the nsfi parameter has a value other than *stop*, the nsr parameter must be specified.

The specified screening reference (sr) must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N24 or ITU-N16 point codes.

Valid values must be specified for the nsccpmt and sccpmt parameters.

The specified value for the nsfi parameter is not valid for cgpa screen.

The new CGPA point code, ri, sccpmt, and ssn to be added can not already exist in the CGPA entity set.

The J7 Support feature must be enabled before the un, sna, mna, nun, nsna, or nmna parameters are specified.

The J7 Support feature must not be enabled before the msa, ssa, sp, nmsa, nssa, or nsp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to a LIM. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

An asterisk can be specified for a parameter value in the `chg/dlt-scr-cgpa` commands only if that parameter value was specified as an asterisk in the `ent-scr-cgpa` command to define the parameter value.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters i.e., ni, nc, ncm, nni, nnc, or nncm. The command can be entered successfully whether the J7 Support feature is enabled or not enabled.

Output

```
chg-scr-cgpa:sr=iec:ni=240:nc=010:ncm=010:ssn=3:ri=dpc
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    CHG-SCR-CGPA:  SCREEN SET AFFECTED - IEC  25% FULL
    CHG-SCR-CGPA:  MASP A - COMPLTD
;
```

Related Commands

dlt-scr-cgpa, *ent-scr-cgpa*, *rtrv-scr-cgpa*

chg-scr-destfld

Change an Allowed DESTFLD

Use this command to change the attributes of a specific screening reference in the allowed affected destination field (DESTFLD) category. Attributes that can be changed are the allowed affected destination point codes.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —remove an existing gateway screening stop action set from a gateway screening rule.

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

narea (optional)

New ITU-international area value

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nid (optional)

New ITU-international ID value.

Range:

*0 - 7, **

*—the full range of values from 0–7

Default:

No change to the current value

nmna (optional)

New 16-bit ITU national main number area. The new *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31

nmsa (optional)

New 24-bit ITU-national main signaling area value. The new *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nnc (optional)

New network cluster. This parameter specifies one or more *nnc* values for the screening reference specified in the sr parameter. It specifies the new *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nncm (optional)

New network cluster member. This parameter specifies one or more *ncm* values for the screening reference specified in the sr parameter. It specifies the new *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nni (optional)

New network identifier. This parameter specifies one or more *nni* values for the screening reference specified in the sr parameter. It specifies the new *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nnpc (optional)

New ITU-national point code

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you use multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

Default:

No change to the current value

npc (optional)

ITU national point code.

Range:

0 - 16383

*—the full range of values from 0–16383

npcst (optional)

New point code subtype. This parameter indicates whether the specified new ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process.

Range: ***stop*** **,**

stop —The gateway screening process ends and the message proceeds through normal routing.

Default:

No change to the current value

nsna (optional)

New 16-bit ITU national sub number area. The new *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15

nsp (optional)

New 24-bit ITU national signaling point. The new *sp* of the point code represented by *msa-ssa-sp*. A

Range:

*0 - 255, **

*—the full range of values from 0–255

nsr (optional)

Next screening reference. This parameter specifies the point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

nssa (optional)

New 24-bit ITU national sub signaling area. The new *ssa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nun (optional)

New 16-bit ITU national unit number. The new *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127

nzone (optional)

New ITU-international zone. The new *zone* for the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–255

Default:

No change to the current value

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
chg-scr-destfld:sr=iec:ni=240:nc=010:ncm=019&&020:nncm=021
chg-scr-destfld:sr=iec:ni=240:nc=010:ncm=019&&020:nsfi=stop:actname=none
chg-scr-destfld:sr=dst1:zone=1:area=2:id=3:nsfi=stop:pcst=s:npcst=none
chg-scr-destfld:sr=ds01:un=1:sna=2:mna=3:nun=4:nsna=5:nmna=6
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or npc combination unless a value of *c* is specified.

A new point code entry must be specified by one, and only one of the five point code parameter combinations: nni-nnc-nncm, nzone-narea-nid, nmsa-nssa-nsp, nun-nsna-nmna or nnpc. If the new point code entry is a different point code type than the existing point code entry, all subfields of the new point code type must be specified.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The new DESTFLD defined by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must not already exist in the screening reference.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the zone=* parameter is specified, then the area=* and the id=* parameters must be specified.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the nsfi=stop parameter is specified, then the nsr parameter cannot be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range 000–255 .

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc=* parameter is specified, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a range, the nncm parameter must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a single value or a range, a single value must be specified for the nni parameter.

If the nnc parameter is specified as an asterisk, the nnm parameter must be specified as an asterisk or as the full range.

If the nncm parameter is specified as a single value, or a range other than the full range of 0–255, the nni and nnc parameters must be specified with a single value.

If the nni parameter is specified as an asterisk or as a range, the nnc and nncm parameters must be specified as an asterisk or as the full range.

The nsfi=stop parameter must be specified in the command

The entry specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must already exist in the screening reference.

The specified screening reference must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N24 or ITU-N16 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

The J7 support feature must be enabled before the un, sna, mna, nun, nsna, or nmna parameters are specified.

The J7 support feature must not be enabled before the msa, ssa, sp, nmsa, nssa, or nsp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk can be specified for a parameter value in the `chg/dlt-scr-destfld` commands only if that parameter value was specified as an asterisk in the `ent-scr-destfld` command to define the parameter value.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst and npcst parameters indicate whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters i.e., ni, nc, ncm, nni, nnc or nncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
chg-scr-destfld:sr=iec:ni=240:nc=010:ncm=019&&020:nncm=021
```

```
    rlghncxa03w 04-01-13 11:49:47 EST  EAGLE 31.3.0
    CHG-SCR-DESTFLD: SCREEN SET AFFECTED - SS01  25% FULL
    CHG-SCR-DESTFLD: MASP A - COMPLTD
;
```

Related Commands

dlt-scr-destfld, *ent-scr-destfld*, *rtrv-scr-destfld*

chg-scr-dpc Change Allowed DPC

Use this command to change the attributes of a specific screening reference in the allowed DPC category. Attributes that may be changed are the point code, next screening function identifier, and the next screening reference.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —remove an existing gateway screening stop action set from a gateway screening rule.

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

narea (optional)

New ITU-international area value.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nid (optional)

New ITU-international ID value.

Range:

*0 - 7, **

*—the full range of values from 0–7

Default:

No change to the current value

nmna (optional)

New 16-bit ITU national main number area. The new *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31

nmsa (optional)

New 24-bit ITU-national main signaling area value. The new *msa* of the point code represented by*msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nnc (optional)

New network cluster. This parameter specifies one or more nnc values for the screening reference specified in the sr parameter. It specifies the new*nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nncm (optional)

New network cluster member. This parameter specifies one or more *ncm* values for the screening reference specified in the sr parameter. It specifies the new *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nni (optional)

New network identifier. This parameter specifies one or more *nni* values for the screening reference specified in the sr parameter. It specifies the new *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nnpc (optional)

New ITU-national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you use multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

Default:

No change to the current value

npc (optional)

ITU national point code.

Range:

0 - 16383

*—the full range of values from 0–16383

npcst (optional)

New point code subtype. This parameter indicates whether the specified new ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

cgpa

Allowed CGPA is the next screening category.

cgpa

Allowed CGPA is the next screening category.

cgpa

Allowed CGPA is the next screening category.

isup

ISUP message type (ISUP) is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

No change to the current value

nsna (optional)

New 16-bit ITU national sub number area. The new *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15

nsp (optional)

New 24-bit ITU national signaling point. The new *sp* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

nssa (optional)

New 24-bit ITU national sub signaling area. The new *ssa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nun (optional)

New 16-bit ITU national unit number. The new *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127

nzone (optional)

New ITU-international zone. The new *zone* for the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Default:

No change to the current value

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*. A

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
chg-scr-dpc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=003:nncm=030
```

```
chg-scr-dpc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=003:nncm=030:nsfi=stop
:actname=none
```

```
chg-scr-dpc:sr=dpc1:npc=128:nsfi=fail:pcst=s:npcst=none
```

```
chg-scr-dpc:sr=dpc2:un=1:sna=2:mna=1:nun=2:nsna=3:nmna=2:nsfi=stop
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or npc combination unless a value of *c* is specified.

A new point code entry must be specified by one, and only one of the four point code parameter combinations: nni-nnc-nncm, nzone-narea-nid, nmsa-nssa-nsp, nun-nsna-nmna or nnpc . If the new point code entry is a different point code type than the existing point code entry, all subfields of the new point code type must be specified.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The DPC specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must already exist in the screening reference or within an existing range of DPCs.

The new DPC or DPC range defined by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must not already exist in the screening reference or within an existing range of DPCs.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the*ACT NAME* field of the `rtrv-gws-actset` command output.

If the zone=* parameter is specified, then the area=* and id=* parameters must be specified.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and sp=* parameters must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the un=* parameter is specified, then the sna=* and mna=* parameters must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc=* parameter is specified, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a range, the nncm parameter must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a single value or a range, a single value must be specified for the nni parameter.

If the nnc=* parameter is specified, the nnm parameter must be specified as an asterisk or as the full range.

If the nncm parameter is specified as a single value, or a range other than the full range of 0–255, the nni and nnc parameters must be specified with a single value.

If the nni parameter is specified as an asterisk or as a range, the nnc and nncm parameters must be specified as an asterisk or as the full range.

If the nsfi=stop parameter is not specified, then the nsr parameter must be specified.

The value of the sr parameter must already exist in the BLKDPC entity set.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N24, or ITU-N16 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

The J7 support feature must be enabled before the un, sna, mna, nun, nsna or nmna parameters are specified.

The J7 support feature must not be enabled before the msa, ssa, sp, nmsa, nssa or nsp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-dpc` command.

If the screen set reaches 100% capacity (indicated by the "100% full" message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to the card. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst and npcst parameters indicate whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters i.e., ni, nc, ncm, nni, nnc or nncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
chg-scr-dpc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=003:nncm=030
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    CHG-SCR-DPC:  SCREEN SET AFFECTED - IEC  25% FULL
    CHG-SCR-DPC:  MASP A - COMPLTD
;
```

Related Commands

dlt-scr-dpc, *ent-scr-dpc*, *rtrv-scr-dpc*

chg-scr-isup

Change Allowed ISUP Screening Reference

Use this command to change the attributes associated with a specific allowed ISUP screening reference in the Allowed ISUP entity set.

Parameters

isupmt/tupmt (mandatory)

ISUP or TUP message type.

Range:

*0 - 255, **

*—the full range of values from 0–255

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Action name. The stop action set name.

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

Default:

No change to the current value

nisupmt/ntupmt (optional)

New ISUP or new TUP message type.

Range:

*0 - 255, **

*—the full range of values from 0–255

nsfi (optional)

The next screening category that is used in the gateway screening process.

Range:

stop —The gateway screening process ends and the message proceeds through normal routing.

Default:

No change to the current value

nsr (optional)

Next screening reference. The parameter specifies which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

Example

```
chg-scr-isup:sr=iec:isupmt=1:nisupmt=1&&2
chg-scr-isup:tupmt=20:ntupmt=1:sr=tu01
```

Dependencies

At least one optional parameter must be specified.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

The value specified for the isupmt or tupmt parameter must already exist in the screening reference specified by the sr parameter.

The specified nisupmt or ntupmt parameter value cannot already exist in the specified sr.

If the nsfi parameter is specified, the parameter value must be *stop*.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

For SEAS commands with the nisupmt parameter specified, the nsfi parameter must be specified.

The GWSOA parameter combination should be known and valid.

The ISUPMT (ISUP Message Type) parameter must be specified for a SEAS command.

Notes

An asterisk can be specified for a parameter value in the `chg/dlt-scr-isup` and commands only if that parameter value was specified as an asterisk in the `ent-scr-isup` command to define the parameter value.

A range of values can be specified for the isupmt or tupmt parameter, by separating the values that define the range by two ampersands *(&&)*; for example, isupmt=025&&100 specifies all ISUP message types from 25 - 100. The value to the left of the *&&* must be less than the value to the right of the*&&* in the range.

TUP does not apply to SEAS. ISUP Message Type is the default.

To use TUP message type screening, an SIO screening reference with si=04 (TUP) must exist in the SIO table. The TUP screening reference specifies the SIO screening reference as the next screening reference parameter (nsr) value.

To use ISUP message type screening, an SIO screening reference with si=05 (ISUP) must exist in the SIO table. The ISUP screening reference specifies the ISUP SIO screening reference as the nsr value.

To screen for TUP and ISUP message types using a combined ISUP/TUP screen set, the SIO screening reference with si=4 and the SIO screening reference with si=5 must be two different scrrening references. The TUP screening reference specifies the SIO screening reference as the nsr value, and the ISUP screening reference specifies the SIO ISUP screening reference as the nsr value.

Output

When a screening reference is specified that is not yet associated with a screen set, the following output appears:

```
chg-scr-isup:sr=is01:isupmt=2:nsfi=stop:nisupmt=4
```

```
    rlghncxa03w 04-01-14 16:45:50 EST  EAGLE 31.3.0
    CHG-SCR-ISUP: MASP A - COMPLTD
;
```

When a screening reference is specified that is already associated with one or more screen sets, the following output appears:

```
chg-scr-isup:sr=is02:isupmt=9:nsfi=stop:nisupmt=8
```

```
    tekelecstp 04-02-17 16:35:56 EST  EAGLE 31.4.0
    Extended Processing Time Required -- Please Wait
    Notice: The number of screensets affected is   2.
    CHG-SCR-ISUP: SCREEN SET AFFECTED - ist1    1% FULL
    CHG-SCR-ISUP: SCREEN SET AFFECTED - ist2    1% FULL
    CHG-SCR-ISUP: MASP A - COMPLTD
;
```

Related Commands

dlt-scr-isup, *ent-scr-isup*, *rtrv-scr-isup*

chg-scr-opc

Change Allowed OPC

Use this command to change the attributes associated with a specific screening reference in the allowed OPC category. Attributes that can be changed are the point code, next screening function identifier and, next screening reference.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Remove an existing gateway screening stop action set from a gateway screening rule.

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

narea (optional)

New ITU-international area value

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by*ni-nc-ncm.*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nid (optional)

New ITU-international ID value.

Range:

*0 - 7, **

*—the full range of values from 0–7

Default:

No change to the current value

nmna (optional)

New 16-bit ITU national main number area. The new *mna* in the point code represented by *un-sna-mna*.

Range:

*0 - 31, **

*--- the full range of values from 0--31

nmsa (optional)

New 24-bit ITU-national main signaling area value. The new *msa* of the point code represented by *msa-ssa-sp* .

Range:

*0 - 255, **

*—the full range of values from 0–255

nnc (optional)

New network cluster. This parameter specifies one or more *nnc* values for the screening reference specified in the sr parameter. It specifies the new *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nncm (optional)

New network cluster member. This parameter specifies one or more *ncm* values for the screening reference specified in the sr parameter. It specifies the new *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nni (optional)

New network identifier. This parameter specifies one or more *nni* values for the screening reference specified in the sr parameter. It specifies the new *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

nnpc (optional)

New ITU-national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you use multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

Default:

No change to the current value

npc (optional)

ITU national point code

Range:

*0 - 16383, **

*—the full range of values from 0–16383

npcst (optional)

New point code subtype. This parameter indicates whether the specified new ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

blkopc

Blocked OPC is the next screening category.

cgpa

Allowed CGPA is the next screening category.

dpc

Allowed DPC is the next screening category.

sio

Allowed SIO is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

No change to the current value

nsna (optional)

New 16-bit ITU national sub number area. The new *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15

nsp (optional)

New 24-bit ITU national signaling point. The new *sp* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

nssa (optional)

New 24-bit ITU national sub signaling area. The new *ssa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nun (optional)

New 16-bit ITU national unit number. The new *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127

nzone (optional)

New ITU-international zone. The new *zone* for the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Default:

No change to the current value

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 - 15, **

*--- the full range of values from 0--15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by*msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* in the point code represented by *un-sna-mna*.

Range:

*0 - 127, **

*--- the full range of values from 0--127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
chg-scr-opc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=010:nncm=020
```

```
chg-scr-opc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=010:nncm=020:nsfi=stop
:actname=cncf
```

```
chg-scr-opc:sr=iec:nsfi=dpc:nsr=wrd2
```

```
chg-scr-opc:sr=opc1:npc=128:nsfi=fail:pcst=s:npcst=none
```

```
chg-scr-opc:sr=opc2:un=1:sna=2:mna=1:nun=2:nsna=3:nmna=2:nsfi=stop
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or npc combination unless a value of *c* for "continue" is specified.

A new point code entry must be specified by one, and only one of the four point code parameter combinations: nni-nnc-nncm, nzone-narea-nid, nmsa-nssa-nsp, nun-nsna-nmna or nnpc. If the new point code entry is a different point code type than the existing point code entry, all subfields of the new point code type must be specified.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The current OPC specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or the npc parameter must already exist in the screening reference or within an existing range of OPCs.

The new OPC or OPC range defined by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or the npc parameter must not already exist in the screening reference or within an existing range of OPCs.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

If the nsr parameter is specified, then the actname parameter cannot be specified.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If zone=* is specified, area=* and id=* must be specified.

If the area=* parameter is specified, the id=* parameter must be specified.

If the msa=* parameter is specified, the ssa=* and sp=* parameters must be specified.

If the ssa=* parameter is specified, the sp=* parameter must be specified.

If the un=* parameter is specified, then the sna=* and mna=* parameters must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc=* parameter is specified, the ncm parameter must be specified as an asterisk or as the full range .

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and the nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a range, the nncm parameter must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a single value or a range, a single value must be specified for the nni parameter.

If the nc=* parameter is specified, the nnm parameter must be specified as an asterisk or as the full range.

If the nncm parameter is specified as a single value, or a range other than the full range of 0–255, the nni and the nnc parameters must be specified with a single value.

If the nni parameter is specified as an asterisk or as a range, the nnc and nncm parameters must be specified as an asterisk or as the full range.

If the nsfi=stop parameter is not specified, then the nsr parameter must be specified.

The value of the sr parameter must already exist in the BLKOPC entity set.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N24 or ITU-N16 point codes.

The J7 support feature must be enabled before the un, sna, mna, nun, nsna, or nmna parameters are specified.

The J7 support feature must not be enabled before the msa, ssa, sp, nmsa, nssa, or nsp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-opc` command.

If the screen set reaches 100% capacity (indicated by the "100% full" message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to the card. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst and npcst parameters indicate whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters i.e., ni, nc, ncm, nni, nnc, or nncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

`chg-scr-opc:sr=iec:ni=240:nc=010:ncm=010:nni=240:nnc=010:nncm=020`

```
    rlghncxa03w 04-01-07 12:05:33 EST  EAGLE 31.3.0
    CHG-SCR-OPC:  SCREEN SET AFFECTED - IEC  25% FULL
    CHG-SCR-OPC: MASP A - COMPLTD
;
```

Related Commands

dlt-scr-opc, *ent-scr-opc*, *rtrv-scr-opc*

chg-scr-sio — Change Allowed SIO

Use this command to change a specific screening reference in the allowed service indicator octet category. Attributes that may be changed are the network indicator, service indicator, message priority, heading codes, next screening function identifier, and next screening reference.

Note: To use TUP message type screening, an SIO screening reference with si=04 (TUP) must be defined in the SIO table. This SIO screening reference is specified as the next screening reference (nsr) value in an ISUP screening reference for screening TUP message types.

Parameters

nic (mandatory)

Network indicator code. This parameter specifies whether the message originated from an international (0) or national (2) network.

Range:

*0 - 3, **

*—the full range of values from 0–3

pri (mandatory)

Message priority. The new message priority in the SIO.

Range:

*0 - 3, **

*—the full range of values from 0–3

Default:

No change to the current value

si (mandatory)

Service indicator. The type of message. The values are defined in Telcordia TR-NWT-000246.

Range:

00 - 15

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic charahcter followed by up to 3 alphanumeric characters

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —remove an existing gateway screening stop action set from a gateway screening rule.

h0 (optional)

This parameter is mandatory if the si value is 00, 01, 02, or 03. Otherwise, the h0 parameter is undefined.

Range:

*0 - 15, **

*—the full range of values from 0–15

Default:

Current value or undefined

h1 (optional)

This parameter is mandatory if the si value is 00, 01, 02, or 03. Otherwise, the h1 parameter is undefined.

Range:

*0 - 15, **

*—the full range of values from 0–15

Default:

Current value or undefined

nh0 (optional)

New H0 heading code. The new H0 heading code for the screening reference specified in the sr parameter.

Range:

*0 - 15, **

*—the full range of values from 0–15

Default:

No change to the current value

nh1 (optional)

New H1 heading code. The new H1 heading code for the screening reference specified in the sr parameter.

Range:

*0 - 15, **

*—the full range of values from 0–15

Default:

No change to the current value

nnic (optional)

New network indicator code. The new *nic* for the screening reference specified.

Range:

0 - 3

*—the full range of values from 0–3

Default:

No change to the current value

npri (optional)

New message priority. The new message priority in the SIO.

Range:

*0 - 3, **

*—the full range of values from 0–3

Default:

No change to the current value

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC

cdpa

Allowed CDPA

cgpa

Allowed CGPA

destfld

Allowed destination field (DESTFLD)

isup

ISUP message type (ISUP)

stop

The gateway screening process ends and the message proceeds through normal routing.

dpc

Allowed DPC

Default:

No change to the current value

nsi (optional)

New service indicator. The type of message for the specified screening reference. The values are defined in Telcordia TR-NWT-000246.

Range:

0 - 15

Default:

No change to the current value

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

Example

```
chg-scr-sio:sr=iec:nic=1:si=1:h0=02:h1=03:pri=*:nh0=03&&04
chg-scr-sio:sr=iec:nic=1:si=3:pri=2:npri=1
chg-scr-sio:sr=iec:nic=1:si=3:pri=3:nnic=2:nsfi=stop:actname=copy
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

At least one attribute must be changed.

If asterisk values or ranges are specified for the new heading codes, nothing that matches the entire combination of nic/nnic, si/nsi, and the specified new heading codes and priorities can already exist in the allowed SIO category for the screening reference.

An asterisk cannot be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-sio` command.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the*ACT NAME* field of the `rtrv-gws-actset` command output.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

The values specified for the nsfi and si parameters must meet the mapping requirements as shown:

- nsfi=destfld — si=00
- nsfi=cdpa — si=03
- nsfi=cgpa — si=03
- nsfi=isup — si=05

If the si parameter value is greater than 2, and the nsi parameter value is greater than 3, the nh0 and nh1 parameters are used to enter the required h0 and h1 parameter values.

Valid combinations for the h0/h1 and nh0/nh1 parameters are:

- h0 (nh0) is a single value—h1 (nh1) can be a single value, range, or asterisk
- h0 (nh0) is a range— h1 (nh1) can be an asterisk
- h0 (nh0) is an asterisk— h1 (nh1) can be an asterisk

If the value specified for the nsi parameter is greater than 2, then the nh0 and nh1 parameters cannot be specified.

Use *Table 18: Supported chg-scr-sio Parameter Combinations* to determine additional acceptable combinations of specified parameter values

Table 18: Supported chg-scr-sio Parameter Combinations

si value:	nic value	pri value	h0 value:	h1 value:
0	s, *	s, *, r	s	s, *, r
0	s, *	s, *, r	*, r	*
1, 2	s, *	s, *, r	s	s, *, r
1, 2	s, *	s, *, r	*, r	*
3-15	s, *	s, *, r	u	u

Legend

- s = single value
- r = range
- * = asterisk
- u = unspecified

If the nh0 or nh1 parameters are specified, the parameter values must be valid with the h0 or h1 values currently in the database.

The h0, h1, nh0, and nh1 parameters cannot be specified if the si parameter is not equal to 00, 01, or 02, and the nsi parameter is not specified.

The nnic, nsi, pri, and nh0/nh1 parameters must not already exist in the allowed SIO category.

The sr, nic, si, pri, and h0/h1 parameters for which attributes are to be changed must be in the allowed SIO category.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

If the nsfi=stop parameter is not specified, then the nsr parameter must be specified.

If the si parameter is equal to 00, 01, or 02, the h0 and h1 parameters must be specified. Otherwise, the h0 parameter cannot be specified.

The specified screening reference must already exist in the database.

The GWSOA parameter combination should be known and valid.

For SEAS command commands, the pri parameter specified must be in the range 0-3, *."

For SEAS command commands, the h0 parameter specified must be in the range 0-15, *."

For SEAS command commands, the h1 parameter specified must be in the range 0-15, *."

Notes

If the screen set reaches 100% capacity (indicated by the "100% full" message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to the card. Ensure that screen sets do not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

To use TUP message type screening, an SIO screening reference with si=04 (TUP) must be defined in the SIO table. To use ISUP message type screening, a rule with si=05 (ISUP) must be defined in the SIO table. To use a combined ISUP/TUP screen set for TUP and ISUP message screening, the SIO screening reference with si=4 and the SIO screening reference with si=5 must be two different screening references.

A network indicator value of 1 or 3 can be used in private networks.

A network indicator value of 3 can be used in some national networks to broaden the identity of a national network, but is usually spare.

Output

```
chg-scr-sio:sr=iec:nic=1:si=3:pri=2:npri=1
```

```
    rlghncxa03w 04-01-14 16:45:50 EST  EAGLE 31.3.0
    CHG-SCR-SIO: SCREEN SET AFFECTED - SS01  25% FULL
    CHG-SCR-SIO: SCREEN SET AFFECTED - SS04  35% FULL
    CHG-SCR-SIO: MASP A - COMPLTD
;
```

Related Commands

dlt-scr-sio, *ent-scr-sio*, *rtrv-scr-sio*

chg-scr-tt

Change Allowed Translation Type

Use this command to change the attributes of a specific screening reference in the allowed translation type category. Attributes that can be changed are the translation type, next screening function identifier and next screening reference.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

type (mandatory)

Translation type. The GTT type value in the CdPA.

Range:

*0 - 255, **

*—the full range of values from 0–255

actname (optional)

Action name. The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —remove an existing gateway screening stop action set from a gateway screening rule.

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range: ***cdpa, stop***

cdpa

Allowed called party address is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

No change to the current value

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

ntype (optional)

New translation type. The GTT type value in the CdPA. A single value or a range of values can be specified.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

No change to the current value

Example

```
chg-scr-tt:sr=iec:type=012:ntype=014
chg-scr-tt:sr=iec:type=012:ntype=014:nsfi=stop:actname=none
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

At least one attribute must be changed.

The new translation type cannot already exist.

If an asterisk is specified for the new allowed type, no other translation types can exist in the screening table.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the*ACT NAME* field of the `rtrv-gws-actset` command output.

The next screening function identifier and the next screening to be added must point to one or more existing screening references.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

If the nsfi parameter has a value other than *stop*, the nsr parameter must be specified.

If the screening reference exists, the single value or range specified for the allowed type to be added to the TT screen for the allowed TT screening reference must not already exist in that TT screen.

The screening reference and translation type for which the attributes are to be changed must exist.

The current translation type must already exist.

The value specified for the type parameter must be within the allowed range.

The GWSOA parameter combination should be known and valid.

Notes

If the screen set reaches 100% capacity (indicated by the “100% full” message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to the card. Ensure that screen sets do not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

An asterisk can be specified for a parameter value in the `chg/dlt-scr-tt` commands only if that parameter value was specified as an asterisk in the `ent-scr-tt` command to define the parameter value.

Output

```
chg-scr-tt:sr=iec:type=012:ntype=014
```

```
    rlghncxa03w 04-01-07 12:05:33 EST  EAGLE 31.3.0
    CHG-SCR-TT:  SCREEN SET AFFECTED - IEC  25% FULL
    CHG-SCR-TT:  MASP A - COMPLTD
;
```

Related Commands

dlt-scr-tt, *ent-scr-tt*, *rtrv-scr-tt*

chg-scrset

Change Screen Set

Use this command to change the attributes of a screen set. A screen set is a group of screening references that can be assigned to a linkset. It is defined by a name and a pointer to the first screening reference of a screen set.

Parameters

The nscrn, nsfi, or nsr parameter must be specified.

scrn (mandatory)

Screen set name. Each screening reference must have a unique name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Action name. This parameter specifies the name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none—remove an existing gateway screening stop action set from a gateway screening rule.

destfld (optional)

This parameter turns on and off the automatic allowed affected destination screening for network management messages against the routing table, self point codes, and capability point codes. When this parameter is on, the automatic screening is applied at the end of the provisioned screen set.

Range:

yes

no

Default:

Current value

nscrn (optional)

New screen set name.

Range:

ayyy 1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Current value

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

blkopc

Blocked OPC is the next screening category.

dpc

Allowed DPC is the next screening category.

opc

AllowedOPC is the next screening category.

sio

Allowed SIO is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

Current value

nsr (optional)

Next screening reference. The parameter indicates which screening reference in the specified screening category (*nsfi*) is to be used in the screening process. If nsfi=stop, the nsr parameter cannot be specified.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Current value

Example

```
chg-scrset:scrn=ss01:nsfi=opc:nsr=iec
chg-scrset:scrn=ss02:nsfi=stop:nscrn=ss03
chg-scrset:scrn=ss02:nscrn=ss03:nsfi=stop:actname=copy
chg-scrset:scrn=ss02:nsfi=stop:nscrn=ss03:destfld=no
```

Dependencies

The value of the nscrn parameter cannot be assigned to another screen set.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the *ACT NAME* field of the `rtrv-gws-actset` command output.

The nsfi and nsr parameters must point to one or more existing entities in another entity set, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the nsfi=stop parameter is not specified, then the nsr parameter must be specified.

An existing screen set must be removed from all linksets before it can be changed.

If the nscrn parameter is specified, the scrn parameter value cannot be referenced by a linkset.

If the next screening function identifier (nsfi) and the next screening reference (nsr) does not point to an existing screen, the nsfi must be equal to *stop* and the nsr parameter must not be specified.

The nsfi parameter must be valid for the SCRSET entity.

At least one optional parameter must be specified.

The GWSOA parameter combination should be known and valid.

The value for scrn and nscrn parameters must be different.

When the screen sets are provisioned at maximum capacity (1023 screensets), no screen sets can be changed.

Notes

If the screen set reaches 100% capacity (indicated by the “100% full” message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to the card. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The system validates the command to verify that the specified screen set name is in use.

Output

```
chg-scrset:scrn=ss01:nsfi=opc:nsr=iec
```

```
    rlghncxa03w 04-01-07 09:35:10 EST  EAGLE 31.3.0
    CHG-SCRSET:  SCREEN SET AFFECTED - SS01  25% FULL
    CHG-SCRSET:  MASP A - COMPLTD
;
```

Related Commands

dlt-scrset, *ent-scrset*, *rtrv-scrset*

chg-seas-config

Changes CCMR Configuration

Use this command to configure information for the CCS Message Router (CCS MR) in the EAGLE database. The CCS MR is a stand-alone, self-contained system that provides a centralized mechanism for routing CCS network operations traffic between STPs/SCPs and existing and new OSS.

Parameters

authmode (optional)

Authentication mode. The authentication mode for the EAGLE.

Note: Password-based authentication is the only authentication mode that is supported currently.

Range:

password

conn (optional)

Connection. The CCS MR where the SEAS terminal is connected.

Range:

ipmr1

ipmr2

hname (optional)

Host name. This parameter specifies the name of the remote host machine.

Range:

zzzzzzzzzzzzzzz

1-15 alphanumeric characters. Quotation marks ("") can be entered as part of the value. If quotation marks are used, then a hyphen ( ) can also be used.

ipaddr (optional)

IP address. The IP address of the CCS MR.

Range:

4 numbers separated by dots, with each number in the range of 0-255.

login (optional)

The login name used to create an SSH connection between the CCS MR and the EAGLE.

Range:

zzzzzzzzzzzzzzz

1-15 alphanumeric characters.

port (optional)

The port number of the CCS MR.

Range:

1024 - 5000

seasclli (optional)

The SEASCLLI portion of the EAGLE node name that is sent in SR-5129 messages.

Note: This value is different from the EAGLE CLLI value that is configured with the `chg-sid` command.

The corresponding SEASCLLI name must be configured on the CCS MR. Refer to Telecordia Configuration Specification "Telcordia Technologies System Documentation", *BD-SNAM-ADMIN-4 Issue 14, November 2006*.

Range:

axxxxxxxxxx

1 alphabetic character followed by up to 10 alphanumeric characters

Example

```
chg-seas-config:seasclli=eaglestp001:conn=ipmr1:
ipaddr=198.168.25.10:port=1500
```

```
chg-seas-config:conn=ipmr2:port=3000
```

```
chg-seas-config:conn=ipmr2:ipaddr=10.203.63.23
```

Dependencies

The SEAS Over IP feature must be enabled before this command can be entered.

The SEAS terminal must be inhibited before the seasclli, ipaddr, port, login, hname, or authmode parameters can be specified.

The conn parameter must be specified before the port, ipaddr, login, or hname parameters can be specified.

The value of the password requested by the login parameter must be from 1 - 15 alphanumeric characters in length.

The values of the login and hname parameters must be between 1-15 characters in length.

The port and ipaddr parameters must have unique values for each CCS MR.

Output

```
chg-seas-config:seasclli=eaglestp001:conn=ipmr1:ipaddr=198.168.25.10:port=1500
```

```
    tekelecstp 07-06-16 22:34:11 IST  EAGLE 37.5.0
    CHG-SEAS-CONFIG: MASP A - COMPLTD
;
```

Related Commands

rtrv-seas-config

chg-secu-dflt

Change System-Wide Security-Related Defaults

Use this command to change various system-wide, security-related defaults, such as:

- The default password aging interval
- The default user ID aging interval
- Whether to allow or prohibit multiple simultaneous logins with the same user ID
- Control of the password security algorithm
- Login warning message text
- Clear the warning message text displayed during login to the EAGLE
- Password expiring notification interval
- Password expired grace period
- Control of the Telnet terminal security

Parameters

alpha (optional)

Minimum number of alphabetic characters (a–z) required in a new password.

Range:

0 - 12

Default:

Current value

System Default:

1

clrwrntx (optional)

Clear warning text. This parameter deletes warning message text.

Range:

no

Does not delete any warning message text.

yes

Deletes warning message text for the line specified by the *wrnln* parameter.

all

Deletes warning message text for all lines.

Default:

No change to current value.

minintrvl (optional)

Minimum number of days before a password can be changed again.

Range:

0 - 30

Default:

No change to the current value

System Default:

1

minlen (optional)

Minimum number of characters that must be in a user password.

Range:

1 - 12

Default:

Current value

System Default:

8

multlog (optional)

This parameter specifies whether multiple simultaneous logins can be performed with a user ID.

Range:

yes

A user ID can be logged in to more than one terminal at the same time.

no

A user ID can be logged in to only one terminal at a time.

Default:

Current value

System Default:

no

num (optional)

Minimum number of numeric characters required in a new password.

Range:

0 - 12

Default:

Current value

System Default:

1

page (optional)

Default password aging interval for newly created user IDs. If the page parameter is specified in the `ent-user` command, the system uses that value; otherwise, the system uses the value specified here.

Range:

0 - 999

Default:

Current value

System Default:

90

pchreuse (optional)

Number of characters that cannot be reused from the existing password when setting a new password.

Range:

0 - 10

Default:

No change to the current value

System Default:

4

pgrace (optional)

Number of days after password expiration during which the user can login without changing their password.

Range:

0 - 7

Default:

No change to the current value

System Default:

3

pnotify (optional)

Number of days before password expiration that the user is notified about the expiration.

Range:

0 - 30

Default:

No change to the current value

System Default:

7

preuse (optional)

Number of passwords in the password history that must be unique.

Range:

0 - 12

Default:

No change to the current value

punc (optional)

Minimum number of punctuation characters required in a new password. A punctuation character is any character that is not an alphabetic or numeric character, including spaces.

Range:

0 - 12

Default:

Current value

System Default:

1

ssh (optional)

This parameter specifies whether the telnet connections are secure or not.

Range:

on

The telnet connections are secure.

off

The telnet connections are unsecure.

System Default:

off

uout (optional)

Number of successive days a user ID can go unused (no successful login) before the system denies login. If the uout parameter is specified in the `ent-user` command, the system uses that value; otherwise, the system uses the value specified here.

Range:

0 - 999

Default:

Current value

System Default:

90

wrnln (optional)

Warning message line number. The line number within the warning message to receive the new text specified by the wrntx parameter.

Range:

1 - 20

Default:

Current value

wrntx (optional)

New message text for the warning message. The text that replaces the current text of the warning message line specified by the wrnln parameter.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz
Any quoted alphanumeric string from 1-76 characters in length; for example, “abc123”.

Default:

Current value

Example

```
chg-secu-dflt:minlen=5
```

The following example input shows how to add a blank line to the display after a successful login and how to cause lines not to display as part of the message after a successful login.

```
chg-secu-dflt:wrnln=1:wrntx="************************************************************"
chg-secu-dflt:wrnln=1:clrwrntx=yes
chg-secu-dflt:wrnln=3:wrntx="* unauthorized access or use may lead to*"
chg-secu-dflt:wrnln=4:wrntx="* prosecution.*"
chg-secu-dflt:wrnln=5:wrntx="* 05-07-01 notice!!! eagle will be upgraded
between'*"
chg-secu-dflt:wrnln=6:wrntx="* the hours of 2am-3am on 05-07-01.*"
chg-secu-dflt:wrnln=7:wrntx="* *"
chg-secu-dflt:wrnln=8:wrntx="* today's happy message: go with oracle!!*"
chg-secu-dflt:wrnln=9:wrntx="************************************************"
```

```
chg-secu-dflt:wrnln=10:wrntx=“ ” (set to 1 space to insert a blank line)
chg-secu-dflt:wrnln=10:clrwrntx=yes
chg-secu-dflt:clrwrntx=all
chg-secu-dflt:clrwrntx=no:multilog=yes
chg-secu-dflt:ssh=on
```

Dependencies

At least one optional parameter must be specified.

The sum of the values specified for the alpha, num, and punc parameters must not be greater than 12.

The wrnln and wrntx parameters must be specified together in this command.

If the clrwrntx=yes parameter is specified, then the wrnln parameter must be specified.

If the clrwrntx=all parameter is specified, then the wrnln and wrntx parameters cannot be specified.

If the wrnln parameter is specified, then the wrntx parameter or the clrwrntx=yes parameter must be specified.

Inhibit the IPSM cards before changing the value of parameter SSH.

If the OAM IP security feature is not activated then the parameter SSH=ON cannot be specified.

Notes

The warning message lines are displayed in the scroll area in order after a successful login; that is, line 1, line 2, and so on.

Any warning message line deleted with *clrwrntx=yes* parameter is not displayed in the scroll area during login.

The following message is the default message delivered with every system:

```
NOTICE: This is a private computer system.
```

```
Unauthorized access or use may lead to prosecution.
```

Even though the minimum number of characters allowed in a password is specified using the minlen parameter, the password also must satisfy the minimum value requirements specified on the alpha, num, and punc parameters. The actual minimum password length is the greater of either the value specified on the minlen parameter or the total number of characters specified on the alpha, num, and punc parameters.

For example, if `chg-secu-dflt:minlen=5:alpha=2:num=2:punc=2` is entered, the minimum number of password characters specified on the minlen parameter is 5. But the total number of characters specified in the alpha, num, and punc parameters is 6 (alpha+num+punc). The effective minimum number of characters is actually 6 rather than the 5 specified on the minlen parameter.

If the clrwrntx=yes parameter is specified, then at least one line number must be specified.

The Telnet connections will be secure when the OAM IP security feature is ON and the value of parameter SSH is ON. If either of them is OFF, the Telnet connections will not be secure.

Output

The following commands create the warning message that is shown in the output after the commands. The notes that are not bold in parentheses after some commands explain the displayed output. The warning message is displayed after the user enters the `login` command and a password. The output example shows the command output, a `login` command and password prompt, and the warning message that was created with these commands. See the Notes section for this command for additional information about entering this command.

```
chg-secu-dflt:wrnln=1:wrntx="*************************************************"

chg-secu-dflt:wrnln=2:wrntx="* NOTICE: This is a private computer system.
*"
chg-secu-dflt:wrnln=3:wrntx="* Unauthorized Access or use may lead to *"
chg-secu-dflt:wrnln=4:wrntx="* prosecution. *"
chg-secu-dflt:wrnln=5:wrntx="* 08/03/01 Notice!!! Eagle will be upgraded
between '*"
chg-secu-dflt:wrnln=6:wrntx="*              the hours of 2am-3am on
08/03/15. *"
chg-secu-dflt:wrnln=7:wrntx="* *"
chg-secu-dflt:wrnln=8:wrntx="* Today's happy message: Go with Oracle!!
*"
chg-secu-dflt:wrnln=9:wrntx="*************************************************"
chg-secu-dflt:wrnln=10:wrntx=" "  (set to 1 space to cause blank line before login history is
displayed)
chg-secu-dflt:wrnln=11:clrwrntx=yes
chg-secu-dflt:wrnln=12:clrwrntx=yes
chg-secu-dflt:wrnln=13:clrwrntx=yes
chg-secu-dflt:wrnln=14:clrwrntx=yes   (remaining lines are provisioned to cause
chg-secu-dflt:wrnln=15:clrwrntx=yes   them not to display as part of the message
chg-secu-dflt:wrnln=16:clrwrntx=yes   after successful login)
chg-secu-dflt:wrnln=17:clrwrntx=yes
chg-secu-dflt:wrnln=18:clrwrntx=yes
chg-secu-dflt:wrnln=19:clrwrntx=yes
chg-secu-dflt:wrnln=20:clrwrntx=yes
```

```
rlghncxa03w 08-03-10 11:43:04 EST  EAGLE 38.0.0
CHG-SECU-DFLT: MASP A - COMPLTD
```

```
;
    LOGIN:UID=eagle
    PASSWORD:<password is not displayed>


    ************************************************
    *  NOTICE: This is a private computer system.       *
    *  Unauthorized Access or use may lead to           *
    *  prosecution.                                     *
    *  08/03/01 Notice!!! Eagle will be upgraded between *
    *               the hours of 2am-3am on 08/03/15.  *
    *                                                  *
    *  Today's happy message: Go with Oracle!!         *
    ************************************************

    0 LOGIN failures since last successful LOGIN
    Last successful LOGIN was on port 3 on 08-03-09 @ 12:12:35
;
```

The following command clears all of the warning messages.

`chg-secu-dflt:clrwrntx=all`

```
    tekelecstp 08-03-02 17:53:13 EST  EAGLE 38.0.0
    CHG-SECU-DFLT: MASP A - COMPLTD
;

    LOGIN:UID=eagle
    PASSWORD:<password is not displayed>

    0 LOGIN failures since last successful LOGIN
    Last successful LOGIN was on port 3 on 08-02-26 @ 12:12:35
;
```

The following commands set the warning message text that is shown in the output. The parameter clrwrntx=no has no impact on the command output.

chg-secu-dflt:wrnln=1:wrntx="":clrwrntx=no**

chg-secu-dflt:wrnln=2:wrntx="* NOTICE: This is a private computer system. *":clrwrntx=no

chg-secu-dflt:wrnln=3:wrntx="**":clrwrntx=no

```
    tekelecstp 08-03-02 17:53:31 EST  EAGLE 38.0.0
    CHG-SECU-DFLT: MASP A - COMPLTD
;
    LOGIN:UID=eagle
    PASSWORD:<password is not displayed>


    ************************************************
    *  NOTICE: This is a private computer system.       *
    ************************************************

    0 LOGIN failures since last successful LOGIN
    Last successful LOGIN was on port 3 on 08-02-26 @ 17:12:35
;
```

The following command sets the SSH parameter when the OAM IP security feature is activated.

```
chg-secu-dflt:ssh=on
```

```
tekelecstp 12-09-18 10:11:43 EST 45.0.0-64.42.0
chg-secu-dflt:ssh=on
Command entered at terminal #4.
CHG-SECU-DFLT: MASP A - COMPLTD
;
```

The following command is rejected when OAM IP security feature is not activated.

```
chg-secu-dflt:ssh=on
```

```
tekelecstp 12-09-19 12:57:51 EST 45.0.0-64.42.0
chg-secu-dflt:ssh=on
Command entered at terminal #4.
E2680 Cmd Rej: OAM IP Security Feature must be activated
CHG-SECU-DFLT: MASP A- Command Aborted
;
```

Related Commands

ent-user, *login*, *rtrv-secu-dflt*

chg-secu-trm

Change Terminal Access Rights

Use this command to configure the access rights for a terminal. Only a user with system security administration authority can change a terminal's access rights. Access rights determine whether a terminal or port has command access to the system for the different command classes.

Parameters

trm (mandatory)

Terminal ID. The port to be configured.

Range:

1 - 16

all (optional)

All non-configurable command classes. This parameter specifies whether to configure all of the command classes.

Range:

yes

no

Default:

No change to the current value

System Default:

no

cc1 (optional)

Configurable command class name specifying whether the command class is allowed for the specified terminal.

Range:

ayy-yes, *ayy-no*

1 alphabetic character followed by 2 alphanumeric characters, a dash, and the indicator value

-no —The command is not allowed for the specified terminal.

-yes —The command is allowed for the specified terminal.

cc2 (optional)

Configurable command class name specifying whether the command class is allowed for the specified terminal.

Range:

ayy-yes, *ayy-no*

1 alphabetic character followed by 2 alphanumeric characters, a dash, and the indicator value

-no —The command is not allowed for the specified terminal.

-yes —The command is allowed for the specified terminal.

cc3 (optional)

Configurable command class name specifying whether the command class is allowed for the specified terminal.

Range:

ayy-yes, *ayy-no*

1 alphabetic character followed by 2 alphanumeric characters, a dash, and the indicator value

-no —The command is not allowed for the specified terminal.

-yes —The command is allowed for the specified terminal.

cc4 (optional)

Configurable command class name specifying whether the command class is allowed for the specified terminal.

Range:

ayy-yes, *ayy-no*

1 alphabetic character followed by 2 alphanumeric characters, a dash and the indicator value

-no —The command is not allowed for the specified terminal.

-yes —The command is allowed for the specified terminal.

cc5 (optional)

Configurable command class name, specifying whether the command class is allowed for the specified terminal.

Range:

ayy-yes, *ayy-no*

1 alphabetic character followed by 2 alphanumeric characters, a dash, and the indicator value

-no —The command is not allowed for the specified terminal.

-yes —The command is allowed for the specified terminal.

cc6 (optional)

Configurable command class name specifying whether the command class is allowed for the specified terminal.

Range:

ayy-yes, *ayy-no*

1 alphabetic character followed by 2 alphanumeric characters, a dash, and the indicator value.

-no —The command is not allowed for the specified terminal.

-yes —The command is allowed for the specified terminal.

cc7 (optional)

Configurable command class name specifying whether the command class is allowed for the specified terminal.

Range:

ayy-yes, *ayy-no*

1 alphabetic character followed by 2 alphanumeric characters, a dash and the indicator value

-no —The command is not allowed for the specified terminal.

-yes —The command is allowed for the specified terminal.

cc8 (optional)

Configurable command class name specifying whether the command class is allowed for the specified terminal.

Range:

ayy-yes, *ayy-no*

1 alphabetic character followed by 2 alphanumeric characters, a dash and the indicator value

-no —The command is not allowed for the specified terminal.

-yes —The command is allowed for the specified terminal.

db (optional)

Database Administration class. This parameter specifies whether the Database Administration class of commands is allowed.

Range:

yes

no

Default:

No change to the current value

System Default:

no

dbg (optional)

Debug class. This parameter specifies whether the Debug class of commands is allowed.

Range:

yes

no

Default:

No change to the current value

System Default:

no

link (optional)

Link Maintenance class. This parameter specifies whether the Link Maintenance class of commands is allowed.

Range:

yes

no

Default:

No change to the current value

System Default:

no

pu (optional)

Program Update class. This parameter specifies whether the Program Update class of commands is allowed.

Range:

yes

no

Default:

No change to the current value

System Default:

no

sa (optional)

Security Administration class. This parameter specifies whether the Security Administration class of commands is allowed.

Range:

yes

no

Default:

No change to the current value

System Default:

no

sys (optional)

System Maintenance class. This parameter specifies whether the System Maintenance class of commands is allowed.

Range:

yes

no

Default:

No change to the current value

System Default:

no

Example

```
chg-secu-trm:trm=3:all=yes
chg-secu-trm:trm=3:sys=yes:cc1=u04-no:cc3=u11-yes
```

Dependencies

This command is not supported on telnet terminals (terminal IDs 17-40).

At least one optional parameter must be specified.

Access rights for a terminal cannot be changed while a user is logged on to that terminal.

At least two terminal ports must be configured to have security administration authority.

The Command Class Management feature must be enabled before any of the configurable command class name parameters (cc(X)) can be specified.

The value specified for a configurable command class name must be a default or provisioned command class name in the CCNAMES table.

If the all parameter is specified and any of the individual command classes are also specified, the individual command classes take precedence.

Notes

Up to 8 configurable command class name parameters can be entered in one command. Additional commands can be entered to change access rights for more than 8 names. To change access rights for all 32 available configurable command class names, four commands could be entered with 8 names specified in each command.

Security Administration ports whose terminal port type has been configured with a value of *none* or *printer* do not allow commands to be entered. Because commands cannot be entered from terminals attached to these ports, they are not considered as ports configured for security administration authority.

Output

```
chg-secu-trm:trm=3:all=yes
```

```
    rlghncxa03w 04-01-15 12:30:04 EST  EAGLE 31.3.0
    Command entered at terminal #13.

    rlghncxa03w 04-01-15 12:30:07 EST  EAGLE 31.3.0
    CHG-SECU-TRM: MASP A - COMPLTD
;
```

Related Commands

rtrv-secu-trm

chg-sg-opts

Change IP

Use this command to change the IP7 Secure Gateway protocol options.

Parameters

dscp (optional)

This parameter specifies the dscp value that shall be set for outbound messages for SIGTRAN cards.

Range:

0-63

None

The system-wide SCTP value is turned off, and the SCTP value can be configured on a per-card basis.

Default:

No change to the current value

System Default:

0

getcomm (optional)

The community name to use for SNMP Get and GetNext request validations. This value applies for each E5-ENET and E5-ENET-B SNMP agent in the system.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string up to 32 characters in length

If the string contains characters other than alphanumeric characters, the entire string must be enclosed in single quotes (' ').

The string can be entered in upper and lower case; the system converts upper case alphabetic characters to lower case.

Default:

No change to the current value

System Default:

public

ipgwabate (optional)

Enable or disable IPGWx SS7 congestion abatement procedures. This parameter specifies whether the TFC is forwarded to the system's true point code, to allow MSUs to be discarded as part of abatement procedures on all cards running the IPGWx application. When set to *yes*, the system will maintain and abate congestion on behalf of IPGWx-connected nodes.

Range:

yes

no

Default:

No change to the current value

System Default:

no

sctpcsum (optional)

SCTP checksum algorithm for the node.

Range:

adler32

crc32c

percard

The system-wide SCTP checksum algorithm type is turned off, and the SCTP checksum algorithm can be configured on a per-card basis.

Default:

No change to the current value

System Default:

percard

setcomm (optional)

The community name to use for SNMP set request validations. This value applies for each E5-ENET, and E5-ENET-B SNMP agent in the system.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string up to 32 characters in length.

If the string contains characters other than alphanumeric characters, the entire string must be enclosed in single quotes (' ').

The string can be entered in upper and lower case; the system converts upper case alphabetic characters to lower case.

Default:

No change to the current value

System Default:

private

snmpcont (optional)

System contact information for each DCM SNMP agent in the Secure Gateway. This parameter specifies the sysContact object in the SNMP MIB II System Group (OID 1.3.6.1.2.1.1.4).

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string of up to 64 characters.

If the string contains characters other than alphanumeric characters, the entire string must be enclosed in single quotes (' '-TO).

The string can be entered in upper and lower case; the system converts upper case alphabetic characters to lower case.

Default:

No change to the current value

System Default:

tekelec

srkq (optional)

Static routing key quantity. The maximum number of routing key entries available in the Static Routing Key table of each SS7IPGW or IPGWI card.

Range:

0 - 2500

Default:

No change to the current value

System Default:

1000

trapcomm (optional)

The value used in the community name field when SNMP traps are generated. This value applies for each E5-ENET and E5-ENET-B SNMP agent in the system.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string up to 32 characters in length.

If the string contains characters other than alphanumeric characters, the entire string must be enclosed in single quotes (' ').

The string can be entered in upper and lower case; the system converts upper case alphabetic characters to lower case.

Default:

No change to the current value

System Default:

public

uameasusedftas (optional)

This parameter specifies whether UA measurements are pegged against the default application server or against the application server indicated by the routing context.

This parameter applies to E5-ENET and E5-ENET-B cards. UA measurements for E5-ENET and E5-ENET-B cards running the IPSG application are always pegged against the default application server.

Range:

yes

UA measurement registers are pegged against the default application server.

no

UA measurement registers are pegged against the application server indicated by the routing context.

Default:

No change to the current value

Example

```
chg-sg-opts:srkq=500
chg-sg-opts:snmpcont="John Doe 555-123-4444"
chg-sg-opts:getcomm=public
chg-sg-opts:setcomm=private
chg-sg-opts:sctpcsum=adler32
chg-sg-opts:trapcomm=public
chg-sg-opts:ipgwabate=yes
chg-sg-opts:uameasuseas=yes
chg-sg-opts:dscp=7
```

Dependencies

At least one optional parameter must be specified.

The number of static entries in the Routing Key table cannot exceed the value specified for the srkq parameter.

The srkq parameter value must be greater than or equal to the current number of static routing key entries. Attempts to decrease the value below the actual current number of static routing key entries are not allowed.

The total number of the srkq value cannot exceed 2500 for E5-ENET or E5-ENET-B cards running the SS7IPGW or IPGWI application.

The total number of actual routing keys cannot not exceed 2500 per system.

This command generated an unexpected response message.

Notes

SCTP Checksum Algorithm

The SCTP checksum algorithm affects the IPLIMx, IPGWx, and IPSG cards under the following conditions:

- All associations on the card are in the **open=no** state.
- No associations are provisioned on the card

If neither condition is true, the card raises minor alarm (UAM 298) under the following scenarios:

- The system-wide SCTP checksum algorithm is configured to a different value than the active SCTP checksum algorithm on the card.
- The system-wide SCTP checksum algorithm is set to *percard*, and the per-card setting is different than the active SCTP checksum algorithm on the card.

The alarm is cleared (UAM 299), and the SCTP checksum algorithm takes effect when all associations on the card are set to open=no or when the card is reset.

Table 19: Standard DSCP Values

DSCP Class	DSCP (bin)	DSCP (hex)	DSCP (dec)
NONE	000000	0×00	0
CS1	001000	0×08	8
AF11	001010	0×0A	10
AF12	001100	0×0C	12
AF13	001110	0×0E	14
CS2	010000	0×10	16
AF21	010010	0×12	18
AF22	010100	0×14	20
AF23	010110	0×16	22
CS3	011000	0×18	24
AF31	011010	0×1A	26
AF32	011100	0×1C	28
AF33	011110	0×1E	30
CS4	100000	0×20	32
AF41	100010	0×22	34
AF42	100100	0×34	36
AF43	100110	0×26	38
CS5	101000	0×28	40
EF	101110	0×2E	46
CS6	110000	0×30	48
CS7	111000	0×38	56

Output

`chg-sg-opts:sctpcsum=percard`

```
    tekelecstp 08-02-22 17:56:31 EST  EAGLE 38.0.0
    CHG-SG-OPTS: MASP A - COMPLTD
;
```

`chg-sg-opts:dscp=8`

```
    tekelecstp 13-09-24 16:56:31 EST  EAGLE 46.0.0
    CHG-SG-OPTS: MASP A - COMPLTD
```

```
;
```

Related Commands

rtrv-sg-opts

chg-shlf Change Shelf

Use this command to change the Shelf FAN bit for an equipment shelf in the database.

Parameters

loc (mandatory)

The location of the shelf.

Range:

1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300, 5100, 5200, 5300, 6100, 6200, 6300

fan (optional)

This parameter turns ON/OFF the FAN bit. If it is turned ON, the FAN power for this shelf will be added to the Frame Power Budget.

Range:

off

on

Example

```
chg-shlf:loc=1200:fan=on
```

```
chg-shlf:loc=1200:fan=off
```

Dependencies

The frame and shelf values of the shelf location parameter (loc) must be within the valid range (*xyzz*, where *x*=frame and *y*=shelf; *zz* is always 00 for this command).

The specified shelf location must have been configured previously.

A shelf cannot be provisioned at location 1100. This location is reserved for the control shelf.

The Shelf FAN bit cannot be turned OFF if EPMB, HC-MIM, or E5-APP-B card(s) are provisioned in the shelf.

Notes

None

Output

```
chg-shlf:loc=1200:fan=on

    tekelecstp 03-09-12 11:11:28 EST  EAGLE 45.0.0
    ENT-SHLF: MASP A - COMPLTD
;
```

```
chg-shlf:loc=1200:fan=off

    tekelecstp 03-09-12 11:11:28 EST  EAGLE 45.0.0
    ENT-SHLF: MASP A - COMPLTD
;
```

Related Commands

dlt-shlf, *rtrv-shlf*

chg-sid

Change Self Identification

Use this command to change the self-identification of the system. The self-identification identifies the system to the other signaling points in the network.

Caution: Use this command only during periods of low traffic. If you use the `chg-sid` command to change the point code, then the change does not become enabled until you initialize (`init-sys`) the system.

Note: If you use the `chg-sid` command to change the capability point code, then you do not need to initialize the system for the change to become enabled.

Caution: Changing a SID impacts all adjacent nodes that reference the SID. Both sides must be changed at the same time, or the signaling link test messaging will fail, and the links will go down.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Caution: If there are STC cards in the system for the EAGLE 5 Integrated Monitoring Support (E5IS) feature, you must turn off the EIS copy function (see the `chg-eisopts` command) before you change the system CLLI. When the CLLI change is complete, use the `chg-eisopts` command to turn on the EIS copy function again.

clli (optional)

Common language location identifier. This parameter, which must be unique, identifies the system in terms of its physical location:

- The first four characters identify the city, town, or locality.
- The fifth and sixth characters identify state or province.
- The seventh and eighth characters identify the building.
- The last three characters identify the traffic unit.

Range:

ayyyyyyyyyy

1 alphabetic character followed by up to 10 alphanumeric characters

The value *none* is invalid for the CLLI.

Default:

No change to the current value

cpc (optional)

ANSI capability point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

cpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

cpc/cpca/cpci/cpcn/cpcn24/cpcn16 (optional)

Capability point code. The code used by the SS7 protocol to identify a group of functionally related STPs in the signaling network to which the STP belongs.

cpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

cpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

cpctype (optional)

Capability point code type. This parameter specifies whether the capability point code is for the STP or for a particular service.

This parameter cannot be changed after it is assigned.

Range:

lnp

Local Number Portability

stp

EAGLE

inp

INAP-based Number Portability

eir

Equipment Identity Register

gport

G-Port (GSM Mobile Number Portability)

gflex

G-Flex (GSM Flexible Numbering)

mnp

Mobile Number Portability

atinpq

ATI Number Portability Query

vflex

Voice Mail Router

aiq

ANSI41 Analyzed Information Query

Default:

stp

ncpc (optional)

New ANSI capability point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

ncpca

Range:

000-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

ncpc/ncpca/ncpci/ncpcn/ncpcn24/ncpcn16 (optional)

New capability point code. Use new CPCs to replace or delete existing CPCs.

ncpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

Enter *none* to delete the point code.

The point code *0-000-0* is not a valid point code.

ncpcn (optional)

New ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc).

Range:

s-, 0-16383, aa-zz, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

Enter *none* to delete the point code.

Default:

No change to existing point code value.

ncpcn24 (optional)

New 24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000-255

ssa—000-255

sp—000-255

Enter *none* to delete the point code.

ncpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000--127, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Enter *none* to delete the point code.

npc (optional)

New ANSI STP point code with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm)*.

Synonym:

npca

Range:

000-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When chg-sid:pctype=ansi is specified, *ni = 000* is not valid.

When chg-sid:pctype=ansi is specified, *nc = 000* is not valid if *ni = 001-005*.

When chg-sid:pctype=ansi is specified, *nc = 000* is valid if *ni = 006-255*.

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

npci (optional)

New STP ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

Enter *none* to delete the point code.

The point code *0-000-0* is not a valid point code.

npci/npcn (optional)

New STP ITU national or international point code.

npcn (optional)

New STP ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

Enter *none* to delete the point code.

pc (optional)

ANSI STP point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (optional)

STP point code.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pctype (optional)

Point code type. This parameter does not affect ITU destinations.

Range: ***ansi, other***

ansi —Supports point codes that meet the ANSI standard

other —Supports point codes that do not meet the ANSI standard.

Default:

The point code type is not changed.

Example

To change the site identification PCTYPE to ANSI:

```
chg-sid:pctype=ANSI
```

To change the site identification CLLI to *rlghncxa03w* :

```
chg-sid:clli=rlghncxa03w
```

To add a new ANSI capability point code:

```
chg-sid:cpc=002-002-002
```

To delete an ITU-I capability point code:

```
chg-sid:cpci=2-003-4:ncpci=none
```

To change an existing ITU-N capability point code, *01234*, to *02092* : (The existing CPC is replaced with the new CPC)

```
chg-sid:cpcn=01234:ncpcn=02092
```

To add a new ANSI LNP CPC:

```
chg-sid:cpc=002-002-002:cpctype=lnp
```

To change an existing ITU-N capability point code with a group code of *01234-aa* to *02092-si* : (The existing CPC is replaced with the new CPC)

```
chg-sid:cpcn=01234-aa:ncpcn=02092-si:cpctype=stp
```

To change the ITU-N 24-bit site identification STP Point Code when no previous ITU-N site identification STP point code exists:

```
chg-sid:pcn24=1-101-1
```

To change the ITU-N site identification STP Point Code when a previous ITU-N site identification STP point code exists:

```
chg-sid:pcn=11111:npcn=none
```

To add a new ITU-N 24-bit Capability Point Code:

```
chg-sid:cpcn24=22-22-22
```

To change an existing 24-bit ITN-N Capability Point Code *22* to *33*:

```
chg-sid:cpcn24=22-22-22:ncpcn24=33-33-33
```

To add a new EIR-type Capability Point Code:

```
chg-sid:cpctype=eir:cpci=2-30-1
```

To delete an existing ITUI Capability Spare Point Code:

```
chg-sid:cpci=s-2-003-4:ncpci=none
```

To change an existing node ITU-I spare true point code from an assigned point code value to *none*:

```
chg-sid:pci=s-1-234-5:npci=none
```

To change an existing ITU-N spare capability point code from *s-01234* to *s-02092.* The existing CPC is replaced with the new CPC:

```
chg-sid:cpcn=s-01234:ncpcn=s-02092:cpctype=stp
```

To change or add new node true point codes simultaneously, for ITU-I spare and ITU-N spare point code types:

```
chg-sid:pci=s-1-234-5:pcn=s-12345
```

To change an existing node ITU-N spare true point code from an assigned point code value to *none:*

```
chg-sid:pcn=s-12345:npcn=none
```

To change the CPC list to include an ANSI CPC for the G-Port service:

```
chg-sid:cpca=1-2-3:cpctype=gport
```

To change the CPC list to include an ITU-I CPC for the G-Flex service:

```
chg-sid:cpci=2-3-4:cpctype=gflex
```

To change the ITU-N site identification STP Point Code when a previous ITU-N site identification STP point code does not exist:

```
chg-sid:pcn=11112
```

To change the CPC list to include an ANSI CPC for the ATINPQ service:

```
chg-sid:cpc=3-4-6:cpctype=atinpq
```

To change the CPC list to include an ANSI CPC for the AIQ service:

```
chg-sid:cpc=2-3-5:cpctype=aiq
```

To change the CPC list to include an ANSI CPC for the INP service:

```
chg-sid:cpc=1-1-1:cpctype=inp
```

To add a new ITU-N 16-bit Capability Point Code:

```
chg-sid:cpcn16=125-10-25
```

To change an existing 16-bit ITU-N Capability Point Code from 10 to 15:

```
chg-sid:cpcn16=125-10-25:ncpcn16=125-15-25
```

To change the ITU-N16 site identification STP Point Code:

```
chg-sid:pcn16=123-10-25
```

Dependencies

At least one optional parameter must be specified.

The Spare Point Code Support feature must be enabled before a spare point code (s-) can be specified in the command.

The value specified for the pcn, cpcn, or npcn parameter must be a full point code.

The STP destination and capability point codes can be specified only as full point codes or *none*.

If the ncpc/ncpca/ncpci/ncpcn/ncpcn24/ncpcn16 parameter is specified, a corresponding existing cpc/cpca/cpci/cpcn/cpcn24/cpcn16 parameter must be specified.

If the npci or npcn parameter is specified, a corresponding existing pci parameter or pcn parameter must be specified.

If the cpctype parameter is specified, the cpc/cpca/cpci/cpcn/cpcn24/cpcn16 parameter must be specified.

If the cpctype parameter is specified, an ncpc/ncpca/ncpci/ncpcn/ncpcn24/ncpcn16 parameter cannot be specified in the command.

The values of the pc/pca/pci/pcn/pcn24/pcn16, cpc/cpca/cpci/cpcn/cpcn24/cpcn16, and ncpc/ncpca/ncpci/ncpcn/ncpcn24/ncpcn16 parameters cannot be equal.

The STP capability point code type (domain) must match the new STP capability point code type (domain).

If the cpctype=lnp parameter is specified, then the cpc/cpca parameter must be specified with an ANSI point code value.

The LNP feature must be turned on before the cpctype=lnp parameter can be specified.

The INP feature must be on before the cpctype=inp parameter can be specified.

The EIR feature must be on before the cpctype=eir parameter can be specified.

Only the pcn parameter or the pcn24 parameter can be specified; however, both parameters cannot be specified in the same command.

If a 14-bit ITU-N site ID exists, then a 24-bit ITU-N site ID cannot be assigned. If a 24-bit ITU-N site ID exists, then a 14-bit ITU-N site ID cannot be assigned.

Only one of the ncpc/ncpca/ncpci/ncpcn/ncpcn24/ncpcn16 parameters can be specified.

If the pcn, npcn, cpcn, or ncpcn parameter is specified, the format must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

The site CLLI code that is specified in the command cannot be the same as an existing route destination CLLI code.

The STP capability point code that is specified in the command cannot be the same as an existing STP capability point code.

The new STP capability point code that is specified in the command cannot be the same as an existing STP capability point code.

If the system is configured for ANSI format point codes, the specified network indicator value (*ni*) of the pc, cpc, or ncpc parameter must be 6 or greater when the specified cluster value (*nc*) is 0 .

The true point code and capability point codes cannot be the same as existing secondary point codes.

The existing true point code cannot be changed if it is in the MAP table.

The maximum number of capability point codes that can be provisioned is 96.

If the existing spare ITU-I or spare ITU-N point code is an STP destination point code, then the npci=none or npcn=none parameter (respectively) cannot be specified.

A value of none cannot be specified for the cpc/cpca/cpci/cpcn/cpcn24/cpcn16 parameters.

The STP destination point code that is specified in the command cannot be the same as an existing route dpc or cpc.

The new STP capability point code that is specified in the command cannot be the same as the STP destination point code.

The specified pci or pcn parameter value must already exist as an STP destination point code.

The G-Flex feature must be turned on to change the capability point code if the cpctype=gflex parameter is specified.

The G-Port feature must be enabled before the cpctype=gport parameter can be specified.

If the A-Port or the IS41 GSM Migration (IGM) feature is not enabled, the cpctype=mnp parameter cannot be specified.

If the A-Port or IGM feature is enabled, the cpctype=gport parameter cannot be specified.

Could not add or change the (new) capability point code to the list due to software error.

The ATINP feature must be enabled before the cpctype=atinpq parameter can be specified.

If a value of *aiq*, *atinpq*,or *eir* is specified for the cpctype parameter, then the cpcn24 parameter cannot be specified.

The V-Flex feature must be turned on before the cpctype=vflex parameter can be specified.

The ANSI41 AIQ feature must be enabled before the cpctype=aiq parameter can be specified.

The values specified for the cpc/cpca/cpci/cpcn, ncpc/ncpca/ncpci/npcn, npc/npca/npci/npcn, and pc/pca/pci/pcn parameters cannot be the same as any Emulated Point Code value in the PCT table.

ANSI or ITUN-24 SID cannot be provisioned if the J7 feature is enabled.

Notes

If one of the pc/pca/pci/pcn/pcn24/pcn16 parameters is specified to change the point code, the following message is displayed:

```
CAUTION: SYSTEM SITE ID HAS BEEN CHANGED, MANUAL RE-INITIALIZATION IS NEEDED
```

If the redirect function refers to any of the pc/pca or cpc/cpca parameters, the following message is displayed:

```
CAUTION: SYSTEM SITE ID WAS REFERENCED BY THE REDIRECT FUNCTION’S DPC
```

In order for the change to be fully implemented, you must enter the `init-sys` command. This initializes the entire system, and reloads all LIMs with the new self ID.

Only one ITU-N Site ID point code can be defined at one time (PCN or PCN24). To change from one to the other, the current Site ID must be disabled before the new one can be defined.

When the cpctype=lnp parameter is specified, it associates a specific service or capability (for example, local number portability query response and message relay service) with one or more of the capability point codes.

After the CPCTYPE is defined, it cannot be changed.

For initial installation of a system, the self point code must be entered before any destination is entered.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

When the Site ID is changed, manual initialization is required because an MSU can be in transition between a link card and an SCCP card at the time the SID table is changed. In that case, it is possible for the Destination True Point Code to no longer appear to belong to the STP node, and SCCP would not know what to do with it. The following message is displayed:

```
CAUTION: SYSTEM SITE ID HAS BEEN CHANGED, MANUAL RE-INITIALIZATION IS NEEDED
```

```
Introduced for Feature 90773 GFlex Reroute
Parameter CPCType has new values added for the services GPORT and GFLEX.
The CPC parameter is used to support incoming messages (DPC = CPC) which are
routed via Final GTT (rt-ssn) to the Eagles internal LNP, EIR, and/or INP
Subsystems.
The CPC parameter is also used to support incoming messages which are routed via
 Intermediate GTT (rt-gt) to the Eagle (with DPC = CPC) for G-FLEX and/or G-PORT
 Services and Subsystems on HLR's and/or Nodes which are external to the Eagle.
```

The `chg-sid` command is used to identify the STP in the signaling network. STP identity is determined by the Common Language (CLLI) code and the SS7 Destination/True Point Code (DPC). For MTP message discrimination, the STP can also be identified by one or more optional capability codes representing service-related SCCP capabilities resident at the STP.

The CLLI and DPC are used as paired key fields in SEAS to uniquely identify the STP and all SEAS interactions with that STP. This command is viewed as the first command to be used in provisioning a newly commissioned STP or an STP that is being reactivated in a new location or at a new network address.

The `chg-sid` command can also be used to add capability codes to the existing set for that STP after the CLLI and DPC have been initialized. Alternatively, the STP CLLI and DPC can be provisioned locally during installation, and the command used only to add new capability codes. The STP's own CLLI must be provisioned before SEAS-STP communication, in order to support UAL-level interactions.

If the `chg-sid` command is used to change only the capability point code, then the system does not need to be initialized to enable the change.

The cpctype=vflex parameter is used to support incoming messages (DPC = CPC) that are routed through Final GTT to the EAGLE V-Flex subsystem.

If the CLLI of the system is entered or changed with the `chg-sid` command, and the SEAS Over IP feature is turned on, then the CCS MR configuration must be changed to include the new EAGLE CLLI value. The following warning message appears:

```
CAUTION: System CLLI has changed, CCSMR re-configuration required
```

The cpctype=aiq parameter is used to support incoming messages (DPC = CPC) that are routed through Final GTT to the EAGLE AIQ subsystem.

If the CLLI is changed and if platformenable is on (see the *chg-measopts* command), the MCPM cards should be booted.

If the CLLI is changed and if oamhcmeas is on (see the *chg-measopts* command), the E5-OAM cards should be booted.

Output

`chg-sid:pc=10-20-30`

```
    rlghncxa03w 04-01-07 09:17:40 EST  EAGLE 31.3.0
    CHG-SID: MASP A - COMPLTD
;
```

`chg-sid:pcn16=125-2-6`

```
    tekelecstp 13-02-27 12:34:45 EST  45.0.0-64.56.0
    chg-sid:pcn24=125-2-6
    Command entered at terminal #4.
    CAUTION: SYSTEM SITE ID HAS BEEN CHANGED, MANUAL RE-INITIALIZATION IS NEEDED

    CHG-SID: MASP A - COMPLTD
;
```

Related Commands

ent-sid, *rtrv-sid*

chg-sip-npp

Change SIP NPP

Use this command to change existing number normalization rules (SIPPHCXT and SIPNNPFX). SIPPHCXT table will be used to provision the phone-context. SIPNNPFX table will be used to configure the prefixes against each phone context and it will also contain number of digits to be deleted (NPDD) and new prefix to be added (NPDS).

Parameters

phctxt (mandatory)

Phone Context

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of 1 to 64 characters. Valid values are (0-9, A-Z), +, *, #, .(period), @ or DFLT (default).

pfx (mandatory)

Prefix

Range:

zzzzzzzzzzzzzzz

A string of 1 to 15 characters. Valid values are hex digits (0-9, A-F), +, *, -, #.

npds (optional)

New prefix digits to be substituted to digit string after deleting the NPDD.

Range:

zzzzzzzzzzzzzzz

A string of 1 to 15 characters. Valid values are hex digits (0-9, A-F), and NONE.

Default:

No change to the current value

System Default:

none

npdd (optional)

Number of prefix digits to be deleted from the incoming digit string.

Range:

zzzzzzzzzzzzzzz

An integer in the range of 0 to 15.

Default:

No change to the current value.

System Default:

0

Example

```
chg-sip-npp:phctxt=abc.com:pfx=131:npdd=2
chg-sip-npp:phctxt=xyz.com:pfx=131:npds=3a
chg-sip-npp:phctxt=abc.com:pfx=1:npdd=1:npds=af91
chg-sip-npp:phctxt=user@xyz.com:pfx=91*:npdd=1:npds=af91
```

Dependencies

SIPNP Feature must be enabled before changing any number normalization rules.

SIP Phone Context table (SIPPHCXT) should be accessible.

SIP Prefix table (SIPNNPFX) should be accessible.

SIP DBMM 2 table should be accessible.

At least one optional parameter must be specified.

The SIP Prefix entry must already exist in the SIPNNPFX table.

The SIP Phone Context entry must already exist in the SIPPHCXT table.

At least one NPDD or NPDS must be specified with non-default (other than 0, NONE) value.

Notes

None

Output

This example displays the output when all the parameters are specified:

```
chg-sip-npp:phctxt=abc.com:pfx=1:npdd=1:npds=af91
```

```
tekelecstp 12-07-09 19:12:14 EST EAGLE 45.0.0
chg-sip-npp:phctxt=abc.com:pfx=1:npdd=1:npds=af91
Command entered at terminal #4.

PHCTXTID table is (2 of 101) 2% full.

CHG-SIP-NPP: MASP A - COMPLTD

;
```

Related Commands

dlt-sip-npp, *rtrv-sip-npp*, *ent-sip-npp*

chg-sipopts

Change SIP Options

Use this command to change SIP configuration. This command updates the SIPOPTS table.

Parameters

nplkupfail (optional)

This parameter indicates whether 302 or 404 response is sent, when DN is not found in RTDB lookup.

Range:

302

Redirection response.

404

This parameter indicates that RTDB lookup was unsuccessful and DN was not found.

Default:

No change to the current value

System Default:

404

nprspfmt (optional)

This parameter defines format of URI in Contact header, when INCLUDERN is OFF.

Range:

rn

Routing Number

rndn

RN+DN

ccrndn

CC+RN+DN

rnasddn

RN+ASD+DN

rnasd

RN+ASD

Default:

No change to the current value.

System Default:

rndn

off (optional)

This parameter turns off the specified options.

Range:

includenpdi

This option indicates to exclude "npdi" parameter in the response in cases where the RTDB dip is successfully performed.

includern

This option indicates to exclude "rn" parameter in the response in cases where the RTDB dip is successfully performed.

on (optional)

This parameter turns on the specified options.

Range:

includenpdi

This option indicates to include "npdi" parameter in the response in cases where the RTDB dip is successfully performed.

includern

This option indicates to include "rn" parameter in the response in cases where the RTDB dip is successfully performed.

rncontext (optional)

This parameter describes the rncontext (if RN is local or global). If rncontext is NULL it indicates RN is global.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of 1 to 64 characters.

Default:

No change to the current value

System Default:

null

rnfmt (optional)

This parameter defines format of Routing Number (RN) in the 302 response, when INCLUDERN is ON.

Range:

rn

Routing Number

rnasd

RN+ASD

Default:

No change to the current value

System Default:

rn

Example

```
chg-sipopts:on=includenpdi
chg-sipopts:nprspfmt=rndn:off=includern,includenpdi
chg-sipopts:rnfmt=rnasd:nplkupfail=302:rncontext=abc.com
```

Dependencies

SIPNP Feature must be enabled before changing any SIP configuration.

SIPOPTS table should be accessible.

At least one optional parameter must be specified.

The same option cannot be specified for the on and off parameters in the same command.

Only the defined values must be given for the parameters nplkupfail, rnfmt, on, off and nprspfmt.

Output

```
chg-sipopts:on=includenpdi
```

```
tekelecstp 12-06-22 17:25:00 EST  EAGLE 45.0.0
chg-sipopts:on=includenpdi
Command entered at terminal #4.
CHG-SIPOPTS: MASP A - COMPLTD

;
```

Related Commands

rtrv-sipopts

chg-slt

Change Signaling Link Test Message

Use this command to change the fields of a signaling link test message (SLTM) record in the SLTM table.

Parameters

sltset (mandatory)

Signaling link test message record number in the SLTM table.

Range:

1 - 20

enabled (optional)

Enables the signaling link test message.

Range:

on

off

Default:

No change to the current value

mode (optional)

SLTM mode to be used when sending test messages.

Range:

special

All SLTMs generated by the links in the linkset associated with this SLTM record are designated "special" maintenance messages.

regular

All SLTMs generated by the links in the linkset associated with this SLTM record are designated "regular" maintenance messages.

Default:

No change to the current value

pattern (optional)

Test pattern to be sent with a signaling link test message.

Range:

aayyyyyyyyyyyyyyyyyyyyyyyyyyyy

2 to 30 alphanumeric characters; valid characters are *0-9, a-f, A-F*

An even number of characters must be used in the pattern. The first two characters of the pattern must be letters.

Default:

No change to the current value

t1 (optional)

Timer 1. The amount of time, in milliseconds, to wait after an SLTM test fails before running the SLTM test again.

Range:

4000 - 12000

Default:

No change to the current value

t2 (optional)

Timer 2. The amount of time, in milliseconds, that should pass between running SLTM tests for a normally functioning signaling link.

Range:

30000 - 90000

Default:

No change to the current value

Example

```
chg-slt:sltset=1:t1=4000:t2=39000:enabled=off:pattern=aabbccdd
```

Dependencies

The value of t1 should be greater than the level 3 timer t6 . The level 3 timer t6 can be 100 - 2000 milliseconds. Enter the `rtrv-l3t` command to verify the value of the level 3 timer t6.

Notes

None

Output

```
chg-slt:sltset=1:t1=4000:t2=39000:enabled=off:pattern=aabbccdd
```

```
    rlghncxa03w 04-01-07 00:21:41 EST  EAGLE 31.3.0
    CHG-SLT: MASP A - COMPLTD
;
```

Related Commands

chg-l3t, *ent-ls*, *rtrv-ls*, *rtrv-slt*

chg-snmp-host Change SNMP Host

Use this command to change an existing entry in the SNMP Host table to re-configure an SNMP northbound interface.

Parameters

host (optional)

Host name. This parameter is used as the search key to locate a specific table entry. Either HOST or IPADDR must be specified, but both cannot be used in the same command.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 32 characters in length. Valid values are a..z, A..Z, 0..9, or .

The hostname cannot be changed with the chg-snmp-host command.

ipaddr (optional)

IP Address. This parameter is used as the search key to locate a specific table entry. Either HOST of IPADDR must be specified, but both cannot be used in the same command.

Range:

4 numbers separated by dots, with each number in the range of 0-255.

The IP address cannot be changed with the chg-snmp-host command.

trapcomm (optional)

The value used in the community name field when SNMP traps are generated.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string up to 32 characters in length.

If the string contains characters other than alphanumeric characters, the entire string must be enclosed in double quotes (" ").

The string can be entered in upper and lower case; however, the system converts upper case alphabetic characters to lower case.

Default:

No change to the parameter value

System Default:

public

cmdport (optional)

SNMP interface command port ID.

Range:

161, 1024..65535

This is the port that the SNMP agent will monitor for commands such as GET and SET.

Default:

No change to the parameter value

System Default:

161

trapport (optional)

SNMP interface trap port ID.

Range:

162, 1024..65535

This is the port through which the SNMP agent will transmit traps to the Manager.

Default:

No change to the parameter value

System Default:

162

hb (optional)

Heartbeat notification interval

Range

0, 60, 120, 300, 600, 900, 1800, 3600, 5400, 7200

Default:

No change to the parameter value

System Default:

60

Example

```
chg-snmp-host:host=snmpmgr:hb=300:trapcomm="newpwd"
chg-snmp-host:ipaddr=10.25.60.99:hb=300:trapcomm="password":cmdport=2000
```

Dependencies

The specified HOST or IPADDR must exist in the SNMP Host table.

The specified heartbeat value must be within the range for the HB parameter.

The SNMP feature must be enabled before an SNMP Host can be configured.

To locate a table entry, either the HOST or IPADDR parameters must be specified, but both cannot be used in the same command.

The specified CMDPORT and TRAPPORT values must be within the allowed range.

Notes

None.

Output

```
chg-snmp-host:ipaddr=10.25.55.25:cmdport=2015:hb=60
```

```
tekelecstp 12-06-13 10:58:26 EST 45.0.0-64.66.0
chg-snmp-host:ipaddr=10.25.55.25:cmdport=2015:hb=60
Command entered at terminal #4.
CHG-SNMP-HOST: MASP A-COMPLTD
;
```

Related Commands

ent-snmp-host, *dlt-snmp-host*, *rtrv-snmp-host*

chg-snmpopts

Change SNMP Options

Use this command to change the system-wide SNMP Options.

Parameters

on (optional)

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

Range:

snmpuim

off (optional)

This parameter turns off the specified options. Up to 8 comma-separated unique options can be specified.

Range:

snmpuim

getcomm (optional)

The value used as a password for incoming GET commands.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string up to 32 characters in length.

If the string contains characters other than alphanumeric characters, the entire string must be enclosed in double quotes (" ").

The string can be entered in upper and lower case; however, the system converts upper case alphabetic characters to lower case.

Default:

No change to the parameter value

System Default:

public

setcomm (optional)

The value used as a password for incoming SET commands.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string up to 32 characters in length.

If the string contains characters other than alphanumeric characters, the entire string must be enclosed in double quotes (" ").

The string can be entered in upper and lower case; however, the system converts upper case alphabetic characters to lower case.

Default:

No change to the parameter value

System Default:

private

Example

```
chg-snmpopts:on=snmpuim:getcomm="my.getcomm.str"
```

Dependencies

The SNMP feature must be enabled before an SNMP Option can be changed.

Notes

None.

Output

```
chg-snmpopts:on=snmpuim:getcomm=my.getcomm.str
```

```
tekelecstp 12-06-13 15:27:34 EST 45.0.0-64.66.0
chg-snmpopts:on=snmpuim:getcomm=my.getcomm.str
Command entered at terminal #4.
CHG-SNMPOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-snmpopts

chg-srvsel Change Service Selector

Use this command to assign the applicable service selectors required to change a service entry for DSM services.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

Note: The nature of address indicator parameters (naiv or nai) and the numbering plan parameters (npv or np) can be specified using a mnemonic or an explicit value. The mnemonic or the explicit value can be specified; however, both values cannot be specified at the same time for the same parameter. *Table 60: NAIV/NAI Mapping* shows the mapping between the naiv and nai values. *Table 61: NPV/NP Mapping* shows the mapping between the npv and np values.

gti/gtia/gtii/gtin/gtin24 (mandatory)

Global title indicator. For all service selector commands, the domain is defined as GTI and GTIA (ANSI), GTII (ITU international), GTIN (ITU national) and GTIN24 (24-bit ITU national). For the service selector commands, GTI and GTIA are equivalent.

Range:

Supported value for ANSI: gti/gtia=2

Supported values for ITU: gtii/gtin/gtin24=2, 4

ssn (mandatory)

Subsystem number.

Range:

*0 - 255, **

tt (mandatory)

Translation type.

Range:

0 - 255

nai (optional)

Nature of address indicator.

Range:

sub

rsvd

natl

intl

Default:

No change to the current value

naiv (optional)

Nature of address indicator value.

Range:

0 - 127

Default:

No change to the current value

ndfltact (optional)

New default action ID associated with the service selector entry.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

This parameter must have one of the following values:

- a valid GTT Action ID that exists in the GTT Action table and has a GTT Action of *disc/udts/tcaperr*
- *fallback* — Fallback to the relay data. The relayed MSU is routed using routing data provided by the service.
- *falltogtt* —Fallback to GTT. If the gttselid parameter has a value other than *none*, and the GTT selector search fails, then the GTT selector search is performed again using gttselid=none.

Default:

No change to the current value

ngttselid (optional)

New GTT Selector ID. The new ID used to perform GTT on the message relayed by the service.

Range:

0 - 65534, none

none —deletes the current value of the GTTSELID field

Default:

No change to the current value

np (optional)

Numbering plan.

Range:

e164

generic

x121

f69

e210

e212

e214

private

Default:

No change to the current value

npv (optional)

Numbering plan value.

Range:

0 - 15

Default:

No change to the current value

nrqdtblnop

The action performed if a message arrives at an SCCP card that does not have the necessary RTDB table, and the current message routing is GT.

Range:

udts

generate UDTS for the processed MSU

gtt

fall through to GTT for the processed MSU

disc

discard the processed MSU

nserv (optional)

New DSM service.

Note: The GPORT service cannot be used for the Prepaid SMS Intercept Phase 1 (PPSMS) or the Portability Check for Mobile Originated SMS feature; use the SMSMR service. The MNP service includes the G-Port, A-Port, and IS41-to-GSM Migration services.

Range:

eir

Equipment Identity Register

gflex

GSM flexible numbering

gport

GSM number portability

inpq

INP query

inpmr

INP message relay

smsmr

Prepaid SMS Intercept Phase 1, Portability Check for Mobile Originated SMS, MO-based GSM SMS NP, MO-based IS41 SMS NP, MO SMS IS41-to-GSM Migration, MO SMS ASD, MO SMS GRN, MO SMS B-Party Routing.

idpr

Prepaid IDP Query Relay

idps

IDP Screening for Prepaid

mnp

Mobile Number Portability

vflex

V-Flex

atinp

ATI Number Portability Query (ATINP)

ttr

Triggerless TCAP Relay

aiq

ANSI41 Analyzed Information Query

Default:

No change to the current value

nsnai (optional)

New service nature of address indicator.

Range:

sub

Subscriber number

natl

National significant number

intl

International number

rnidn

Routing number prefix and international dialed/directory number

rnndn

Routing number prefix and national dialed/directory number

rnsdn

Routing number prefix and subscriber dialed/directory number

none

The *nsnai* is not associated with the new DSM service.

ccrndn

Country code, routing number, and national directory number

Default:

No change to the current value

nsnp (optional)

New service numbering plan.

Range:

e164

E.164 numbering plan

e212

E.212 numbering plan

e214

E.214 numbering plan

none

The NSNP value is not associated with the new DSM service.

Default:

No change to the current value

off (optional)

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 10 feature options can be specified in the list.

Range:

gttrqd

on (optional)

Enables or turns on the specified feature options. A comma separated list of feature options that are requested to be turned on. Up to 10 feature options can be specified in the list.

Range:

gttrqd

Example

```
chg-srvsel:gti=2:tt=10:ssn=250:nserv=gflex
chg-srvsel:gtin=4:tt=0:ssn=100:np=e164:nai=intl:nsnp=e164:nsnai=rnidn
chg-srvsel:gtin24=4:tt=4:np=e164:ssn=50:nai=intl:nsnai=rnidn
chg-srvsel:gtii=4:tt=4:np=e164:nai=intl:ssn=10:nserv=eir
```

```
chg-srvsel:gtii=4:tt=4:np=e164:nai=intl:ssn=12:nserv=gport:on=gttrqd:ngttselid=4:ndfltact=act1
chg-srvsel:gti=2:tt=10:ssn=250:nserv=gflex:nrqdtblnop=gtt
```

Dependencies

The G-Flex feature must be turned on before the nserv=gflex parameter can be specified.

The INP feature must be turned on before the nserv=inpmr or nserv=inpq parameter can be specified.

The G-Port feature must be turned on before the nserv=gport parameter can be specified.

The Equipment Identity Register (EIR) feature must be turned on before the nserv=eir parameter can be specified.

The nsnp, nsnai, nserv, ndfltact, ngttselid, on, or off parameter must be specified.

Values 1 and 3 are not valid for the gti/gtia/gtii/gtin/gtin24 parameters.

Value 4 is not valid for the gtia parameter.

If the gti/gtia/gtii/gtin/gtin24=2 parameter is specified, then the np(v) and nai(v) parameter combinations cannot be specified.

If the gtii/gtin/gtin24=4 parameter is specified, then an np(v) and nai(v) parameter combination must be specified. The parameters can be specified in these combinations: np/naiv, npv/nai, np/nai, or npv/naiv.

The np and npv parameters cannot be specified together in the command.

The nai and naiv parameters cannot be specified together in the command.

If the nserv parameter has a value of *inpmr*, *gport*, or *eir* then the gtia and gti parameters cannot be specified.

If the nserv=inpmr parameter is specified, then the nsnp=e164 parameter must be specified.

If the value specified for the nsnai parameter is *rnidn*, *rnndn*, or *rnsdn*, then the value specified for the nserv parameter must be *inpmr*, *gport*, or *smsmr*.

If the nserv=inpq parameter is specified, then the gtii parameter cannot be specified.

If a value of *aiq*, *atinp*, *eir*, *idpr*, *idps*, *inpq*, *ttr*, or *vflex* is specified for the nserv parameter, then only a value of *none* can be specified for the nsnai or nsnp parameter.

If the nserv=gflex parameter is specified, then the nsnai=none and nsnp=none parameters cannot be specified.

If the nserv=inpmr parameter is specified, then the nsnai parameter must be specified.

An entry must already exist that exactly matches the gti/gtii/gtin/gtin24, tt, ssn, np(v), and nai(v) combination of parameters.

If the nsnai=ccrndn parameter is specified, then the value specified for the nserv parameter must be *gport* or *smsmr*.

If the value specified for the nserv parameter is *inpmr*, *smsmr*, or *gport*, then the nsnp=e164 parameter must be specified.

If the value specified for the nserv parameter is *gflex*, *gport*, *inpmr* or *smsmr*, then the nsnai and nsnp parameters must be specified.

The nsnai=none parameter can be specified only if the value specified for the nserv parameter is *atinp, eir, idps, inpq, idpr, ttr*, or *vflex*.

If the ansigflex STP option is enabled (see the `chg-stpotps` command), then an ITU Service Selector cannot be entered.

The Prepaid IDP Query Relay feature must be turned on or the IAR Base feature must be enabled before the nserv=ttr parameter can be specified.

If a value of *idpr* or *ttr* is specified for the nserv parameter, then the only valid mandatory service parameters are gtii, gtin, ssn, and tt, and the only valid optional parameters are np and nai.

The IDP Screening for Prepaid feature must be turned on before the nserv=idps parameter can be specified.

When the nserv=idps parameter is specified, the only valid optional service parameters are np and nai.

If the nserv=idps parameter is specified, then the only valid mandatory service parameters are tt, serv, ssn, gtin, and gtii.

The V-Flex feature must be turned on before the nserv=vflex parameter can be specified.

The PPSMS or Portability Check for MO SMS feature must be turned on, or the MO SMS ASD, MO SMS GRN, MO SMS IS41-to-GSM Migration, MO SMS B-party Routing, MO-based GSM SMS NP, or MO-based IS41 SMS NP feature must be enabled before the nserv=smsmr parameter can be specified.

The ATINP feature must be enabled before the nserv=atinp parameter can be specified.

If a value of *aiq*, *atinp*, or *eir* is specified for the nserv parameter, then the gtin24 parameter cannot be specified.

If the A-Port or IGM feature is enabled, then the nserv=gport parameter cannot be specified.

The Prepaid IDP Query Relay feature must be turned on before the nserv=idpr parameter can be specified.

The ANSI41 AIQ feature must be enabled before the nserv=aiq parameter can be specified.

The A-Port or IGM feature must be turned on, or the A-Port or IGM feature must be enabled and the G-Port feature must be turned on before the nserv=mnp parameter can be specified.

If a DSM4G card is active in the system, then the on=gttrqd parameter cannot be specified.

The ndfltact, ngttselid, on=gttrqd, and off=gttrqd parameters are supported for the IDPR, TTR, MNP, GPORT, SMSMR, GFLEX, and INPMR services.

If a GTT Action ID is specified as the value for the ndfltact parameter, then the Action ID must already exist in the GTT Action table.

The value specified for the ndfltact parameter must be *fallback, falltogtt*, or a valid GTT Action ID with an associated GTT Action of *disc/udts/tcaperr*.

The EGTT feature must be turned on before the ngttselid or ndfltact parameter can be specified.

The same values cannot be specified for the on and off parameters.

The ndfltact=none parameter cannot be specified.

The EPAP Data Split feature or the Dual ExAP Config feature must be ON before the nrqdtblnop parameter can be specified.

The nrqdtblnop=gtt parameter cannot be specified if:

- an existing service record for the INPQ, VFLEX, ATI NP, or EIR service is being changed
- a value of *inpq*, *vflex*, *atinp*, or *eir* is specified for the nserv parameter

The nrqdtblnop parameter cannot be specified if:

- an existing AIQ or IDPS service record is being changed
- a value of *aiq* or *idps* is specified for the nserv parameter

If the serv=inpq parameter is specified, then the gtii parameter cannot be specified.

If the value specified for the serv parameter is *gport* or *smsmr*, then the snp=e164 parameter must be specified.

The requested service selector entry must exist in the database.

The GSM DBMM table must be accessible.

Notes

on/off options

- *gttrqd* —GTT required. Specifies whether GTT is required after service execution is complete and the message is relayed by the service. This option is supported for the IDPR, MNP, TTR, GPORT, SMSMR, GFLEX, and INPMR services.

Output

```
chg-srvsel:gti=2:tt=10:ssn=25:nserv=aiq
```

```
    tekelecstp 09-12-03 16:40:40 EST  EAGLE 42.0.0
    Service Selector table is (115 of 1024) 11% full
    CHG-SRVSEL: MASP A - COMPLTD
;
```

Related Commands

dlt-srvsel, *ent-srvsel* , *rtrv-srvsel*

chg-ss-appl Change Subsystem Application

Use this command to change the application status in the database.

Parameters

appl (mandatory)

Application type.

Range:

lnp

inp

eir

vflex

atinpq

aiq

nstat (mandatory)

Status.

Range:

offline

online

nrqdtblnop

The action performed with a message that arrives at an SCCP card that does not have the necessary RTDB table, and the current message routing is subsystem.

Range:

udts

generate UDTS for the processed MSU

disc

discard the processed MSU

Example

```
chg-ss-appl:appl=lnp:nstat=offline
chg-ss-appl:appl=atinpq:nstat=online
chg-ss-appl:appl=inp:nstat=offline:nrqdtblnop=disc
```

Dependencies

The LNP feature must be turned on before the appl=lnp parameter can be specified.

The INP feature must be turned on before the `chg-ss-appl:appl=inp` command can be entered.

The Equipment Identity Register (EIR) feature must be turned on before the `chg-ss-appl:appl=eir` command can be entered.

The application type (appl parameter) must already exist in the SS-APPL table.

The subsystem must be in the opposite state of the requested change.

The subsystem must be inhibited before status=offline can be specified.

Application type must exist in the LNP database

Application type not in SS-APPL table

The V-Flex feature must be turned on before the appl=vflex parameter can be specified.

The ATINP feature must be enabled before the appl=atinpq parameter can be specified.

The ANSI41 AIQ feature must be enabled before the appl=aiq parameter can be specified.

The EPAP Data Split feature OR Dual ExAP Config feature must be turned on before the nrqdtblnop parameter can be specified.

If the appl=aiq parameter is specified, then the nrqdtblnop parameter cannot be specified.

Notes

After the LNP subsystem is inhibited before performing an LNP ELAP bulk download, `chg-ss-appl:appl=lnp:nstat=offline` must be entered to ensure that the subsystem remains down through Service Module card replacements and reloads.

Output

`chg-ss-appl:appl=aiq:nstat=offline`

```
    tekelecstp 09-12-03 13:35:40 EST  EAGLE 42.0.0
    CHG-SS-APPL: MASP A - COMPLTD
;
```

Related Commands

dlt-ss-appl, *ent-ss-appl*, *rtrv-ss-appl*

chg-ss7opts

Change SS7 Options

Use this command to update (change by simple replacement) the values of one or more of the SS7 option indicators maintained in the STP Options table. SS7 options can modify normal handling of SS7 traffic.

Parameters

ddbaudtimer (optional)

Dynamic database audit timer. The amount of time, in minutes, between the end of an automatic dynamic database audit and the beginning of the next automatic dynamic database audit.

Range:

5 - 1440, none

none —disables the automatic dyamic database audit

Default:

No change to the current value

System Default:

10

discardtfci (optional)

This parameter enables and disables the handling of TFC traffic from ITU-I networks. If enabled, TFC traffic from ITU-I networks will be discarded.

Range:

on

Discard TFC ITU-I traffic

off

Do not discard TFC ITU-I traffic

System Default:

off

discardtfcn (optional)

This parameter enables and disables the handling of TFC traffic from ITU-N networks. If enabled, TFC traffic from ITU-N networks will be discarded.

Range:

on

Discard TFC ITU-N traffic

off

Do not discard TFC ITU-N traffic

System Default:

off

lsrestrict (optional)

Use the restricted linkset routing determination algorithm. This parameter enables and disables the restricted linkset routing determination algorithm on a system-wide basis.

Range:

on

Restrictive linkset routing enabled; route traffic on the least restrictive available route with the lowest cost.

off

Restrictive linkset routing disabled; route traffic on the lowest cost route.

Default:

No change to the current value

System Default:

off

msgpri2itui (optional)

Message Priority to ITUI. The priority for messages that cross to an ITUI network.

Range:

0 - 3, dflt

0-3 —The priority for any MSU crossing to an ITUI network is set to the provisioned value. MSUs crossing to ANSI networks are not affected.

dflt —Messages retain their original functionality

Default:

No change to the current value

System Default:

dflt

msgpri2itun (optional)

Message Priority to ITUN. The priority for messages that cross to an ITUN or ITUN-24 network.

Range:

0 - 3, dflt

0- 3 —The priority for any MSU crossing to an ITUN or ITUN-24 network is set to the provisioned value. MSUs crossing to ANSI networks are not affected.

dflt —Messages retain their original functionality

Default:

No change to the current value

System Default:

dflt

slancporgopc (optional)

This parameter specifies whether to copy the originating point code (OPC) from the incoming MSU to the STPLAN application.

Range:

on

Copy the OPC from the incoming MSU to the STPLAN application.

off

Do not copy the OPC from the incoming MSU to the STPLAN application.

System Default:

off

slanlsn (optional)

SLAN linkset name. This parameter specifies whether to copy the incoming and outgoing linkset names into the STPLAN message format.

Range:

on

Copy the incoming and outgoing linkset names into the STPLAN message format.

off

Do not copy the incoming and outgoing linkset names into the STPLAN message format.

Default:

No change to the current value

System Default:

off

slsreplace (optional)

Signaling link selector replace. This parameter enables the EAGLE to replace the SLS for an ANSI message with a random generated SLS value by Random SLS feature .

Note: The randsls=perls parameter must be specified in the `chg-stpopts` command and a randsls parameter value other than off must be specified on the individual ANSI incoming linkset before the SLS can be replaced. The size of the SLS in the outgoing message is based on the STPOPTS:SLSREPLACE parameter, ingress linkset ASL8 parameter and 5->8 bit conversion option. Please refer to *Database Administration - SS7 User's Guide, Per-Linkset Random SLS* for more details.

Range:

no

Do not replace the SLS in an outgoing message with a randomly generated SLS.

yes

Replace the SLS in an outgoing message with a randomly generated SLS.

Default:

No change to the current value.

System Default:

no

Example

```
chg-ss7opts:lsrestrict=on
chg-ss7opts:slancporgopc=on
chg-ss7opts:slsreplace=yes
chg-ss7opts:ddbaudtimer=5
chg-ss7opts:ddbaudtimer=none
chg-ss7opts:slanlsn=on
```

Dependencies

At least one optional parameter must be specified.

When the lsrestrict=on parameter is specified, the tfatcabmlq parameter value for C linksets can be changed to a non-zero value (see the `chg-ls` command). If the tfatcabmlq parameter in any C linkset has been changed to a non-zero value, the tfatcabmlq value must be set back to 0 for all C linksets before the lsrestrict parameter can be turned off.

The STP LAN feature must be turned on before the slancporgopc or slanlsn parameter can be specified.

Notes

None

Output

`chg-ss7opts:slancporgopc=on`

```
    tekelecstp 08-09-26 15:22:38 EST  EAGLE 39.2.0
    CHG-SS7OPTS: MASP B - COMPLTD
;
```

Related Commands

rtrv-ss7opts

chg-stpopts

Change STP Options

Use this command to change the values of one or more of the STP node level processing option indicators maintained in the STP's options table. All values are assigned initially to system defaults at STP installation time, and they may be updated subsequently using this command.

Note: For those STP option attributes supporting STP event message throttling, the values for the indicated parameters shall become effective in the next event-message output interval following their activation. All other updates shall be effective immediately, as of the time of activation.

Parameters

Note: If the cnvcgda, cnvcgdi, cnvcgdn, or cnvcgdn24 parameter has a value of *no* (or a value of *cnvcgda, cnvcgdi, cnvcgdn*, or *cnvcgdn24* is specified for the off parameter), and the CGPA cannot be converted during processing, then the MSU is discarded.

ansigflex (optional)

This parameter enables ANSI G-Flex to execute at 1700 TPS per DSM card.

Range:

yes

Enabled

no

Disabled

Default:

No change to the current value

System Default:

no

archbldid (optional)

Archive build ID. This parameter specifies whether the database archive file name contains the EAGLE build number instead of the release number.

Range:

on

The file name contains the build number.

off

The file name contains the release number.

Default:

No change to the current value

System Default:

off

cnvcgda (optional)

This parameter enables discarding of the CGPA point code in SCCP messages if the destination network type is ANSI, and the point code or alias point code of the destination network type is not defined.

Range:

yes

Enabled

no

Disabled

Default:

No change to the current value

System Default:

no

cnvcgdi (optional)

This parameter enables discarding of the CGPA point code in SCCP messages if the destination network type is ITU-I, and the point code or alias point code of the destination network type is not defined.

Range:

yes

Enabled

no

Disabled

Default:

No change to the current value

System Default:

no

cnvcgdn (optional)

This parameter enables discarding of the CGPA point code in SCCP messages if the destination network type is ITU-N, and the point code or alias point code of the destination network type is not defined.

Range:

yes

Enabled

no

Disabled

Default:

No change to the current value

System Default:

no

cnvcgdn24 (optional)

This parameter enables discarding of the CGPA point code in SCCP messages if the destination network type is ITU-N24, and the point code or alias point code of the destination network type is not defined.

Range:

yes

Enabled

no

Disabled

Default:

No change to the current value

System Default:

no

cnvcgdn16 (optional)

This parameter enables discarding of the CGPA point code in SCCP messages if the destination network type is ITU-N16, and the point code or alias point code of the destination network type is not defined.

Range:

yes

Enabled

no

Disabled

Default:

No change to the current value

System Default:

no

critalminh (optional)

Critical alarm inhibit. This parameter enables inhibiting of critical alarms.

Range:

yes

Enabled

no

Disabled

Default:

No change to the current value

System Default:

no

defcc (optional)

Default country code.

Range:

1-3 digits, *none*.

Valid digits are *0-9, A-F, a-f*

none —Deletes the current value.

Default:

No change to the current value

defndc (optional)

Default network destination code.

Range:

1-5 digits, *none*

Valid digits are *0-9, a-f, A-F*

none —Deletes the current value.

Default:

No change to the current value

dispactalms (optional)

Display active alarms. This parameter displays active or total alarms in the alarm status area of the VT320 screen (see *Figure 1: System Terminal User Display*). The alarm status area comprises four boxes to show counts for critical, major, minor, and inhibited alarms. When total alarms are displayed (dispactalms=no), the counts for critical, major, and minor alarms include any temporarily or permanently inhibited alarms. The alarm status area is labeled *Total Alarm Status*. When active alarms are displayed (dispactalms=yes), the counts for critical, major, and minor alarms do not include any temporarily or permanently inhibited alarms. The alarm status area is labeled*Active Alarm Status*. This parameter does not affect the count displayed in the inhibited box; the number of inhibited alarms is always displayed.

Range:

yes

Enabled; active alarm status is displayed

no

Disabled; total alarm status is displayed

Default:

No change to the current value

System Default:

no

dsmaud (optional)

Service Module card audit running state.

Range:

on

Running

off

Not running

ccc

Running with Corruption Cross Correction enabled. EAGLE LNP, G-Flex, G-Port, INP, or V-Flex systems contain *n*+1 Service Module cards (maximum 32) running the VSCCP application. Each Service Module card contains a full image of the RTDB database. If a record within the RTDB database on any card should become corrupted, a mate Service Module card can supply the corrected data. The dsmaud=ccc parameter enables the Corruption Cross Correction function used by the system to obtain the correct data from a mate Service Module card.

Default:

No change to the current value

System Default:

off

gdpc (optional)

Specifies the value used to set the ANSI destination point code field in the routing label of the MSU that is being duplicated. The point code has subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

gdpca

Range:

000---255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When chg-sid:pctype=ansi is specified, ni = 000 is not valid.

When chg-sid:pctype=ansi is specified, nc = 000 is not valid if ni = 001-005.

When chg-sid:pctype=ansi is specified, nc = 000 is valid if ni = 006-255.

Enter *none* to delete the point code.

The point code *000-000-000* is not a valid point code.

Default:

Current value

gdpc/gdpca/gdpci/gdpcn24/gdpcn16 (optional)

Destination point code.

gdpci (optional)

Specifies the value used to set the ITU international destination point code field in the routing label of the MSU that is being duplicated. The point code has subfields *zone-area-id*.

Range:

0---255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The point code 0---000---0 is not a valid point code.

zone---0---7

area---000---255

id---0---7

Enter*none* to delete the point code.

Default:

Current value.

gdpcn (optional)

Specifies the value used to set the ITU national destination point code field in the routing label of the MSU that is being duplicated. The point code is in the format of a 5-digit number (nnnnn); or 2, 3, or 4 numbers (members) separated by dashes (m1-m2-m3-m4) when the chg-stpopts:npcfmti flexible point code option is on. A group code (gc) must be specified when the ITUDUPPC feature is on (nnnnn-gc, m1-m2-m3-m4-gc).

Range:

0---16383, aa---zz, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn---0---16383

gc---aa---zz

*m1--m2--m3--m4---0--14*for each member; values must sum to 14.

Enter*none* to delete the point code.

Default:

Current value.

gdpcn24 (optional)

Specifies the value used to set the 24-bit ITU national destination point code field in the routing label of the MSU that is being duplicated. The point code has subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000--255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa---000---255

ssa---000---255

sp---000---255

Enter*none* to delete the point code.

Default:

Current value.

gdpcn16 (optional)

Specifies the value used to set the 16-bit ITU national destination point code with subfields *unit number, sub number area, main number area* (*un-sna-mna*).

Range:

000--127, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna--000---31

Enter *none* to delete the point code.

Default:

Current value.

gsmdecerr (optional)

GSM MAP screening decode error action.

Range:

pass

discard

Default:

No change to the current value

System Default:

pass

gsmdflt (optional)

GSM MAP screening default action.

Range:

pass

discard

Default:

No change to the current value

System Default:

pass

gtcnvdflt (optional)

This parameter enables routing of SCCP messages using system defaults when an appropriate entry is not found in the Default GT Conversion Table.

Range:

yes

Enabled

no

Disabled

Default:

Current value

System Default:

no

mtpdpcq (optional)

MTP destination point code quantity. The maximum number of DPCs that can be provisioned from the STP. The value of this parameter depends on the number of x-list entries that can be provisioned using the mtpxlq parameter. If the number of destinations that can be provisioned is increased, the number of x-list entries that can be maintained is decreased.

Range:

500 - 10000

500-2000 —if the DSTN5000 feature is not turned on

500–5000 —if the DSTN5000 feature is turned on

500–6000 —if the 6000 Routesets feature is enabled

500–7000 —if the 7000 Routesets feature is enabled

500–8000 —if the 8000 Routesets feature is enabled

500–10000 —if the 10,000 Routesets feature is enabled

Default:

No change to the current value

System Default:

2000

mtplprst (optional)

MTP low priority route set test. This parameter specifies whether low priority route set polling is enabled or disabled at the STP.

Range:

yes

Enabled

no

Disabled

Default:

Current value

System Default:

yes

mtpltctdpcq (optional)

MTP loop test congestion trigger DPC quantity. The number of most frequently occurring DPCs to which the MTP loop test messages are to be sent when the MTP loop test is triggered by congestion.

Range:

3 - 10

Default:

No change to the current value

System Default:

3

mtplti (optional)

MTP loop test indicator. This parameter specifies whether the MTP loop detection procedures are enabled or disabled at the STP.

Range:

yes

Enabled

no

Diabled

Default:

Current value

System Default:

yes

mtpltst (optional)

MTP loop test supervision timer. The amount of time, in milliseconds, that the MTP loop test detection procedures run when started.

Range:

10000 - 20000

Default:

Current value

System Default:

10000

mtprsi (optional)

MTP Restart indicator. This parameter specifies whether ANSI and ITU MTP Restart procedures are enabled at the STP.

Range:

yes

enable restart procedures

no

do not enable restart procedures

Default:

Current value

System Default:

no

mtprsit (optional)

ANSI MTP Restart isolation timer. The minimum duration of node isolation, in milliseconds, before the ANSI MTP Restart procedure is deemed necessary.

Range:

2000 - 900000

Default:

No change to the current value

System Default:

5000

mtpt10alt (optional)

MTP T10 alternate timer, in milliseconds. The interval at which the STP performs a route set test on low priority routes. The value of this parameter must be equal to or greater than the value of the level 3 T10 timer.

Range:

20000 - 10000000

Default:

No change to the current value

System Default:

30000

mtpt31ctl (optional)

MTP T31 congestion trigger level. The signaling link congestion level at which the system starts the level 3 t31 timer. When the level 3 t31 timer expires, the associated signaling link is removed from service for realignment.

Range:

1 - 2

Default:

No change to the current value

System Default:

1

mtpxlet (optional)

MTP x-list expiration time. The maximum amount of time the system maintains an unreferenced dynamic status exception list (x-list) entry. This parameter must be specified in one of the following formats: *mm*, *hmm*, or *hhmm*, where *m* is minutes and *h* is hours. For example, *43* is 43 minutes, *138* is 1 hour 38 minutes, and *2400* is 24 hours.

Range:

0020 - 2400

Default:

No change to the current value

System Default:

0100

mtpxlot (optional)

MTP x-list occupancy threshold. The dynamic status exception list (x-list) occupancy threshold at which the system raises a minor alarm. The threshold is expressed as a percentage of space available.

Range:

0 - 100

Default:

No change to the current value

System Default:

90

mtpxlq (optional)

MTP x-list quantity. The number of dynamic status exception list (x-list) entries the system maintains. The value of this parameter is dependent directly on the number of destinations that are provisioned using the mtpdpcq parameter.

Range:

500 - 10000

500-2000 —if the DSTN5000 feature bit is not turned on

500–5000 —if the DSTN5000 feature bit is turned on

500–6000 —if the 6000, 7000, or 8000 Routesets feature is enabled

500–10000 —if the 10,000 Routesets feature is enabled

Default:

Current value

System Default:

500

npcfmti (optional)

ITU National Point Code Format Identifier. This parameter specifies how the ITU national point code is entered into the database and how it is displayed in any outputs from the system. The ITU national point code is a 14-bit integer. The point codes can be a single number up to five digits, or two, three, or four numbers separated by dashes. This parameter specifies the number of bits to allow in each position of the four members.

Range:

m1-m2-m3-m4: Four members where each member represents the number of bits allowed in the corresponding position for a flexible ITU national point code. The range of each member (*m1–m4*) is from *0 - 14*.

Each member must be specified no matter how many numbers the point code format contains, and the sum of *m1+m2+m3+m4* must equal 14 (for example, *npcfmti=7-7-0-0* or *npcfmti=0-6-8-0*).

Table 20: NPCFMTI Parameter - ITU National Point Code Values defines the values of the parts of the ITU national point code.

Table 20: NPCFMTI Parameter - ITU National Point Code Values

Number of Bits in Point Code Section								
Bit	0	1	2	3	4	5	6	7
Range of Values	Not used	0-1	0-3	0-7	0-15	0-31	0-63	0-127

Bit	8	9	10	11	12	13	14	
Range of Values	0-255	0-511	0-1023	0-2047	0-4095	0-8191	0-16383	

Table 21: Point Code Format Examples

NPCFMTI Value	**Range of Point Code Values**
7-7-0-0	0-0 to 127-127
0-6-8-0	0-0 to 63-255
0-0-4-10	0-0 to 15-1023
3-8-3-0	0-0-0 to 7-255-7
2-9-2-1	0-0-0-0 to 3-511-3-1
4-4-4-2	0-0-0-0 to 15-15-15-3
14-0-0-0	00000 to 16385

Default:

No change to the current value

System Default:

14-0-0-0

off (optional)

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

ansigflex

archbldid

cnvcgda

cnvcgdi

cnvcgdn

cnvcgdn24

gtcnvdflt

critalminh

dispactalms

mtplprst

mtplti

mtprsi

rptlnpmrss

rstrdev

uimrd

on (optional)

Enables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

ansigflex

archbldid

cnvcgda

cnvcgdi

cnvcgdn

cnvcgdn24

gtcnvdflt

critalminh

dispactalms

mtplprst

mtplti

mtprsi

rptlnpmrss

rstrdev

uimrd

pcn16fmt (optional)

PCN16 point code can be provisioned in two formats: first format is 745 (un-sna-mna) and second format is 547 (mna-sna-un).

Range:

745

un-sna-mna

547

mna-sna-un

Default:

No changes to the current value

System Default:

745

pct (optional)

The method used to apply PCT to MSUs.

Range:

off

do not apply PCT to any MSU

on

apply PCT to all MSUs

lset

apply PCT to MSUs that are coming in or going out on a link that belongs to a linkset where PCT is provisioned (see the `chg-lsopts` command)

Default:

off

randsls (optional)

Random SLS (signaling link selection) option. This parameter enables the system to ignore the incoming SLS value and randomly generate a new SLS value to select an outgoing linkset and a link. This parameter is implemented independently of the SLS Enhancement feature settings for individual linksets, which are defined by the slsocbit and slsrsb parameters of the `ent/chg-ls` commands. For ITU the value specified for the randsls parameter in the `chg-stpopts` command will override the value specified for the randsls parameter for each individual linkset. To use the randsls with ANSI, the value for randsls must be specified as perls.

To enable random SLS generation per linkset, the randsls=perls parameter must be specified. When this parameter is specified, the SLS Bit Rotation capability (set with the slsrsb parameter of the `ent/chg-ls` command) is overridden, and cannot be used on individual linksets. The `ent/chg-ls` commands do not prevent the user from provisioning with the parameter and also enables the user to restrict Random SLS generation to Class 0 messages only.

This parameter is implemented independently of the SLS Enhancement feature settings for individual linksets. These settings are specified by the slsocbit (Use of the Other CIC BIT capability) and slsrsb (SLS Bit Rotation capability) parameters of the `ent/chg-ls` commands. When the SLS Enhancement is turned on with the randsls=all or randsls=class0 parameters, the SLS Bit Rotation capability (set with the slsrsb parameter of the `ent/chg-ls` command) is overridden, and cannot be used on individual linksets. The `ent/chg-ls` commands do not prevent the user from provisioning with the slsrsb parameter.

When randsls=perls is specified, the randsls parameter needs to be individually enabled on outgoing linksets for ITU traffic and on incoming linksets for ANSI traffic, to get the feature working for the particular traffic.

Range:

class0

Enables random SLS generation for ITU Class0 SCCP traffic. (Not compatible with ANSI)

all

Enables random SLS generation for both ITU Class0 & Class1 SCCP traffic. (Not compatible with ANSI)

off

Disables random SLS generation for both ITU and ANSI traffic

perls

Enables random SLS generation on a per-linkset basis for ITU Traffic (SCCP Class0 or both SCCP Class0 & Class1 instead of a system-wide basis) and for ANSI traffic (SCCP Class0 or both SCCP Class0 & ISUP).

Default:

No change to the current value

System Default:

off

rptlnpmrss (optional)

Report LNP MR SS unequipped. This parameter specifies whether to generate UIN 1049 for LNP message relay (MR) messages with missing subsystems. If no MAP entry is found from a GTT done on an LNP MR message, the UIM is either displayed (rptlnpmrss=yes) or suppressed (rptlnpmrss=no). This setting applies only to LNP MR messages. All other messages display UIM 1049 when no MAP entry is found, regardless of this setting.

Range:

yes

Display UIM 1049 for all messages.

no

Do not display UIM 1049 for LNP MR with missing subsystems.

Default:

No change to the current value

System Default:

yes

rstrdev (optional)

Restore device state. This parameter enables restoration of device states when the `init-sys` command is executed and when an OAM role change occurs and maintains the inhibited state of terminals, links, and cards.

Caution: An `init-sys` command causes the system to go down.

Range:

on

off

Default:

No change to the current value

System Default:

off

secmtpmate (optional)

This parameter enables security screening for MTP messages received by an STP on a non-C-Link, with an OPC equal to the SID (True, Adjacent, or Capability) point code of its mate.

Range:

off

Screening is disabled; message is processed normally

notify

Screening is enabled; UIM is generated and message is discarded

silent

Screening is enabled; message is discarded. No UIM is generated

test

Screening is enabled; UIM is generated and message is processed normally

Default:

No change to the current value

System Default:

off

secmtpsid (optional)

This parameter enables security screening for MTP messages received at MTP3 containing an OPC equal to its own SID (OPC that is the True, Secondary, or Capability point code entered in the `chg-sid` command) that is not a route-set-congestion-message. The system should not receive a message with its own OPC unless the message is a result of a circular route test or is an SLTM when the far end is in loopback. (SLTM messages are not checked.)

Range:

off

Screening is disabled; message is processed normally.

notify

Screening is enabled; UIM is generated and message is discarded.

silent

Screening is enabled; message is discarded. No UIM is generated.

test

Screening is enabled; UIM is generated and message is processed normally.

Default:

Current value

System Default:

off

secmtpsnm (optional)

This parameter enables security screening for MTP SNM messages. The system should not receive an MTP network management message unless:

- The OPC is an adjacent point code. (For all link types, this rule does not apply to UPU, TFC, and RCT messages.)
- The system has a route to the OPC of the MTP network management message on the linkset which the message was received.
- The system has a route to the destination field in the message (if applicable to the concerned message) on the linkset which the message was received. (For all link types, this rule does not apply to RST messages.)

Range:

off

Screening is disabled; message is processed normally

notify

Screening is enabled; UIM is generated and message is discarded

silent

Screening is enabled; message is discarded. No UIM is generated

test

Screening is enabled; UIM is generated and message is processed normally

Default:

No change to the current value

System Default:

off

secsccpscmg (optional)

This parameter enables security screening for SCCP SCMG messages. The system should not receive an SCCP network management message unless:

- The system has a route to the OPC of the SCMG message on the linkset on which the message was received.
- The system has a route to the Affected Point Code (Concerned Point Code) in the message on the linkset on which the message was received.

This parameter applies only to SSP and SOR messages. SSA, SST, SOG, SBR, SNR and SRT messages are not affected.

Range:

off

Screening is disabled; message is processed normally.

notify

Screening is enabled; UIM is generated and message is discarded.

silent

Screening is enabled; message is discarded. No UIM is generated.

test

Screening is enabled; UIM is generated and message is processed normally.

Default:

No change to the current value

System Default:

off

slscnv (optional)

Per node SLS conversion indicator.

Range:

on

SLS conversion is enabled on all linksets

off

SLS conversion is disabled on all linksets

perls

SLS conversion is enabled on a per linkset basis

Default:

No change to the current value

System Default:

off

tfatfrpr (optional)

TFA/TFR pacing rate. The amount of time, in milliseconds, between partial broadcasts of up to 20 percent increments of the number of TFAs/TCAs or TFRs/TCRs to be broadcast by the STP when an affected destination becomes accessible using its primary route rather than an alternate route. The STP uses this pacing to prevent congestion on the newly recovered linksets.

Range:

0 - 1000

Set in increments of 100

Default:

No change to the current value

System Default:

1000

uimrd (optional)

Unsolicited Information Message (UIM) redirect indicator. This parameter specifies whether the UIMs are to be routed to the specified output group.

Range:

yes

Enabled

no

Disabled

Default:

No change to the current value

System Default:

no

uithrottle (optional)

UI pacing rate. This parameter specifies the speed at which UI output is sent to the terminals. Zero represents the most throttling, or the slowest output. Nine represents the least throttling, or the fastest output.

Caution: Before changing the uithrottle value from the default, the terminals must be set to the 115200 baud rate. If the uithrottle value is changed without updating the terminals, output could be lost.

Range:

0--9

Default:

No change to the current value

System Default:

0

Example

```
chg-stpopts:mtpt31ctl=2:uimrd=yes
chg-stpopts:mtpxlq=1000:mtpxlet=0200:mtpxlot=75
chg-stpopts:npcfmti=4-4-4-2
chg-stpopts:rptlnpmrss=no
chg-stpopts:rstrdev=on
chg-stpopts:hsclksrc=t1framed
chg-stpopts:hsclksrc=e1unframed:force=yes
```

```
chg-stpopts:hsclkll=shorthaul
chg-stpopts:cnvcgda=yes
chg-stpopts:randsls=perls
chg-stpopts:pct=on
chg-stpopts:mtpdpcq=10000
chg-stpopts:cnvcgdn16=on
chg-stpopts:pcn16fmt=547
chg-stpopts:gdpca=2-2-2
```

Dependencies

The values of the mtpdpcq and mtpxlq parameters are interdependent; that is, to increase the number of DPCs that can be provisioned, the number of x-list entries that the STP is to maintain must be decreased. Conversely, to increase the number of x-list entries that the STP maintains, the number of DPCs that can be provisioned must be decreased.

At least one optional parameter must be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before the cnvcgda, cnvcgdi, cnvcgdn, cnvcgdn24, or gtcnvdflt parameters can be specified.

To allow ANSI GFLEX and other EPAP-based features to co-exist, the E5-SM4G Throughput Cap quantity key for 6800 must be enabled.

The ansigflex option cannot be enabled if a DSM is equipped in the system AND one or more of the following features are Enabled:

- 1100 TPS/DSM for ITU NP
- A-Port
- AINPQ
- ATINP
- EIR
- G-Flex MAP Layer Routing
- G-Port
- Info Analyzed Relay Base
- INP
- IS41 GSM Migration
- Prepaid Short Message Intercept Phase 1 (PPSMS)
- MO SMS ASD
- MO SMS GRN
- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- Portability Check for MO SMS
- TIF Number Portability
- TIF Number Substitution
- TIF Selective Screening

- TIF Subscr CgPN Blacklist
- V-Flex

The G-Flex feature must be on before the ansigflex option can be enabled.

The ansigflex option cannot be enabled when Service Selector table contains an ITU entry. (See the `chg-srvsel` command.)

When the mtpxlet parameter is specified, the value for minutes (*mm*) must be in the range 00-59.

The DSTN5000 (5000 Routes) feature must be turned on before the mtpdpcq parameter value can be increased to more than 2000.

When the number of x-list entries (mtpxlq parameter) is specified, the total number of DPCs (mtpdpcq parameter) and x-list entries provisioned cannot exceed the space available in the Route table.

When the number of DPCs (mtpdpcq parameter) is specified, the total number of DPCs and x-list entries (mtpxlq parameter) provisioned cannot exceed the space available in the Route table.

The number of DPCs provisioned (mtpdpcq parameter) cannot be increased if space allocated for maintaining x-list entries becomes full.

The value for the mtpdpcq parameter cannot be less than the number of DPCs provisioned.

The Cluster Routing and Management Diversity (CRMD) feature must be turned on before the mtpxlq, mtpxlet, and mtpxlot parameters can be specified.

The ANSI MTP restart (MTPRS) feature must be turned on before the mtprsit parameter can be specified.

The ANSI MTP restart (MTPRS) or ITU MTP restart (ITUMTPRS) feature must be turned on before the mtprsi parameter can be specified.

The value for the tfatfrpr parameter must be specified in increments of 100 milliseconds (0.1 seconds).

If critical alarms are inhibited in the system, then the critalminh=no parameter cannot be specified.

If the npcfmti parameter is specified, the sum of the values specified for *m1* + *m2* + *m3* + *m4* must be equal to 14.

The defcc parameter value cannot already exist as an entry in the GSM Options Multiple Country Code (the multcc parameter) list.

If a GSM Options Multiple Country Code (multcc parameter) has been defined, the defcc=none parameter cannot be specified.

The GSM Map Screening feature must be turned on before the gsmdflt or gsmsdecerr parameter can be specified.

The Network Security Enhancements feature must be turned on before the secmtpmate, secmtpsid, secmtpsnm, and secsccpscmg parameters can be specified.

If the Origin-based MTP Routing feature is enabled, then the mtplprst=no parameter cannot be specified.

The AINPQ, EIR, G-Flex, G-PORT, INP, LNP ELAP Configuration, Prepaid SMS Intercept Ph1, SIP NP or V-Flex feature must be turned on before the dsmaud parameter can be specified.

The value specified for mtpt10alt parameter cannot be less than the Level3-T10 timer value.

If the MT-Based GSM SMS NP feature is turned on, then the defcc=none parameter cannot be specified.

If the MT-Based IS41 SMS NP feature is turned on, then the defcc=none parameter cannot be specified.

If the ATINP feature is turned on, then the defcc=none parameter cannot be specified.

If the TN quantity key is above 228M, or if ELAP version 8.0 or above is provisioned, then the dsmaud=ccc parameter cannot be specified.

If the Prepaid IDP Relay feature is turned on or the IAR Base feature is enabled, then the defcc=none parameter cannot be specified.

If the on or off parameter is specified, then the ansigflex, archbldid, cnvcgda, cnvcgdi, cnvcgdn, cnvcgdn24, gtcnvdflt, critalminh, dispactalms, mtplprst, mtplti, mtprsi, rptlnpmrss, rstrdev, and uimrd parameters cannot be specified.

The same option cannot be specified by both the on and off parameters.

A PCT quantity feature must be enabled before the pct parameter can be specified.

Contact My Oracle Support (MOS) for assistance in turning off the PCT Feature.

If the SIPNP feature is turned on, then the defcc=none parameter cannot be specified.

Notes

If the database contains ITU national point codes of a particular format, and the format is changed with the npcfmti parameter, the format of the ITU national point codes in the database will be changed to the new format.

The format defined by the npcfmti parameter applies to all database entities that use ITU national point codes except gateway screening. Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If the system is using a format for the ITU national point code other than a single number, the point code will have to be converted from its current format to a single number in order to be used by gateway screening. The conversion is explained in “Converting ITU National Point Code Formats”.

For the STP option attributes supporting STP event message throttling, the values for the indicated parameters become effective in the next event-message output interval following their activation. All other updates become effective at the time of activation (immediately).

When the slscnv=on parameter is specified, the node acts as if the 5-bit to 8-bit SLS conversion is being performed on every linkset in the database, including linksets where the slsci=no parameter has been specified.

When the slscnv=off parameter is specified, the node acts as if the 5-bit to 8-bit SLS conversion has been turned off for every linkset in the database, including linksets where the slsci=yes parameter has been specified.

When the slscnv=perls parameter is specified, the 5-bit to 8-bit SLS conversion is performed only on the linksets where the slsci=yes parameter has been specified.

When the value of the dispactalms parameter is changed, there could be a delay of up to five seconds as the VT320 screen refreshes to the selected display.

The maximum allowed number of destination point codes can be changed by the mtpdpcq parameter.

If the Cluster Routing and Management Diversity feature is turned on, the maximum number of destination point codes contained in the exception list can be changed by the mtpxlq parameter.

The sum of the values of the mtpdpcq and mtpxlq parameters can be increased beyond 2500 only if one or more of the following features are turned on:

- If the DSTN5000 feature is turned on, the parameters cannot exceed 5500.
- If the 6000 Routesets feature is enabled, the parameters cannot exceed 6500.
- If the 7000 Routesets feature is enabled, the parameters cannot exceed 7500.
- If the 8000 Routesets feature is enabled, the parameters cannot exceed 8500.
- If the 10,000 Routesets feature is enabled, the parameters cannot exceed 10500.

To enter seconds (instead of milliseconds) for the timer values, the timer value must contain at least one decimal place, and can contain up to three decimal places. If no decimal places are entered, the system accepts the value as milliseconds. The `rtrv-stpopts` command always displays the output in milliseconds, not seconds.

There will be only one Network Point Code in the STPOPTS table for GWS DUP action- either "a" (ANSI), "I" (ITU-I), "n" (ITU-N), "n24" (ITU-N24) or "n16" (ITU-N16).

on/off options

- *ansigflex* —Enables/Disables ANSI G-Flex to execute at 1700 TPS per DSM card
- *archbldid* —Archive build ID. Enables/Disables specifying that the database archive file name contains the EAGLE build number/release number, respectively.
- *cnvcgda* —Enables/Disables discarding of the CGPA point code in SCCP messages if the destination network type is ANSI, and the point code or alias point code of the destination network type is not defined
- *cnvcgdi* —Enables/Disables discarding of the CGPA point code in SCCP messages if the destination network type is ITU-I, and the point code or alias point code of the destination network type is not defined
- *cnvcgdn* —Enables/Disables discarding of the CGPA point code in SCCP messages if the destination network type is ITU-N, and the point code or alias point code of the destination network type is not defined
- *cnvcgdn24* —Enables/Disables discarding of the CGPA point code in SCCP messages if the destination network type is ITU-N24, and the point code or alias point code of the destination network type is not defined
- *critalminh* —Critical alarm inhibit. This enables/disables inhibiting of critical alarms.
- *dispactalms* —Enables/Disables the display of active alarms in the alarm status area of the VT320 screen (see *Figure 1: System Terminal User Display*). The alarm status area comprises four boxes to show counts for critical, major, minor, and inhibited alarms. The counts for critical, major, and minor alarms do not include any temporarily or permanently inhibited alarms. The alarm status area is labeled *Active Alarm Status*. This parameter does not affect the count displayed in the inhibited box; the number of inhibited alarms is always displayed.
- *gdpc* --- MSU duplicated by GWS DUP Stop Action will be routed to the point code configured in GDPC.
- *gtcnvdflt* —Enables/Disables routing of SCCP messages using system defaults when an appropriate entry is not found in the Default GT Conversion Table
- *mtplprst* —Enables/Disables MTP low priority route set testing via polling the STP
- *mtplti* —Enables/Disables MTP loop detection procedures on the STP
- *mtprsi* —Enables/Disables the MTP Restart procedures (both ANSI and ITU) on the STP
- *rptlnpmrss* —Enables/Disables the generation of UIM 1049 for LNP message relay (MR) messages with missing subsystems if no MAP entry is found from a GTT done on an LNP MR message
- *rstrdev* —Enables/Disables restoration of device states when the `init-sys` command is executed and when an OAM role change occurs and maintains the inhibited state of terminals, links, and cards through an `init-sys` execution, OAM role change, and card reload. An `init-sys` command causes the system to go down.

- *uimrd* —Enables/Disables UIMs (Unsolicited Information Messages) to be routed to the specified output group

EPM-B based cards refer to E5-ENET-B, E5-E1T1-B, E5-ATM-B, and E5-MCPM-B cards.

Output

`chg-stpopts:randsls=all`

```
    tekelecstp 06-07-26 12:03:28 EST  EAGLE 36.0.0
    CHG-STPOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-stpopts

chg-t1 Change T1 Interface

Use this command to change an interface for a T1 card in the system. T1 cards consist of HC-MIM or E5-E1T1/E5-E1T1-B cards used as T1 or ST-HSL-A cards.

T1 ports 1, 3, 5, and 7 (master ports) can be independently channel bridged with their adjacent even-numbered T1 ports 2, 4, 6, and 8 (slave ports) to allow non-signaling data pass-through.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

t1port (mandatory)

T1 port number

The value must be a T1 port that has already been configured with a T1 interface on the specified T1 card.

Range:

1 - 8

Any 2 of the 8 ports on an HC-MIM or E5-E1T1-B card can be specified when the card is used as an ST-HSL-A card.

Any 1 of the 8 ports on an E5-E1T1 card can be specified when the card is used as an ST-HSL-A card.

chanbrdg (optional)

Port bridging status. This parameter specifies whether an odd-numbered T1 port is channel bridged with its adjacent even-numbered T1 port for non-signaling data pass through.

Range:

on

off

Default:

No change to the current value

encode (optional)

Indicator for use of B8ZS or AMI encoding/decoding.

Range:

b8zs

ami

Default:

No change to the current value

force (optional)

This parameter specifies to provision an odd-numbered T1 port to channel bridging mode even if the adjacent next higher even-numbered port is already provisioned with a T1 interface.

Range:

yes

no

framing (optional)

Indicator for framing format. *esfperf* is the framing format with performance monitoring.

Range:

sf, esf, esfperf

Default:

No change to the current value

ll (optional)

T1 cable length in feet between the EAGLE and the connecting node.

Range:

0 - 655

Default:

No change to the current value

minsurate (optional)

Minimum signal unit rate. The minimum number of SUs present on a link that are uniformly distributed.

Range:

400 - 1600

Default:

No change to the current value

t1tsel (optional)

Timing source for a T1 card.

Range:

line

slave timing source

external

master timing source

recovered

timing source recovered from the paired master port for channel bridged slave ports

Default:

No change to the current value

Example

```
chg-t1:loc=1205:t1port=1:encode=ami:t1tsel=external
chg-t1:loc=1205:t1port=2:encode=b8z:ll=250s
chg-t1:loc=1205:t1port=3:chanbrdg=on:t1tsel=recovered
chg-t1:loc=1205:t1port=1:minsurate=1000
```

Dependencies

At least one optional parameter must be specified.

The card location specified by the loc parameter must be equipped.

The card specified by the loc parameter must be a LIMT1 card type.

The port specified by the t1port parameter must have already been configured with a T1 interface on the specified T1 card.

All signaling links that are serviced by the specified T1 card must be deactivated before the values for the encode, t1tsel, ll, and framing parameters can be changed.

If an even-numbered T1 port is used, then the chanbrdg=on parameter cannot be specified.

If the chanbrdg=on parameter is specified, then the t1tsel parameter must be specified.

The t1tsel=recovered parameter can be specified only when the status of the specified T1 port is channel-bridged master.

The force=yes parameter must be specified to provision an odd-numbered T1 port to channel bridging mode if the adjacent next higher even-numbered port is already provisioned with a T1 interface.

Parameter values cannot be changed for the even-numbered T1 port interface (t1port parameter) in a channel bridged pair. The values must be changed in the odd-numbered port interface.

Before an odd-numbered T1 port (t1port parameter) can be provisioned into channel bridging mode (chanbrdg=on parameter), all signaling links assigned to its next higher even-numbered adjacent T1 port must be deleted.

The shelf FAN bit must be turned ON for the shelf on which an HC-MIM or E5-E1T1-B card is provisioned and present. The system checks the shelf FAN bit when an HC-MIM or E5-E1T1-B card is present in the specified odd card location (loc parameter) and the chanbrdg=on parameter is specified.

HIPR2 cards must be equipped in card locations *xy*09 and *xy*10 (*x* is the frame, *y* is the shelf) on each EAGLE shelf that contains one or more HC-MIM or E5-E1T1/E5-E1T1-B cards. The system checks for HIPR2 cards when the chanbrdg=on parameter is specified for HC-MIM or E5-E1T1/E5-E1T1-B cards.

The following card locations cannot be specified in the loc parameter: 1113 - 1118 (E5-MASP and E5-MDAL cards), or *xy*09 and *xy*10 where *x* is the frame and *y* is the shelf (MUX cards).

The chanbrdg parameter can be specified only for cards that are used as T1 cards. The parameter cannot be specified if the cards are used as ST-HSL-A cards.

If the value specified by the loc parameter refers to a T1 card, then the chanbrdg=on parameter cannot be specified.

The t1tsel=recovered parameter cannot be specified for a T1 port (t1port parameter) if the T1 port status is channel bridged slave without specifying the chanbrdg=on parameter. The chanbrdg=off parameter cannot be specified for a T1 port (t1port parameter) on the HC-MIM or E5-E1T1 card if the T1 port timing is recovered without specifying the t1tsel=line parameter.

Line (slave) timing cannot be used with channel bridging. If the t1tsel=line parameter is specified for a T1 port with T1 port status of channel bridged with external (master) timing, then the chanbrdg=off parameter must be specified. If the chanbrdg=on/chanbrdg=off parameter is specified for a T1 port that uses T1 port line (slave) timing, then the t1tsel=recovered or t1tsel=external parameter must be specified.

The linkclass=unchan parameter must be specified (see the `ent-t1` command) before the minsurate parameter can be specified.

If the linkclass=unchan parameter is specified, then the chanbrdg=on parameter cannot be specified.

The ST-HSL-A feature must be turned on before the framing=esfperf parameter can be specified.

Notes

External timing is derived from the EAGLE High-Speed Master Clock (1.544 MHz for T1 or 2.048 MHz for E1): therefore, the Master Timing feature is required. Line timing is derived from its received data stream, if present.

Output

```
chg-t1:loc=1205:t1port=1:encode=ami:t1tsel=external
```

```
    rlghncxa03w 04-01-20 09:07:58 EST  EAGLE 31.3.0
    CHG-T1: MASP A - COMPLTD
;
```

Related Commands

dlt-t1, *ent-t1*, *rtrv-t1*, *tst-t1*

chg-tatr-msg

Change Triggerless ANSI TCAP Relay Message

Use this command to revise a Triggerless ANSI TCAP Relay message.

Parameters

msgn (mandatory)

Message number. The number of the TATR message.

Range:

1 - 10

active (optional)

This parameter specifies whether the TATR message is sent to the network card for processing.

Range:

yes

The message is sent to the network card.

no

The message is not sent to the network card.

Default:

No change to the current value

System Default:

no

cdpadgts (optional)

Called party address digits. This parameter specifies the SCCP CdPA digits for the IAR message.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

cdpagt (optional)

Called party address global title. The SCCP CdPA GT for the IAR message.

Range:

0 - 15

Default:

No change to the current value

cdpagtnai (optional)

Called party address global title nature of address indicator. The SCCP CdPA GT NAI for the IAR message.

Range:

0 - 127

Default:

No change to the current value

cdpndgts (optional)

Called party number digits. The TCAP CdPN digits for the IAR message.

Range:

1 - 32 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

cdpnnai (optional)

Called party number Nature of Address Indicator. The value for TCAP CdPN NAI value for the IAR message.

Range:

0 - 255

Default:

No change to the current value

cgpadgts (optional)

Calling party address digits. The SCCP CgPA digits for the IAR message.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

cgpagt (optional)

Calling party address global title. The SCCP CgPA GT for the IAR message.

Range:

0 - 15

Default:

No change to the current value

cgpagtnai (optional)

Calling party address global title nature of address indicator. The SCCP CgPA GT NAI for the IAR message.

Range:

0 - 127

Default:

No change to the current value

cgpndgts (optional)

Calling party number digits. The TCAP CgPN digits in the IAR message.

Range:

1- 32 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

cgpnnai (optional)

Calling party number nature of address indicator. The TCAP CgPN NAI in the IAR message.

Range:

0 - 255

Default:

No change to the current value

reset (optional)

This parameter resets all of the parameters to their default values.

Range:

yes

Resets all message parameters to their default values

Default:

No change to the current value

trigtype (optional)

Trigger Type. The value for the*TrigType*field of the IAR message.

Range:

0 - 255

The value for this parameter can be entered as a decimal value (*0-255*) or as 2 hexadecimal digits. Valid digits are *0-9, a-f, A-F* .

If hexadecimal digits are used, then the digits must be preceded by *h'*. *Table 27: TRIGTYPE Hexadecimal Codes* lists valid hexadecimal values.

Default:

No change to the current value

Example

```
chg-tatr-msg:msgn=1:trigtype=h'26:cdpnnai=4:cdpadgts=12457896abcd:cgpnnai=4
chg-tatr-msg:msgn=1:trigtype=12:cdpnnai=2:cdpndgts=981123456:active=yes
```

Dependencies

The IAR Base feature must be enabled before this command can be entered.

If the reset parameter is specified, then no other parameters can be specified.

At least one optional parameter must be specified.

Output

```
chg-tatr-msg:msgn=1:trigtype=37:cdpnnai=4:cdpndgts=987654321:cgpnnai=4
```

```
    tekelecstp 09-07-07 15:58:08 EST  EAGLE 41.1.0
    CHG-TATR-MSG: MASP A - COMPLTD
;
```

Related Commands

rtrv-tatr-msg, *tst-msg*

chg-tatropts — Change TATR Options

Use this command to enter Triggerless ANSI TCAP Relay (TATR)-specific options in the database. This command updates the TATROPTS table.

Parameters

cdnptype (optional)

Entity type for CdPN RTDB lookup. The entity type that is considered a success when used for RTDB lookup.

Range:

sp

Service provider

rn

Routing number

rnsp

rn or *sp*

anymatch

rn, *sp*, or no match with any entity

always

Lookup is always considered successful

rnspdn

rn, *sp*, or *dn*

If the cdnptype=anymatch parameter is specified, then the value is also used as the RN for the outgoing CdPN.

Default:

No change to the current value

System Default:

rnsp

cgnptype (optional)

CgPN database lookup type. The entity type that is considered a success when used for RTDB lookup.

Range:

sp

Service Provider

rn

Routing Number

rnsp

rn or *sp*

anymatch

rn, *sp*, or no match with any entity

always

Lookup is always considered successful

rnspdn

rn, *sp*, or *dn*

If the cgnptype=anymatch parameter is specified, then the value is also used as the RN for the outgoing CgPN.

Default:

No change to the current value

System Default:

rnsp

cgpaccck (optional)

CgPA country code check. This parameter specifies whether a DEFCC check is performed on the incoming CgPA.

Range:

always

The DEFCC check is always performed.

nonintl

The DEFCC check is performed if the CdPN NAI is not 'International'.

off

The DEFCC check is not performed.

Default:

No change to the current value

System Default:

nonintl

dfltrn (optional)

Default routing number. The default RN used when a value of *sp* or *rnsp* is specified for the cdnptype or cgnptype parameter, and the CdPN or CgPN RTDB lookup returns entity type SP.

Range:

1 - 15 digits, *none*

1-15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

none —a default RN is not used

Default:

No change to the current value

System Default:

none

sporttype (optional)

Service Portability type. This parameter specifies whether Service Portability is performed for the Info Analyzed Relay (IAR) NP feature.

Note: The S-Port feature must be turned on before any change to the parameter will impact the associated feature.

Note: If Service Portability is performed, then the Service Portability prefix (RTDB 'GRN'entity id) is applied.

Range:

gsm

Apply Service Portability prefix for own-network GSM subscribers

is41

Apply Service Portability prefix for own-network IS41 subscribers

all

Apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

none

Service Portability is not performed for the feature.

Default:

No change to the current value

System Default:

none

Example

```
chg-tatropts:cdnptype=always:sporttype=is41
chg-tatropts:cgnptype=sp
chg-tatropts:cgpaccck=always
chg-tatropts:dfltrn=123456789012345
```

Dependencies

At least one optional parameter must be specified.

The IAR Base feature must be enabled before this command can be entered.

The IAR Number Portability and the Service Portability features must be enabled before the sporttype parameter can be specified.

Output

```
chg-tatropts:cdnptype=sp
```

```
    tekelecstp 09-07-05  13:34:22 EST  EAGLE 41.1.0
    CHG-TATROPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-tatropts

chg-th-alm Change Alarm Thresholds

Use this command to change the alarm thresholds and associated values.

Parameters

deirconglvl1 (optional)

The percentage of S13 card level 1 alarm threshold settings.

Range:

1 - 100

Default:

40

deirconglvl2 (optional)

The percentage of S13 card level 2 alarm threshold settings.

Range:

1 - 100

Note: This value must be greater than the value specified for the deirconglvl1 parameter

Default:

80

gttservlv1 (optional)

The percentage for the SCCP GTT Service error ratio level 1 (lower) Threshold Alarm.

Range:

1 - 100

Default:

10

gttservlv2 (optional)

The percentage for the SCCP GTT Service error ratio level 2 (upper) Threshold Alarm.

Range:

1 - 100

Default:

20

imtbusutllvl1 (optional)

The percentage for the IMT Bus Combined utilization level 1 Threshold Alarm (reported on IMT System).

Range:

35 - 70

Default:

70

imtbusutllvl2 (optional)

The percentage for the IMT Bus Combined utilization level 2 Threshold Alarm (reported on IMT System).

Range:

40 - 80

Default:

80

imtcongestlvl1 (optional)

The percentage for the IMT Bus Congestion level 1 Threshold Alarm (reported on HIPR2 card).

Range:

35 - 70

Default:

70

imtcongestlvl2 (optional)

The percentage for the IMT Bus Congestion level 2 Threshold Alarm (reported on HIPR2 card).

Range:

40 - 80

Note: This value must be greater than the value specified for the imtcongestlvl1 parameter.

Default:

80

lnptndblv1 (optional)

The percentage for the TN Database provisioned level 1 (lower) Capacity Threshold Alarm.

Range:

1 - 100

Default:

80

lnptndblv2 (optional)

The percentage for the LNP TN Database provisioned level 2 (upper) Capacity Threshold Alarm.

Range:

1 - 100

Note: This value must be greater than the lnptndblv1 parameter value.

Default:

95

nongttservlv1 (optional)

The percentage for the SCCP Non-GTT Service (AIQ, ATINPQ, GPORT, GFLEX, EIR, INPMR, INPQS, LNPMR, LNPQS, LRNQT, PLNPQS, TLNP, V-Flex, WNPQS) error ratio level 1 (lower) Threshold Alarm.

Range:

1 - 100

Default:

10

nongttservlv2 (optional)

The percentage for the SCCP Non-GTT Service (AIQ, ATINPQ, GPORT, GFLEX, EIR, INPMR, INPQS, LNPMR, LNPQS, LRNQT, PLNPQS, TLNP, V-Flex, WNPQS) error ratio level 2 (upper) Threshold Alarm.

Range:

1 - 100

Default:

20

sccpcalcmthd (optional)

Calculation method used to determine whether the TPS Threshold Alarm levels have been exceeded.

Range:

n

use all In Service Normal cards in the calculation

nplus1

use all In Service Normal cards minus 1 card in TPS calculation

Default:

n

sccpthlv1intvl (optional)

Number of minutes during which the SCCP threshold level 1 alarm cannot be raised more than once.

Range:

0 - 1440

Default:

0

sccpthlv2intvl (optional)

Number of minutes during which the SCCP threshold level 2 alarm cannot be raised more than once.

Range:

0 - 1440

Default:

0

sccptpscap (optional)

The percentage for the SCCP Load Capacity Threshold Alarm.

Range:

0 - 100

Default:

80

sipconglvl1 (optional)

The percentage of SIP card level 1 alarm threshold settings.

Range:

1 - 100

Default:

40

sipconglvl2 (optional)

The percentage of SIP card level 2 alarm threshold settings.

Range:

1 - 100

Note: This value must be greater than the value specified for the sipconglvl1 parameter.

Default:

80

thermallv1 (optional)

Thermal Alarm Level 1 as a percentage of a card's thermal limit.

Range:

73 - 92

thermallv2 (optional)

Thermal Alarm Level 2 as a percentage of a card's thermal limit.

Range:

74 - 100

Example

```
chg-th-alm:lnptndblv1=85
chg-th-alm:sccptpscap=85
chg-th-alm:sccpcalcmthd=nplus1
```

```
chg-th-alm:gttservlv1=25:gttservlv2=28
chg-th-alm:sccpthlv1intvl=20:sccpthlv2intvl=50
chg-th-alm:nongttservlv1=30:nongttservlv2=60
chg-th-alm:deirconglvl1=50:deirconglvl2=80
chg-th-alm:sipconglvl1=50:sipconglvl2=80
```

Dependencies

Each Level 1 parameter value must be less than its corresponding Level 2 parameter value.

Notes

To display the currently configured values for the Thermal Alarm Levels, use the `rtrv-th-alm` command.

HC-MIM cards have a thermal operating limit of 82 degrees Celsius. EPM based E5-E1T1, E5-ATM, E5-ENET, E5-IPSM, and E5-TSM cards have a thermal operating limit of 95 degrees Celsius. E5-SM4G and EPM-B based cards have a thermal operating limit of 90 degrees Celsius. thermallvl1 and thermallvl2 are applicable to both EPM and EPM-B based cards.

The thermal threshold values represent a percentage of the thermal operating limit of a card.

EPM-B based cards refer to E5-ATM-B, E5-ENET-B, E5-E1T1-B, and E5-MCPM-B cards.

Output

`chg-th-alm:thermallv1=85`

```
    rlghncxa03w 06-05-07 11:43:04 EST  EAGLE 35.0.0
    CHG-TH-ALM: MASP A - COMPLTD
;
```

`chg-th-alm:deirconglvl1=50:deirconglvl2=80`

```
    tekelecstp 13-03-19 11:43:04 EST  EAGLE 45.1.0
    CHG-TH-ALM: MASP A - COMPLTD
;
```

```
chg-th-alm:sipconglvl1=50:sipconglvl2=80
    tekelecstp 15-04-22 13:06:06 MST  EAGLE5 47.0.0-66.1.0
    CHG-TH-ALM: MASP A - COMPLTD
;
```

Related Commands

rept-stat-sccp, *rtrv-th-alm*

chg-tifopts

Change TIF Options

Use this command to update the TIF Options table.

Note: Values other than *none* that are entered for the dlma, dlmb, or dlmc parameters for the TIF services (TIF, TIF2, TIF3) using this command will overwrite values entered for those parameters using the `chg-npp-serv` command.

Parameters

condcgpn (optional)

The preconditioning required when a CgPN lookup is needed.

Range:

addcc

add the country code

none

Default:

none

crprel (optional)

The ISUP Release cause for a message that is determined to be circular routed.

Range:

0 - 255

Default:

31 -normal, unspecified

dfltrn (optional)

Default routing number. This parameter provides a set of digits to substitute for a signaling point.

This parameter is used with both calling party and called party numbers.

Range:

1-15 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

none

dlma (optional)

Delimiter A. The digits used for Delimiter A in an NPP Formatting Action.

Range:

1-16 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

none

dlmb (optional)

Delimiter B. The digits used for Delimiter B in an NPP Formatting Action.

Range:

1-16 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

none

dlmc (optional)

Delimiter C. The digits used for Delimiter C in an NPP Formatting Action.

Range:

1-16 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

none

iamcgpn (optional)

The format of the outgoing CgPN digits.

Range:

rn

Replaces the CgPN with the RN.

rndn

Adds the RN as a prefix to the CgPN.

dn

Replaces the CgPN with the DN.

Default:

dn

matchseq (optional)

The DN lookup mechanism.

Range:

dn

search the range database if the DN is not found during subscriber lookup

nptype

search the range database if the DN is not found during subscriber lookup or if the located DN does not match the value specified for the nptype or nptypecgpn parameter

Default:

dn

npflag (optional)

This parameter specifies whether the nm parameter is modified in the IAM message to show that NP lookup has been performed.

The nm parameter exists only in incoming and outgoing IAM messages.

Range:

nm

modifies the nm parameter

none

does not modify the nm parameter

Default:

none

nptypecgpn (optional)

NP entity type for the CgPN. The entity type of the DN that is used to indicate that a successful NP lookup occurred.

Range:

sp

signaling point

rn

routing number

sprn

Lookup is successful if the value of the entity type is *sp* or *rn*

all

Lookup is always considered successful.

rnspdn

Lookup is successful if the value of the entity type is *rn*, *sp*, or *dn*

any

Lookup is successful if the value of the entity type is *rn*, *sp*, or no match with any entity.

Default:

sprn

nptyperls (optional)

The entity type of the DN that is used to indicate that a successful NP lookup occurred for the NPRLS and NPNRLS Service Actions.

Range:

sp

signaling point

rn

routing number

sprn

Lookup is successful if the value of the entity type is *sp* or *rn*.

all

Lookup is always considered successful.

rnspdn

Lookup is successful if the value of the entity type is *rn*, *sp*, or *dn*.

any

Lookup is successful if the value of the entity type is *rn*, *sp*, or no match with any entity.

Default:

No change to the current value

System Default:

sprn

nptyperly (optional)

The entity type of the DN that is used to indicate that a successful NP lookup occurred for the NPRELAY Service Action.

Range:

sp

signaling point

rn

routing number

sprn

Lookup is successful if the value of the entity type is *sp* or *rn*.

all

Lookup is always considered successful.

rnspdn

Lookup is successful if the value of the entity type is *rn*, *sp*, or *dn*.

any

Lookup is successful if the value of the entity type is *rn*, *sp*, or no match with any entity.

Default:

No change to the current value

System Default:

sprn

nsaddldata (optional)

This parameter specifies whether the incoming IAM Calling Party Category should be compared with the value for the nspublic parameter before performing Calling Party number substitution.

Range:

yes

Compare the Calling Party Category in the message with the nspublic parameter value.

no

Do not compare the Calling Party Category in the message with the nspublic parameter value.

Default:

no

nspublic (optional)

The value of the Calling Party Category that indicates that the Calling Party number is public.

Range:

0 - 255

Default:

0

rcausenp (optional)

The value used for the release cause in an REL message when number portability occurs.

Range:

0 - 127

Default:

0

rcausepfx (optional)

The value used for the release cause in an REL message when number portability does not occur.

Range:

0 - 127

Default:

0

rlcopc (optional)

This parameter specifies whether the value specified for the rcause parameter (see the `ent/chg-dstn` commands) overrides the values specified for the rcausenp and rcausepfx parameters.

Range:

off

Use the values specified for the TIFOPTS rcausenp and rcausepfx parameters as the release cause in REL messages.

on

Use the value specified for the rcause parameter as the release cause in REL messages.

Default:

off

rnrqd (optional)

This parameter specifies whether the redirection number is included in the release message when release handling is indicated.

Range:

yes

no

Default:

yes

snscgpndflt (optional)

The digits to be used in calling number simple number substitution.

Range:

1-32 hexadecimal digits, *none*

Valid digits are *0-9, a-f, A-F*

Default:

none

spfill (optional)

This parameter specifies whether the *sp* entity type is populated if the value specified for the defltrn or grn parameter is used for NPP processing.

Range:

off

do not populate the *sp* entity type

on

populate the *sp* entity type

Default:

No change to the current value

System Default:

off

splitiam (optional)

This parameter specifies when to split the IAM into IAM + 1 SAM.

Range:

15 - 31, none

Default:

none

sportrelay (optional)

The Service Portability configuration option for the NPRELAY Service Action.

Range:

none

Service Portability is not performed for this Service Action

gsm

Apply Service Portability prefix (RTDB 'GRN' entity id) for own-network GSM subscribers

is41

Apply Service Portability prefix (RTDB 'GRN' entity id) for own-network IS41 subscribers

all

Apply Service Portability prefix ('GRN' from RTDB entity) for all own-network (IS41 and GSM) subscribers

Default:

No change to the current value

System Default:

none

sportrls (optional)

The Service Portability configuration option for the NPRLS Service Action.

Range:

none

Service Portability is not performed for this Service Action

gsm

Apply Service Portability prefix (RTDB 'GRN'entity id) for own-network GSM subscribers

is41

Apply Service Portability prefix (RTDB 'GRN' entity id) for own-network IS41 subscribers

all

Apply Service Portability prefix ('GRN' from RTDB entity) for all own-network (IS41 and GSM) subscribers

Default:

No change to the current value

System Default:

none

Example

```
chg-tifopts:dlma=1234567890
chg-tifopts:dfltrn=123456789012345
chg-tifopts:nptype=all
chg-tifopts:nsaddldata=yes:nspublic=5
```

Dependencies

At least one optional parameter must be specified.

At least one of the following features must be enabled before this command can be entered.

- TIF Additional Subscriber Data
- TIF Generic Routing Number
- TIF Number Portability
- TIF Number Substitution
- TIF Range CgPN Blacklist
- TIF SCS Forwarding
- TIF Simple Number Substitution
- TIF Subscriber CgPN Blacklist
- TIF Selective Screening

If the TIF ASD feature is turned on, then the matchseq=nptype parameter cannot be specified.

If the TIF GRN feature is turned on, then the matchseq=nptype parameter cannot be specified.

The TIF Number Portability feature must be enabled before the matchseq=nptype parameter can be specified.

If the TIF Number Substitution feature is enabled, then the matchseq=nptype parameter cannot be specified.

The TIF Number Substitution feature must be enabled before the nsaddldata parameter or the nspublic parameter can be specified.

If the matchseq=nptype parameter is specified, then the only value that can be specified for the sportrelay or sportrls parameter is *none*. If the sportrelay or sportrls parameter has a value other than *none*, then the matchseq=nptype parameter cannot be specified.

The S-Port feature must be enabled before the sportrelay or sportrls parameter can be specified.

Notes

None

Output

```
chg-tifopts:nsaddldata=yes:nspublic=5
```

```
    tekelecstp 09-03-05 09:36:03 EST  EAGLE 41.0.0
    CHG-TIFOPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-tifopts

chg-trm

Change Terminal

Use the change terminal command to configure the operational characteristics of each of the 40 terminal ports used to connect modems, printers, and terminals to the system.

Parameters

trm (mandatory)

Terminal. The ID number of the terminal whose characteristics are to be changed.

Range:

1 - 40

all (optional)

This parameter specifies whether to display unsolicited messages of all types (TRAF, LINK, SA, DB, SYS, PU, UIMRD, APPSERV, APPSS, CARD, CLK, DBG, GTT, GWS, MEAS, MON, MPS, SEAS, SLAN) in the scroll area.

Range:

yes

receive all

no

receive none

Default:

yes—If type=emsalm is specified

Current value—if type parameter value is not *emsalm*

appserv (optional)

Application server. This parameter specifies whether to display UAMs and UIMs assigned to the Application Server output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current appserv value.

If type=emsalm is specified—*yes*

System Default:

no

appss (optional)

Application subsystem. This parameter specifies whether to display UAMs and UIMs assigned to the Application Subsystem output group in the scroll area

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current appss value.

If type=emsalm is specified—*yes*

System Default:

no

baud (optional)

The line speed (baud rate) for this terminal's serial port connection.

Range:

2400, 4800, 9600, 19200, 38400, 57600, 115200

Note: Values 38400, 57600, and 115200 are only valid when the OAMHC is used.

Default:

No change to the current value

System Default:

9600

card (optional)

This parameter specifies whether to display UAMs and UIMs assigned to the Card output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current card value.

If type=emsalm is specified—*yes*

System Default:

no

clk (optional)

Clock. This parameter specifies whether to display UAMs and UIMs assigned to the Clock output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current clk value.

If type=emsalm is specified—*yes*

db (optional)

Database. This parameter specifies whether to display database-related unsolicited messages in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current db value.

If type=emsalm is specified—*yes*

System Default:

no

dbg (optional)

Debug. This parameter specifies whether to display UAMs and UIMs assigned to the Debug output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current dbg value.

If type=emsalm is specified—*yes*

System Default:

no

dural (optional)

Terminal lockout time. The length of time the terminal is disabled after each failed login/unlock attempt in excess of the threshold configured on the mxinv parameter. The value can be specified as seconds (*ss*); minutes and seconds (*mmss*); or hours, minutes, and seconds (*hhmmss*).

Range:

0 - 999999

0–59 (*ss*)

0–5959 (*mmss*)

0–995959 (*hhmmss*)

999999

Default:

No change to the current value

System Default:

100

1 minute, 0 seconds

fc (optional)

Flow control. The type of flow control used to regulate the flow of data between the system and an RS-232 connected device, so that no characters are lost (especially at high baud rates). The control setting of the system and the connected device must match.

Range:

hw

hardware flow control

sw

software flow control

both

hardware and software flow control

none

neither hardware nor software flow control

Note: If E5-MASP hardware is used, then a value of *hw* or *both* cannot be specified for the fc parameter.

Default:

No change to the current value

System Default:

sw

gtt (optional)

This parameter specifies whether to display UAMs and UIMs assigned to the GTT output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current gtt value.

If type=emsalm is specified—*yes*

gws (optional)

This parameter specifies whether to display UAMs and UIMs assigned to the GWS output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current gws value.

If type=emsalm is specified—*yes*

System Default:

no

link (optional)

This parameter specifies whether to display link maintenance-related unsolicited messages in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current link value.

If type=emsalm is specified—*yes*

logintmr (optional)

Login timer. The amount of time, in seconds, allowed for a user to log into a Telnet terminal after selecting the terminal.

Note: This parameter applies to Telnet terminals.

Range:

3 - 600, none

none—Login can occur at any time after selecting the terminal.

Default:

No change to the current value

System Default:

none

logouttmr (optional)

Logout timer. The amount of time, in seconds, before the Telnet session closes after the user manually or automatically logs out.

Note: This parameter applies to Telnet terminals.

Range:

0 - 1200, none

none—The Telnet session does not close after logout.

Default:

No change to the current value

System Default:

none

meas (optional)

Measurement. This parameter specifies whether to display UAMs and UIMs assigned to the Measurements Maintenance output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current meas value.

If type=emsalm is specified—*yes*

System Default:

no

mon (optional)

Monitor. This parameter specifies whether to display UAMs and UIMs assigned to the Monitor output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current mon value.

If type=emsalm is specified—*yes*

mps (optional)

This parameter specifies whether to display UAMs and UIMs assigned to the MPS output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current mps value.

If type=emsalm is specified—*yes*

mxinv (optional)

Login/unlock failure threshold. When a login or unlock failure occurs on a terminal, a counter of successive login failures is incremented by one. After the increment, if the counter is greater than or equal to the mxinv parameter value, the system sends an information message to all system administrator ports and locks out the port temporarily. The port is locked out for an interval that is specified in the dural parameter.

To disable the info message and temporary lockout function for the terminal, specify mxinv=0.

Range:

0 - 9

Default:

No change to the current value

System Default:

5

successive failed login/unlock attempts

pngfailcnt (optional)

Ping fail count. The number of consecutive ping fails that must occur before the Telnet connection is dropped.

Note: This parameter applies to Telnet terminals or to EMSALM terminals that have Telnet connections.

Range:

1 - 10

Default:

No change to the current value

System Default:

1

pngtimeint (optional)

Ping time out. The amount of time, in milliseconds, that must pass before the IPSM card initiates a new ping cycle.

Note: This parameter applies to Telnet terminals or to EMSALM terminals that have Telnet connections.

Range:

100 - 1200000, none

none—Pinging does not occur.

Default:

No change to the current value

System Default:

none

prty (optional)

Parity. The parity for this terminal's serial port connection.

Range:

none

even

odd

Default:

No change to the current value

System Default:

even

pu (optional)

Program update. This parameter specifies whether to display program update-related unsolicited messages in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current pu value.

If type=emsalm is specified—*yes*

sa (optional)

Security administration. This parameter specifies whether to display security administration-related unsolicited messages in the scroll area.

Range:

yes

receive all

no

receive none

yes—Receive all.

no—Receive none.

Default:

If all is specified—current all value

If all is not specified—current sa value.

If type=emsalm is specified—*yes*

sb (optional)

Stop bit. The number of stop bits used in communications with the terminal.

Range:

1 - 2

Default:

No change to the current value

System Default:

1

seas (optional)

This parameter specifies whether to display UAMs and UIMs assigned to the SEAS Maintenance output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current seas value.

If type=emsalm is specified—*yes*

slan (optional)

This parameter specifies whether to display UAMs and UIMs assigned to the SLAN Maintenance output group in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current slan value.

If type=emsalm is specified— *yes*

System Default:

no

sys (optional)

System. This parameter specifies whether to display system maintenance-related unsolicited messages in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current sys value.

If type=emsalm is specified—*yes*

tmout (optional)

Maximum channel idle time. The maximum amount of time in minutes that a login session can remain idle (no user input) on a terminal before being automatically logged off. To disable idle time monitoring for a terminal, specify tmout=0.

Range:

0 - 99

Default:

No change to the current value

System Default:

30

minutes

traf (optional)

Traffic. This parameter specifies whether to display traffic-related unsolicited messages displayed in the scroll area.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current traf value

If type=emsalm is specified—*yes*

System Default:

no

type (optional)

The type of device being connected to this terminal.

Range:

vt320, ksr, printer, sccs, mgmt, telnet, emsalm, none, seas

The *emsalm* value is valid for terminals 1-40.

The *telnet, emsalm, seas*, and *none* are valid values for terminals 17 - 40.

Default:

Current value.

System Default:

vt320 -terminals 1-16

telnet-terminals 17-40

uimrd (optional)

Unsolicited messages. This parameter specifies whether to display the unsolicited messages assigned to this group.

Range:

yes

receive all

no

receive none

Default:

If all is specified—current all value

If all is not specified—current uimrd value.

If *type=emsalm* is specified—*yes*

System Default:

no

Example

```
chg-trm:trm=13:type=ksr:baud=9600:uimrd=yes

chg-trm:trm=1:link=yes:sys=yes:db=yes

chg-trm:trm=17:all=yes

chg-trm:trm=22:type=none

chg-trm:trm=10:link=yes:card=yes:clk=yes

chg-trm:trm=1:type=ksr:gtt=yes

chg-trm:trm=2:appserv=no:appss=yes:card=yes:clk=no:dbg=no:gtt=yes:gws=no
:meas=yes:mon=no:mps=yes:seas=no:slan=yes

chg-trm:trm=17:logintmr=50

chg-trm:trm=17:pngtimeint=1000

chg-trm:trm=17:pngfailcnt=5
```

Dependencies

At least one optional parameter must be specified.

The system requires that at least two terminals be configured as security administration terminals. If only two security administration terminals are configured, the value of the type parameter cannot be changed to a value that would make the terminal unusable (*printer* or *none*) because only one security administration terminal would remain.

The combined total line speed (baud rate) for all active terminal ports cannot exceed 168,000. This value allows for 16 terminal to be configured at 9600 bps each.

If the prty=none parameter is specified, then the type=vt320 parameter cannot be specified. A VT320 terminal does not support 7-bit data bytes and no parity. The number of data bits cannot be changed.

If the prty=none parameter is specified, then the type=sccs parameter cannot be specified.

For terminals 1 – 16, the type=telnet parameter cannot be specified.

For terminals 17 - 40, the value of the type parameter must be *telnet*,*seas*, *emsalm*, or *none*.

If the type=telnet parameter is specified, then the baud, prty, sb, and fc parameters cannot be specified.

If the value of the type parameter is *telnet*, *seas*, or *emsalm*, and if the value of the trm parameter is 17-40, then an IPSM card must be equipped in the system. Parameters for these terminals cannot be changed unless an IPSM card has been added for the target terminal.

Note: For one IPSM card, telnet terminals 17-24 are available. For two IPSM cards, telnet terminal IDs 17-32 are available. For three IPSM cards, telnet terminal IDs 17-40 are available. If an installed IPSM card is removed, the eight terminal IDs that were assigned to that card are no longer available. For example, if three IPSM cards are installed, and the second card that was installed is then removed, telnet terminal IDs 17-24 and 33-40 are available. To make the IDs consecutive again, the third card

that was previously installed must be removed and re-installed. Then, its available terminal IDs change from 33-40 to 25-32. Use the `rtrv-trm` command to display the available telnet terminal IDs.

The terminal port must be inhibited (see the `inh-trm` command) before the type, baud, prty, sb, and fc parameters can be changed.

The all, traf, link, sa, db, sys, uimrd, and pu parameters can be changed on any terminal, including the one in use, regardless of the port status (inhibited or allowed).

The port cannot be removed from service (`rmv-trm`) when the type, baud, prty, sb, and fc parameters are being changed.

The dural parameter must be specified in the range of 0–995959 or with a value of 999999.

The hours portion of the dural parameter must be in the range 0–99.

The seconds portion of the dural parameter must be in the range 0–59.

The IP User Interface (Telnet) feature must be enabled and turned on before the type=telnet parameter (IDs 17-40) or the type=emsalm parameter (IDs 1-40).can be specified.

The minutes portion of the dural parameter must be in the range 0–59.

A valid value must be specified or the baud parameter. Baud rates 38400, 57600, and 115200 are only valid when the OAMHC is used.

The terminal state requested must be answered.

The parity (prty) parameter must have a valid value assigned.

If E5-MASP hardware is used, then a value of *hw* or *both* cannot be specified for the fc parameter.

The specified terminal must be inhibited before the type=seas parameter can be specified.

If the specified terminal is a SEAS Terminal, then the SEAS output group cannot be turned off.

If the SEAS Over IP feature is turned on, then an IPSM card must be provisioned at the location corresponding to the specified SEAS terminal.

The SEAS Over IP feature must be enabled before the type=seas parameter can be specified.

The type=seas parameter cannot be specified if:

- The value of the trm parameter is 1 - 16.
- Specifying the parameter results in more than one SEAS terminal on an IPSM card.
- Specifying the parameter results in more than two SEAS terminals in the EAGLE.
- An IPSM card is not physically present in the corresponding location.
- An available (unconfigured) SEAS terminal does not exist in the SEASCFG table.

The IP User Interface feature must be turned on before the value of the type parameter can be *telnet*, *seas*, *emsalm*, or none.

The type=telnet parameter must be specified before the logintmr and logouttmr parameters can be specified.

If the value specified for the type parameter is *seas* or *none*, then the pngtimeint and pngfailcnt parameters cannot be specified.

The terminal must be in the Inhibited state before the logintmr, logouttmr, pngtimeint, and pngfailcnt parameters can be specified.

Notes

Refer to *Maintenance Guide* for a list of unsolicited output messages that you might see for each output group.

This command cannot be entered when an upgrade is in progress.

If your terminal has the auto-wrap feature, you must disable the feature to use the terminal on the system.

To disable the informational message and temporary port lockout feature for a terminal, specify the mxinv=0 parameter.

To prevent a terminal from being disabled, specify the dural=0 parameter.

To make the lockout period for a terminal indefinite, specify the dural=999999 parameter. When disabled, a terminal remains disabled until the port is inhibited (`inh-trm` command) and then allowed (`alw-trm` command).

Terminal idle time monitoring and auto-logout applies only if the terminal type is *vt320, ksr*, or *sccs*. The `chg-trm` command can be entered with a tmout parameter value for other terminal types, but it has no effect.

Using the terminal type of *none* conveys to the terminal processor that a particular port is not connected or is no longer in use. The terminal processor does not service output queues for a terminal port that is configured as type=none.

When the terminal type for a terminal is changed to type=emsalm, the value for all output group parameters is set to *yes*.

When the terminal type for a terminal is changed from type=emsalm to another type, the current value for all output groupts is not changed. A command must be entered to change one or more output group values to another value.

Note: Though the output groups are set to yes, terminals of type emsalm do not display any reports or any UIMs except "UIM 1083 system alive".

The number of data bits cannot be changed; it is set to 7.

Software flow control (XON and XOFF pacing), involves sending control codes between the system and the connected device.

Hardware flow control (RTS and CTS pacing) uses the RTS and CTS lines of the RS-232 interface to pause and restart the flow of data between the system and the connected device.

Software flow control is recommended if the connected device is a printer. Both software and hardware flow control are highly recommended if the connected device is a modem.

To connect a modem, specify the type=vt320 parameter.

The all parameter cannot be specified in the command with the other message status parameters (traf, link, sa, db, sys, or pu). If the all parameter and other message status parameters are specified together in the command, the terminal is assigned the other specified message status parameters and the all parameter is ignored.

If a SEAS terminal is being removed, then a warning that states “Invalidating the Terminal data in SEASCFG table” appears.

If the SEAS output group is turned off for a SEAS terminal, then a message "SEAS Output Group is SET for SEAS Terminal *trm number*"" appears.

Output

```
chg-trm:trm=2:all=yes
```

```
    rlghncxa03w 04-05-07 11:11:28 EST EAGLE 31.5.0
    CHG-TRM: MASP A - COMPLTD
;
```

Related Commands

act-echo, *canc-echo*, *chg-trm*, *dact-echo*, *inh-trm*, *rept-stat-trm*, *rmv-trm*, *rst-trm*, *rtrv-trm*

chg-ttmap

Change Translation Type Mapping

Use this command to change a mapped SS7 message translation type (TT) for a given gateway linkset name. With this command you can change the identification of the type of allowed global title translation in the SS7 message before and after translation type mapping. For example, suppose you are mapping the translation type 001 (before TT mapping) to 238 (after TT mapping). You can use this command to change that mapping to 001 (before) to 254 (after).

Parameters

ett (mandatory)

Translation type before mapping. The identification of the type of global title translation in the SS7 message before translation type mapping. This attribute is the decimal representation of the 1-octet binary field used by the SS7 protocol to identify the translation type.

Range:

0 - 255

io (mandatory)

Incoming or outgoing. This parameter indicates whether the translation type mapping data provisioned for the gateway linkset is for SS7 messages received or sent on the linkset.

Range:

i

incoming

o

outgoing

lsn (mandatory)

Linkset name. The unique network identifier for the gateway linkset.

Range:

ayyyyyyyyy

1 alphabetic character followed by 9 alphanumeric characters

mtt (mandatory)

Mapped translation type. The identification of the type of global title translation in the SS7 message after translation type mapping. This attribute is the decimal representation of the 1-octet binary field used by the SS7 protocol to identify the translation type.

Range:

0 - 255

Example

```
chg-ttmap:lsn=nc001:io=o:ett=128:mtt=55
```

Dependencies

The linkset must be defined.

Notes

None

Output

```
chg-ttmap:lsn=nc001:io=o:ett=128:mtt=55
```

```
    rlghncxa03w 04-01-22 10:37:07 EST  EAGLE 31.3.0
    CHG-TTMAP: MASP A - COMPLTD

    TTMAP table for nc001 is (2 of 64) 3% full
;
```

Related Commands

dlt-ttmap, *ent-ttmap*, *rtrv-ttmap*

chg-ttr-msg

Change Triggerless TCAP Relay Message

Use this command to revise a Triggerless TCAP Relay message.

Parameters

msgn (mandatory)

Message number. The number of the TTR message.

Range:

1 - 10

active (optional)

This parameter specifies whether the TTR message is sent to the network card for processing.

Range:

yes

The message is sent to the network card.

no

The message is not sent to the network card.

Default:

no

bcsm (optional)

Basic call state model. The value for the*EventTypeBCSM*field of the TTR message.

Range:

2 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

cdpadgts (optional)

Called party address digits. The SCCP CdPA digits for the IDP message.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

cdpagt (optional)

Called party address global title. The SCCP CdPA GT for the IDP message.

Range:

0 - 15

Default:

No change to the current value

cdpagtnai (optional)

Called party address global title nature of address indicator. The SCCP CdPA GT NAI for the IDP message.

Range:

0 - 127

Default:

No change to the current value

cdpndgts (optional)

Called party number digits. The TCAP CdPN digits for the IDP message.

Range:

1 - 32 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

cdpnnai (optional)

Called Party Number Nature of Address Indicator. The value for TCAP CdPN NAI value for the IDP message.

Range:

0 - 127

Default:

No change to the current value

cgpadgts (optional)

Calling party address digits. The SCCP CgPA digits for the IDP message.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

cgpagt (optional)

Calling party address global title. The SCCP CgPA GT for the IDP message.

Range:

0 - 15

Default:

No change to the current value

cgpagtnai (optional)

Calling party address global title nature of address indicator. The SCCP CgPA GT NAI for the IDP message.

Range:

0 - 127

Default:

No change to the current value

cgpndgts (optional)

Calling party number digits. The TCAP CgPN digits in the IDP message.

Range:

1- 32 hexadecimal digits, *none* .

Valid digits are *0-9, a-f, A-F*

none -deletes the current digits

Default:

No change to the current value

cgpnnai (optional)

Calling party number nature of address indicator. The TCAP CgPN NAI in the IDP message.

Range:

0 - 127

Default:

No change to the current value

lacdgts (optional)

Location area code digits. The area code if the value is not provided in the CdPN.

Range:

1 - 6 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

reset (optional)

This parameter resets all of the parameters to their default values.

Range:

yes

Resets all message parameters to their default values

Default:

No change to the current value

sk (optional)

Service key. The service key for the IDP message.

Range:

8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Default:

No change to the current value

tcaptype (optional)

This parameter specifies whether the IDP message is Intelligent Network Application Protocol-based (INAP) or Camel Application Protocol-based (CAP).

Range:

inap

INAP-based

cap

CAP-based

Default:

No change to the current value

Example

```
chg-ttr-msg:msgn=1:tcaptype=INAP:cdpnnai=4:cdpadgts=12457896abcd:cgpnnai=4
chg-ttr-msg:msgn=1:cdpnnai=2:cdpndgts=981123456:sk=00006b00:bcsm=02
```

Dependencies

The Prepaid IDP Query Relay feature must be enabled before this command can be entered.

If the tcaptype parameter is specified, then the cdpnnai and the cgpnnai parameters must be specified.

If the reset parameter is specified, then no other parameters can be specified.

At least one optional parameter must be specified.

Notes

None.

Output

```
chg-ttr-msg:msgn=1:tcaptype=CAP:cdpnnai=4:cdpndgts=987654321:cgpnnai=4
```

```
    tekelecstp 08-05-05 15:58:08 EST  EAGLE 39.0.0
    CHG-TTR-MSG: MASP A - COMPLTD
;
```

Related Commands

rtrv-ttr-msg, *tst-msg*

chg-ttropts — Change TTR Options

Use this command to enter Triggerless TCAP Relay (TTR)-specific options in the database. This command updates the TTROPTS table.

Note: Values other than *none* that are entered for the dlma, dlmb, or dlmc parameters for the IDP Relay services (IDPRCDPN(X), IDPRCGPN) using this command will overwrite values entered for those parameters using the `chg-npp-serv` command.

Parameters

Note: The options for the on and off parameters are described in the Notes section.

cddnnotfndrsp (optional)

The system response for an IDP message processed by the IDPR/TTR service when the Called Party Number (CdPN) is not found in the RTDB.

Range:

relay

relay the message

connect

send a CONNECT message

continue

send a CONTINUE message

release

send a RELEASECALL message

Default:

release

cddra (optional)

The destination routing address (DRA) used in the CONNECT message generated by the INPRTG Service Action based on the CdPN RTDB lookup.

Range:

rndn

RN + DN

rn

RN

grn

GRN

rnasd

RN + ASD

asdrn

ASD + RN

rngrn

RN + GRN

grnrn

GRN + RN

ccrndn
CC + RN + DN

rnasddn
RN + ASD + DN

asdrndn
ASD + RN + DN

ccrnasddn
CC + RN + ASD + DN

ccasdrndn
CC + ASD + RN + DN

asdrnccdn
ASD + RN + CC + DN

rnasdccdn
RN + ASD + CC + DN

rngrndn
RN + GRN + DN

grnrndn
GRN + RN + DN

ccrngrndn
CC + RN + GRN + DN

ccgrnrndn
CC + GRN + RN + DN

grnrnccdn
GRN + RN + CC + DN

rngrnccdn
RN + GRN + CC + DN

grndn
GRN + DN

ccgrndn
CC + GRN + DN

Default:
rndn

cddranai (optional)
The DRA nature of address indicator used in the CONNECT response generated by the INPRTG Service Action based on the CdPN RTDB lookup.

Range:
sub

unknown

natl

intl

ntwk

Default:

natl

cddranp (optional)

The DRA numbering plan used in the CONNECT response generated by the INPRTG Service Action based on the CdPN RTDB lookup.

Range:

e164

x121

f69

Default:

e164

cdnoentityrsp (optional)

The system response for an IDP message processed by the IDPR/TTR service when neither the RN nor SP entity is found in the CdPN RTDB.

Range:

relay

relay the message

connect

send a CONNECT message

continue

send a CONTINUE message

release

send a RELEASECALL message

Default:

continue

cdrelcause (optional)

The *cause* parameter value for the RELEASECALL message generated by the INPRTG Service Action based on the CdPN RTDB lookup.

Range:

1 - 127

Default:

31

(not defined)

cdrnrsp (optional)

The system response for an IDP message processed by the IDPR/TTR service when the CdPN is associated with an RN entity.

Range:

relay

relay the message

connect

send a CONNECT message

continue

send a CONTINUE message

release

send a RELEASECALL message

Default:

connect

cdsprsp (optional)

The system response for an IDP message processed by the IDPR/TTR service when the CdPN is associated with an SP entity.

Range:

relay

relay the message

connect

send a CONNECT message

continue

send a CONTINUE message

release

send a RELEASECALL message

Default:

relay

cgdnnotfndrsp (optional)

The system response for an IDP message processed by the IDPR/TTR service when the Calling Party Number (CgPN) is not found in the RTDB.

Range:

relay

relay the message

connect

send a CONNECT message

continue

send a CONTINUE message

release

send a RELEASECALL message

Default:

release

cgdra (optional)

The DRA used in the CONNECT response generated by the INPRTG Service Action based on the CGPN RTDB lookup.

Range:

rndn

RN + DN

rn

RN

grn

GRN

rnasd

RN + ASD

asdrn

ASD + RN

rngrn

RN + GRN

grnrn

GRN + RN

ccrndn

CC + RN + DN

rnasddn

RN + ASD + DN

asdrndn

ASD + RN + DN

ccrnasddn

CC + RN + ASD + DN

ccasdrndn

CC + ASD + RN + DN

asdrnccdn

ASD + RN + CC + DN

rnasdccdn

RN + ASD + CC + DN

rngrndn

RN + GRN + DN

grnrndn

GRN + RN + DN

ccrngrndn

CC + RN + GRN + DN

ccgrnrndn

CC + GRN + RN + DN

grnrnccdn

GRN + RN + CC + DN

rngrnccdn

RN + GRN + CC + DN

grndn

GRN + DN

ccgrnrndn

CC + GRN + DN

Default:

rndn

cgdranai (optional)

The NAI option used in the CONNECT response generated by the INPRTG Service Action based on the CgPN lookup.

Range:

sub

unknown

natl

intl

ntwk

Default:

natl

cgdranp (optional)

The DRA NP used in the CONNECT response generated by the INPRTG Service Action based on the CgPN lookup.

Range:

e164

x121

f69

Default:

e164

cgnoentityrsp (optional)

The system response for an IDP message processed by the IDPR/TTR service when neither the RN nor SP entity is found in the CgPN RTDB.

Range:

relay

relay the message

connect

send a CONNECT message

continue

send a CONTINUE message

release

send a RELEASECALL message

Default:

continue

cgnptype (optional)

CgPN database lookup type. The entity type that is considered a success when used for RTDB lookup.

Range:

sp

Service Provider

rn

Routing Number

rnsp

rn or *sp*

anymatch

rn, *sp*, or no match with any entity

always

Lookup is always considered successful

rnspdn

rn, *sp*, or *dn*

If the cgnptype=anymatch parameter is specified, then the value is also used as the RN for the outgoing CgPN.

Default:

rnsp

cgpaccck (optional)

CgPA country code check. This parameter specifies whether a DEFCC check is performed on the incoming CgPA.

Range:

always

The DEFCC check is always performed.

nonintl

The DEFCC check is performed if the CdPN NAI is not 'International'.

off

The DEFCC check is not performed.

Default:

nonintl

cgpnskrtg (optional)

This parameter specifies whether SK routing occurs if IDP A-Party routing fails.

Range:

no

SK routing does not execute if IDP A-Party Routing fails.

yes

SK routing executes if IDP A-Party Routing fails.

Default:

No change to the current value

System Default:

no

cgrelcause (optional)

The*cause* parameter value in the RELEASECALL message generated by an INPRTG Service Action based on the CgPN RTDB lookup.

Range:

1 - 127

Default:

31 (not defined)

cgrnrsp (optional)

The system response for an IDP message processed by the IDPR/TTR service when the CgPN is associated with an RN entity.

Range:

relay

relay the message

connect

send a CONNECT message

continue

send a CONTINUE message

release

send a RELEASECALL message

Default:

connect

cgsnai (optional)

Calling party number nature of address indicator. The CgPN NAI that is used during number conditioning.

Range:

incoming

The incoming CgPN NAI is used.

intl

The CgPN NAI is set to 'International' (4).

natl

The CgPN NAI is set to 'National' (3).

unkn

The CgPN NAI is set to 'Unknown' (0).

A value of *incoming* must be specified before the intl, natl, nai1, nai2, nai3, and unkn parameters in the `chg-npp-serv` command can be changed to non-default values for the IDPRCGPN service.

Default:

incoming

cgsprsp (optional)

The system response sent for an IDP message processed by the IDPR/TTR service when the CgPN is associated with an SP entity.

Range:

relay

relay the message

connect

send a CONNECT message

continue

send a CONTINUE message

release

send a RELEASECALL message

Default:

relay

dfltrn (optional)

Default routing number. The default RN used when a value of *sp* or *rnsp* is specified for the nptype parameter, and the CdPN RTDB lookup returns entity type SP.

Range:

1-15 hexadecimal digits, *none*.

Valid digits are *0-9, a-f, A-F*.

none —a default RN is not used

Default:

none

dlma (optional)

Delimiter A. The first delimiter used to format the outgoing TCAP dialed number.

Range:

1-16 hexadecimal digits, *none*.

Valid digits are *0-9, a-f, A-F*.

Default:

none

dlmb (optional)

Delimiter B. The second delimiter used to format the outgoing TCAP dialed number.

Range:

1-16 hexadecimal digits, *none*.

Valid digits are *0-9, a-f, A-F*.

dlmc (optional)

Delimiter C. The third delimiter used to format the outgoing TCAP DN.

Range:

1-16 hexadecimal digits, *none*.

Valid digits are *0-9, a-f, A-F*.

drafrmt (optional)

DRA digit format. The format of the DRA digits.

Range:

grn

The format is GRN.

grndn

The format is GRN+DN.

dngrn

The format is DN+GRN.

ccgrndn

The format is CC+GRN+DN.

grnccdn

The format is GRN+CC+DN.

Default:

No change to the current value

System Default:

grn

dranai (optional)

DRA nature of address indicator. The DRA NAI that is used during number conditioning.

Range:

1 - 127

Default:

No change to the current value

System Default:

3 - NATL

map (optional)

Mapping direction. The mapping direction between the Type of Number (TON) and the Nature Of Address Indicator (NAI).

Range:

nai2ton

NAI mapping to TON

ton2nai

TON mapping to NAI

Default:

See the*Notes* section.

nai (optional)

Nature of Address Indicator. The NAI used in mapping.

Range:

0 - 127

Default:

See the*Notes* section.

nptype (optional)

Entity type for CdPN RTDB lookup. The entity type that is considered a success when used for RTDB lookup.

Range:

sp

Service provider

rn

Routing number

rnsp

rn or *sp*

anymatch

rn, *sp*, or no match with any entity

always

Lookup is always considered successful

rnspdn

rn, *sp*, or *dn*

If the nptype=anymatch parameter is specified, then the value is also used as the RN for the outgoing CdPN.

Default:

rnsp

Use RN or SP as entity type for RTDB lookup

off (optional)

This parameter turns off the specified options. Up to 8 comma-separated unique options can be specified.

Range:

cdcnp

cgcnp

on (optional)

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

Range:

cdcnp

cgcnp

rnspfill (optional)

This parameter specifies whether the RN and SP entities are set to the value of the RN or SP digits from the RTDB when certain conditions are met.

Range:

off

If the nptype parameter has a value of *rnsp, anymatch*, or *always*, and the dfltrn=none parameter is specified, then the RN entity is NOT set to the value of the SP digits from the RTDB. If the nptype parameter has a value of *rnsp, anymatch*, or *always*, then the SP entity is NOT set to the value of the RN digits from the RTDB.

on

If the nptype parameter has a value of *rnsp, any*, or *all*, and the dfltrn parameter has a value of *none*, then the RN entity is set to the value of the SP digits from the RTDB. If the nptype parameter has a value of *rnsp, anymatch*, or *always*, and the spfill=on parameter is specified, then the SP entity is set to the value of the RN digits from the RTDB.

Default:

No change to the current value

System Default:

off

snai (optional)

CdPN nature of address indicator. The CdPN NAI used during number conditioning.

Range:

incoming

The incoming CdPN NAI is used.

intl

A CdPN NAI of 'International' (4) is used.

natl

A CdPN NAI of 'National' (3) is used.

unkn

A CdPN NAI of 'Unknown' (0) is used.

A value of *incoming* must be specified before the intl, natl, nai1, nai2, nai3, and unkn parameters in the `chg-npp-serv` command can be changed to non-default values for the IDPRCDPN(X) service.

Default:

incoming

spfill (optional)

This parameter specifies whether the SP entity type is populated if the value specified for the dfltrn or grn parameter is used for NPP processing.

Range:

off

do not populate the SP entity type

on

populate the SP entity type

Default:

No change to the current value

System Default:

off

sporttype (optional)

Service Portability type. This parameter specifies whether Service Portability is performed for the associated feature.

The S-Port feature must be turned on before any change to the parameter will impact the associated feature. If Service Portability is performed, then the Service Portability prefix (RTDB 'GRN'entity id) is applied.

Range:

gsm

apply Service Portability prefix for own-network GSM subscribers

is41

apply Service Portability prefix for own-network IS41 subscribers

all

apply Service Portability prefix for all own-network (IS41 and GSM) subscribers

none

Service Portability is not performed for the feature.

Default:

No change to the current value

System Default:

none

ton (optional)

Type of Number. The Type of Number used in mapping.

Range:

0 - 7

Default:

See the*Notes*section.

Example

```
chg-ttropts:nptype=always
chg-ttropts:snai=intl
chg-ttropts:cgnptype=sp
chg-ttropts:cgsnai=natl
chg-ttropts:dlma=1234567890
chg-ttropts:dlmb=1234567890123456
chg-ttropts:dlmc=1234567890abcdef
chg-ttropts:cgpaccck=always
chg-ttropts:dfltrn=123456789012345
chg-ttropts:cddra=rn:cdrelcause=10:cgdranp=e164:cdrnrsp=continue
chg-ttropts:cddra=grndn:on=cdcnp:off=cgcnp
chg-ttropts:nai=12:ton=7:map=nai2ton
```

Dependencies

At least one optional parameter must be specified.

The Prepaid IDP Query Relay feature must be enabled before this command can be entered.

The IDP A-Party Routing feature and the IDP SK Routing feature must be enabled before the cgpnskrtg parameter can be specified.

If the new or existing value specified for the drafrmt parameter contains a country code (e.g., ccgrndn), then only a value of 4 can be specified for the dranai parameter. If the dranai parameter has a new or existing value that is not equal to 4, then the value that is specified for the drafrmt parameter cannot contain a country code.

The S-Port feature must be enabled before the sporttype parameter can be specified.

The same option cannot be specified for the on and off parameters.

The nai, ton, and map parameters must be specified together in the command.

Notes

Definitions for the on/off options

- *cdcnp* —Specifies whether the *CutAndPaste* parameter is included in the CONNECT message generated by the INPRTG Service Action based on the CdPN RTDB lookup. The value for the *CutAndPaste* parameter is the length of the incoming DN in the IDP query if the DRA formatting option has a DN. If the option does not have a DN, the value is **0**. The option has a default of OFF.
- *cgcnp* —Specifies whether the *CutAndPaste* parameter is included in the CONNECT message generated by the INPRTG Service Action based on the CgPN RTDB lookup. The value for the *CutAndPaste* parameter is the length of the incoming DN in the IDP query if the DRA formatting option has a DN. If the option does not have a DN, the value is **0**. The option has a default of OFF.

IDPR TON Mapping Default Values

If the map, nai, and ton parameters are not specified, then the TON and NAI values are associated as follows:

Table 22: TON2NAI Mapping Default Values

TON	NAI	
1	4	INTL
2	3	NATL
0	2	UNKN
All other values	2	-

Table 23: NAI2TON Mapping Default Values

NAI	TON	
4	1	INTL
3	2	NATL
2	0	UNKN
All other values	0	-

Output

`chg-ttropts:nptype=sp`

```
    tekelecstp 08-05-05  13:34:22 EST  EAGLE 39.0.0
    CHG-TTROPTS: MASP A - COMPLTD
;
```

`chg-ttropts:cgdra=rn:cdrelcause=10:cgdranp=e164:cdrnrsp=continue`

```
    tekelecstp 10-10-20 16:01:35 EST  EAGLE 43.0.0
    Command entered at terminal #4.
    CHG-TTROPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-ttropts

chg-uaps

Change UA Parameter Set

Use this command to change the UA parameter set.

Parameters

set (mandatory)

UA parameter set to be changed.

Range:

1 - 9

Default:

No change to the current value

parm (optional)

Parameter number.

Range:

1 - 10

1 —ASP SNM Options

2—ASP/AS Notification Options

3—UA Serviceability Options

4-10—Unused

Default:

No change to the current value

pvalue (optional)

If the parm parameter is specified, then this parameter specifies the numerical value that the parm parameter will be set to. Each parameter value is 32 bits (decimal 4294967295); not all 32 bits are used for each parameter. Only the values of the used bits are evaluated to determine the parameter value.

If the default setting for one bit is ON and you want to turn ON another bit in addition, specify the value that turns both bits ON. To turn OFF a bit that is ON and leave other bits ON, specify the value that turns ON just the bits that you want to be on. See the Notes section for this command for an explanation of the meanings of the bit settings.

Range:

0 - 4294967295

Enter a valid decimal or hexadecimal value shown in *Table 24: Valid and Default UAPS Parameter Values* for the pvalue parameter to be used for the specified parm parameter.

Table 24: Valid and Default UAPS Parameter Values

Parameter (parm)	To Turn On Only Bit(s)	Decimal pvalue	Hexadecimal pvalue	System Default
1. ASP SNM Options	0	1	h'1	
	1	2	h'2	

Parameter (parm)	To Turn On Only Bit(s)	Decimal pvalue	Hexadecimal pvalue	System Default
Bit 0= Broadcast Bit 1= Response Method Bit 6 = Broadcast Congestion Status Change Bits 2-5 and 7-31= Unused	6	64	h'40	Off
	0, 1	3	h'3	On
	0, 6	65	h'41	
	1, 6	66	h'42	
	0, 1, 6	67	h'43	
2. ASP/AS Notification Options Bit 0= ASP ACTIVE Notifications Bit 1= ASP INACTIVE Notifications Bit 2 = ASP AS State Query Bits 3-31 = Unused	1	h'1		
	1	2	h'2	
	2	4	h'4	
	0, 1	3	h'3	
	0, 2	5	h'5	
	1, 2	6	h'6	
	0, 1, 2	7	h'7	Off
3. UA Serviceability Options Bit 0 = UA Heartbeats Bit 1 = UA Graceful Shutdown Bits 2-31 = Unused	0 1 0,1	1 2 3	h'1 h'2 h'3	Off Off Off
4. SCTP Payload Protocol Indicator Option	0	1	h'1	Off

Parameter (parm)	To Turn On Only Bit(s)	Decimal pvalue	Hexadecimal pvalue	System Default
Bit 0 = Payload Protocol Indicator Bits 1-31 = Unused				

Default:

No change to the current value

srcset (optional)

When specified, this source UAPS will be copied into the specified UAPS (set).

Range:

1 - 10

Default:

Empty

timer (optional)

Timer number within the UA parameter set.

Range:

1 - 10

1 —Unused

2—False IP Connection Congestion Timer

3—UA Heartbeat Period Timer

4—UA Heartbeat Received Timer

5-10—Unused

Default:

No change to the current value

tvalue (optional)

The value given to a timer in milliseconds. Each timer value is 32 bits (decimal 4294967295).

Range:

0 - 60000

Timer 2—*0-30000*

Timer 3—*100-60000*

Timer 4—*100-10000*

If the value specified is greater than the maximum range of the timer, then the maximum value of the timer is used.

Default:

No change to the current value

System Default:

Timer 2 -*3000*

Timer 3 -*10000*

Timer 4 -*5000*

Example

The following example copies UA parameter set 1 into UA parameter set 2.

```
chg-uaps:set=2:srcset=1
```

The following example sets the Timer 2 value to 30 milliseconds.

```
chg-uaps:set=1:timer=2:tvalue=30
```

The following example sets the UA parameter set 2 value to hexadecimal 7, which turns on bits 0, 1, and 2.

```
chg-uaps:set=1:parm=2:pvalue=h'7
```

The following example sets the Timer 2 value to 30 milliseconds, and sets the value for UA parameter set 1 to decimal 64, which turns OFF bits 0 and 1 and turns ON only bit 6.

```
chg-uaps:set=2:timer=2:tvalue=30:parm=1:pvalue=64
```

Dependencies

The srcset and set parameter values cannot be the same.

At least one of the timer, parm, and srcset optional parameters must be entered.

If the srcset parameter is specified, no other optional parameters can be entered in the command.

If the parm parameter is specified, the pvalue parameter must be specified.

If the timer parameter is specified, the tvalue parameter must be specified.

Notes

There are 10 UA parameter sets. Each UA parameter set has 10 timers and 10 optional bit-mapped parameters. The bit-mapped parameter values control SNM and extended UA notification message behavior.

Timer 2 is the False IP Connection Congestion Timer, which controls the maximum amount of time (in milliseconds) that an association is allowed to remain congested before failing due to false connection congestion. This timer value is limited to 0-30,000 milliseconds by the IPGWx application. The default value is 3000 milliseconds. This timer is not supported on the IPSG application.

Timer 3 is the UA Heartbeat Period Timer, which controls the time (in milliseconds) between sending of BEAT messages by the NE. This timer value is limited to 100-60,000 milliseconds by the IPSG and IPGWx applications. The default value is 10,000 milliseconds.

Timer 4 is the UA Heartbeat Received Timer, which controls the timeout period for response BEAT ACK messages by the NE. This timer value is limited to 100-10,000 milliseconds by the IPSG and IPGWx applications. The default value is 5000 milliseconds.

The bit-mapped parameters contain the following flags, which are set by using the *pvalue* parameter to turn the bits on or off in each bit map:

- *Broadcast* —Controls broadcast phase SNM TFPs, TFRs and TFAs sent when a destination's status changes. If this flag is on (set to 1), SNM TFPs, TFRs, and TFAs will be broadcast to all associations and sockets assigned to routing keys associated with the destination's network and group code. The default is to enable all broadcast phase messages.
- *Response Method* —Sending a SNM TFC/UPU as a reply to a message received on an association or a socket for an unavailable destination. If this bit is on (set to 1), the SNM response message is sent. The default is to allow the response to be sent.
- *Broadcast Congestion Status Change* —Controls sending unsolicited congestion status changes. If this flag is on (set to 1) for an ASP, unsolicited congestion status messages are sent by the ASP when a destination's congestion status changes. This flag is applicable only if, *ipgwabate* has been turned on with the `chg-sg-opts` command. The default is do not generate unsolicited congestion status changes.
- *ASP ACTIVE Notifications*—Controls sending ASP-Active notifications. If this flag is on (set to 1), the Secure Gateway will, when an ASP transitions to Active, send a Notify message to all inactive and active ASPs in the AS of status type "Other" and a newly defined status ID of "ASP Activation". The ASP Activation notification message will include the ASP ID of the ASP that activated, and is transmitted only if the ASP ID is present. This notification is an extension to RFC3332 and not implemented for M3UA Version 8 adapters. The default is do not send ASP Active Notifications.
- *ASP INACTIVE Notifications*—Controls sending ASP-Inactive notifications. If this flag is on (set to 1), the Secure Gateway will, when an ASP transitions to Inactive, send a Notify message to all inactive and active ASPs in the AS of status type "Other" and a newly defined status ID of "ASP Inactivation". The ASP Inactivation notification message will include the ASP ID of the ASP that inactivated and is transmitted only if the ASP ID is present. This notification is an extension to RFC3332 and not implemented for M3UA Version 8 adapters. The default is do not send ASP Inactive Notifications.
- *ASP AS State Query*—Controls sending ASP/AS State Notifications on request by ASP. If this flag is on (set to 1), the Secure Gateway will respond with ASP and AS state notifications if 1) the remote ASP sends ASP-UP or ASP-INACTIVE while the local ASP is in the ASP-INACTIVE state, or 2) the remote ASP sends ASP-ACTIVE while the local ASP is in the ASP-ACTIVE state. The default is do not send state notifications.
- *UA Heartbeats*—Controls sending UA Heartbeats on request by a connection. If this flag is on (set to 1), Heartbeat messages are transmitted in the ASP-DOWN, ASP-ACTIVE and ASP-INACTIVE States on connections from the Secure Gateway to the far end.
- *UA Graceful Shutdown*—Controls whether an association should be shutdown gracefully or not. If this flag is on (set to 1), then a graceful shutdown will occur when OPEN=NO is executed on the server side. Otherwise, the association will abort when OPEN=NO is executed.
- *SCTP Payload Protocol Indicator byte order option*—Indicates whether the SCTP Payload Protocol Indicator (PPI) in received/transmitted messages is in big endian or little endian byte format. If this flag is on (set to 1), then the PPI in received/transmitted messages is little endian. Otherwise, the PPI is in big endian byte format. This flag is implemented only on IPSG M2PA associations; all other association types ignore the flag.

Output

chg-uaps:set=2:srcset=1

```
    rlghncxa03w 02-03-07 11:11:28 EST EAGLE 30.0.0
    CHG-UAPS: MASP A - COMPLTD
;
```

Related Commands

rtrv-uaps

chg-user

Change User

Use this command to change user access to commands, change user ID's, and change passwords.

Parameters

Note: Allcc(X)parameters consist of a configurable command class name (*ayy*), and indicator (*-yes*or-*no*) to specify whether the command class is allowed. A value of*ayy-yes*indicates that the value is allowed. A value of*ayy-no*indicates that the value is not allowed.

uid (mandatory)

User ID

Range:

*a*zzzzzzzzzzzzzzz

1 alphabetic character followed by up to 15 alphanumeric characters

all (optional)

Specifies whether or not the user ID is assigned all non-configurable command classes (LINK, SA, SYS, PU, DB, DBG, LNP).

Range:

yes

no

Default:

No change to the current value

cc1 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy

Specify the parameter value in the format *ayy-no* or *ayy-yes* .

cc2 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy

Specify the parameter value in the format *ayy-no* or *ayy-yes* .

cc3 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy

Specify the parameter value in the format *ayy-no* or *ayy-yes* .

cc4 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy

Specify the parameter value in the format *ayy-no* or *ayy-yes* .

cc5 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy

Specify the parameter value in the format *ayy-no* or *ayy-yes* .

cc6 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy

Specify the parameter value in the format *ayy-no* or *ayy-yes* .

cc7 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy

Specify the parameter value in the format *ayy-no* or *ayy-yes* .

cc8 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy

Specify the parameter value in the format *ayy-no* or *ayy-yes* .

db (optional)

Access to all commands in command class Database Administration.

Range:

yes

no

Default:

No change to the current value

dbg (optional)

Access to all commands in command class Debug.

Range:

yes

no

Default:

No change to the current value

link (optional)

Access to all commands in command class Link Maintenance.

Range:

yes

no

Default:

No change to the current value

nuid (optional)

New user ID

Range:

azzzzzzzzzzzzzzz 1 alphabetic character followed by up to 15 alphanumeric characters

Default:

No change to the current value

page (optional)

The maximum age of the password, in days. The STP automatically prompts the user for a new password at login if the user's password is older than the value specified for the page parameter.

Range:

0 - 999

Default:

No change to the current value

pid (optional)

Password ID. Required only if changing the password of a user.

Range:

yes

no

Default:

No change to the current value

pu (optional)

Access to all commands in command class Program Update.

Range:

yes

no

Default:

No change to the current value

revoke (optional)

Revoke the user ID. The system rejects login attempts for a revoked user ID.

Range:

yes

no

Default:

No change to the current value

rstlsl (optional)

Reset the user ID. Use this command to reset the last successful login date, for this user ID, to the current date. If the user ID has been prevented login for non-use, use the rstlsl=yes parameter to allow the user ID access again.

Range:

yes

no

Default:

No change to the current value

sa (optional)

Access to all commands in command class Security Administration.

Range:

yes

no

Default:

No change to the current value

sys (optional)

Access to all commands in command class System Maintenance.

Range:

yes

no

Default:

No change to the current value

uout (optional)

User ID aging interval. The number of successive days a user ID can go unused (that is, no successful login) before the system denies login of that user ID.

Range:

0 - 999

Default:

The value specified for the uout parameter on the `chg-secu-dflt` command

Example

```
chg-user:uid=john:nuid=johnmayer
chg-user:uid=john:nuid=john*mayer
chg-user:uid=john:db=yes
chg-user:uid=user123:cc1=dab-no:cc2=krb-yes
```

Dependencies

Passwords cannot be created or modified from a telnet terminal (terminal IDs 17-40) unless the OA&M IP Security Enhancements feature is turned on.

Changes to a user ID cannot be made while that user is logged on the system.

The revoke=yes parameter cannot be specified for a user ID with system administration authorization.

The Command Class Management feature must be enabled before a configurable command class name can be specified in the cc1 - cc8 parameters.

The values specified in the cc1 - cc8 parameters must be valid default (u01 - u32) or provisioned configurable command class names.

Notes

When the pid=yes parameter is specified, the system issues a separate prompt for this password and disables character echo at the terminal so that the entered password is not displayed on the screen. After the password has been entered, the system issues a second prompt, and the password must be entered again. This feature ensures that no typing mistakes were made on the first entry. The password must adhere to all password provisioning rules as established by the `chg-secu-dflt` command. These rules are displayed on the screen when the password prompt is presented.

The current password is not required when assigning a new password.

Use the following rules for changing passwords:

- A new password cannot contain more than 12 characters.
- A new password must contain at least the number of characters that is specified in the minlen parameter of the `chg-secu-dflt` command.
- A new password must contain at least the number of alphabetic, numeric, and punctuation characters specified in the `chg-secu-dflt` command.

A new password cannot contain the associated user ID.

As a default, the command class Basic is assigned to all users. If no other command class is assigned, the user still has access to commands in the Basic class.

Up to 8 configurable command class name parameters can be specified in one command. Additional commands can be entered to assign user access for more than 8 names. To assign user access for all 32 available configurable command class names, you could enter four commands with 8 names specified in each command.

Output

`chg-user:uid=john:nuid=johnmayer`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    CHG-USER: MASP A - COMPLTD
;
```

Related Commands

act-user, *chg-pid*, *dact-user*, *dlt-user*, *ent-user*, *login*, *logout*, *rept-stat-user*, *rtrv-secu-user*, *rtrv-user*

Use this command to revise the call decision criteria. This command updates the Call Decision table. The V-Flex feature must be enabled before this command can be entered.

Parameters

cdn (mandatory)

Call decision name. The name of an entry in the Call Decision table.

Range:

ayyy

1 alphabetic character followed by 3 alphanumeric characters

ncdn (optional)

New call decision name. A new name for an entry in the Call Decision table.

Range:

ayyy

1 alphabetic character followed by 3 alphanumeric characters

Default:

No change to the current value

nrnidx (optional)

New routing number index. A new routing number index assocated with a call decision entry.

Range:

0 - 9

Default:

No change to the current value

nvmdig (optional)

New voice mail number or voice mail prefix digits. A new voice mail number or voice mail digits associated with a call decision entry.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9, A-F, a-f*

Default:

No change to the current value

Example

The following command specifies a new routing number index.

```
chg-vflx-cd:cdn=cdn1:nrnidx=7
```

The following command specifies a new call decision entry name and new routing number index.

```
chg-vflx-cd:cdn=cdn1:ncdn=cdn3:nrnidx=3
```

The following command specifies a new call decision entry name.

```
chg-vflx-cd:cdn=cdn3:ncdn=cdn5
```

The following command specifies a new voice mail number or voice mail prefix digits.

```
chg-vflx-cd:cdn=cdn1:nvmdig=123456
```

Dependencies

The value specified for the cdn parameter cannot be a reserved word, such as none.

At least one parameter value must be different from the values provisioned for the table entry.

The value specified for the cdn parameter must already exist in the Call Decision table.

The ncdn, nrnidx, or nvmdig parameter must be specified.

The V-Flex feature must be enabled before this command can be entered.

The value specified for the ncdn parameter cannot already exist in the Call Decision table.

The value specified for the nvmdig parameter cannot already exist in the Call Decision table with the same dnstat, rdi, and bcap values.

The value specified for the nvmdig parameter cannot differ from a value that already exists in the Call Decision table by only the value of the dnstat parameter. The values specified for the rdi and bcap parameters must also differ.

Output

```
chg-vflx-cd:cdn=cdn1:ncdn=cdn3:nrnidx=3
```

```
    rlghncxa03w 08-05-07 11:11:28 EST  EAGLE 39.0.0
    CHG-VFLX-CD: MASP A - COMPLTD
;
```

Related Commands

dlt-vflx-cd, *ent-vflx-cd*, *rtrv-vflx-cd*

chg-vflx-opts Change V-Flex Options

Use this command to provision the data that is used to condition the DN in an incoming MSU. This command updates the VFLXOPTS table. The V-Flex feature must be enabled before this command can be entered.

Parameters

Note: The nature of address indicator parameters (dranaiv or drnai) can be specified using a mnemonic or an explicit value. Either the mnemonic or the explicit value can be specified:

however, both values cannot be specified at the same time for the same parameter. *Table 58: DRANAIV/DRANAI Mapping* shows the mapping between the dranaiv and drnai parameter values.

Note: The numbering plan parameters (dranpv or dranp) can be specified using a mnemonic or an explicit value. Either the mnemonic or the explicit value can be specified: however, both values cannot be specified at the same time for the same parameter. *Table 59: DRANPV/DRANP Mapping* shows the mapping between the dranaiv and the drnai parameter values.

dra (optional)

Destination routing address. This parameter specifies the destination routing address in the "CONNECT" response.

Range:

rn

Routing number

rndn

RN + DN

ccrndn

CC + RN + DN

Default:

No change to current value.

System Default:

rn

dranai (optional)

Nature of address indicator. The nature of address indicator for the destination routing address.

Range:

sub

unknown

natl

intl

ntwk

Default:

Current value

dranaiv (optional)

The nature of address indicator value for the destination routing address.

Range:

0 - 127

dranp (optional)

The numbering plan for the destination routing address.

Range:

e164

x121

f69

Default:

No change to the current value

dranpv (optional)

This parameter specifies the numbering plan value for the destination routing address.

Range:

0 - 7

Default:

No change to the current value

nequeryonly (optional)

This parameter specifies whether the Call Decision table is searched after RTDB lookup.

Range:

off

The table is not searched.

on

The table is searched.

Default:

No change to the current value.

netype (optional)

This parameter specifies the network entity type that is used for RTDB lookup.

Range:

vmsid

voice mail server ID

sprn

signaling point routing number

grn

generic routing number

Default:

No change to the current value.

System Default:

vmsid

Example

This example specifies a new numbering plan and nature of address indicator:

```
chg-vflx-opts:dranai=sub:dranp=e164
```

This example searches the Call Decision and VMSID tables and uses the *vmsid* network entity before RTDB lookup:

```
chg-vflx-opts:nequeryonly=on:netype=vmsid
```

This example specifies a new destination routing address:

```
chg-vflx-opts:dra=rn
```

Dependencies

At least one optional parameter must be specified.

The dranp and dranpv parameters cannot be specified together in the command.

The dranai and dranaiv parameters cannot be specified together in the command.

The V-Flex feature must be enabled before this command can be entered.

The nequeryonly=on parameter must be specified before the netype parameter can be specified.

Output

```
chg-vflx-opts:dra=rn:dranp=e164:dranai=intl
```

```
    tekelecstp 08-05-11 11:34:04 EST  EAGLE 39.0.0
    CHG-VFLX-OPTS: MASP A - COMPLTD
;
```

Related Commands

rtrv-vflx-opts

chg-vflx-rn — Change Voice Mail Routing number

Use this command to revise the voice mail routing numbers. This command updates the Routing Number table. The V-Flex feature must be enabled before this command can be entered.

Parameters

rnname (mandatory)

Routing number name. The name associated with a voice mail routing number.

Range:

ayyyyyyy

1 alphabetic character followed by 7 alphanumeric characters

nrn (optional)

New routing number. A new voice mail routing number.

Range:

1-15 digits. Valid digits are *0-9, A-F, a-f*

Default:

No change to the current value

nrnname (optional)

New routing number name. The new name associated with a voice mail routing number.

Range:

ayyyyyyy

1 alphabetic character followed by 7 alphanumeric characters.

Default:

No change to the current value

Example

This example changes the name of the routing number.

```
chg-vflx-rn:rnname=rn01:nrnname=rn04
```

This example changes the routing number digits for a specified routing number name.

```
chg-vflx-rn:rnname=rn01:nrn=122345BC8
```

This example changes the routing number digits and the routing number name.

```
chg-vflx-rn:rnname=rn01:nrn=1223EAB68:nrnname=rn03
```

Dependencies

The value specified for the rnname parameter must already exist in the Routing Number table.

The value specified for the nrn parameter cannot already exist in the Routing Number table.

The V-Flex feature must be enabled before this command can be entered.

The value specified for the nrnname parameter cannot already exist in the Routing Number table.

The nrn or nrnname parameter must be specified in the command.

The value specified for the nrnname parameter cannot be a reserved word, such as none.

At least one parameter value must be different from the values provisioned for the table entry.

Output

```
chg-vflx-rn:rnname=rn01:nrn=122345CE8:nrnname=rn02
```

```
    rlghncxa03w 08-05-07 11:43:04 EST  EAGLE 39.0.0
    CHG-VFLX-RN: MASP A - COMPLTD
;
```

Related Commands

dlt-vflx-rn, *ent-vflx-rn*, *rtrv-vflx-rn*

chg-vflx-vmsid

Change Voice Mail Service ID Entry

Use this command to revise the routing numbers that are associated with a VMS ID. This command updates the VMSID table. The V-Flex feature must be enabled before this command can be entered.

Parameters

id (mandatory)

The identification of the voice mail server.

Range:

1 - 15 digits, *dflt*

Valid digits are *0-9, A-F, a-f*.

dflt —default set of routing numbers that is used when a query is received with an invalid MSISDN or an MSISDN that is not found in the RTDB.

nidx0 (optional)

A new routing number name for VMRN index 0.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with an index

Default:

No change to the current value

nidx1 (optional)

A new routing number name for VMRN index 1.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with an index

Default:

No change to the current value

nidx2 (optional)

A new routing number name for VMRN index 2.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with an index

Default:

No change to the current value

nidx3 (optional)

A new routing number name for VMRN index 3.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with the index

Default:

No change to the current value

nidx4 (optional)

A new routing number name for VMRN index 4.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with the index

Default:

No change to the current value

nidx5 (optional)

A new routing number name for VMRN index 5.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with the index

Default:

No change to the current value

nidx6 (optional)

A new routing number name for VMRN index 6.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with the index

Default:

No change to the current value

nidx7 (optional)

A new routing number name for VMRN index 7.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with an index

Default:

No change to the current value

nidx8 (optional)

A new routing number name for VMRN index 8.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with an index

Default:

No change to the current value

nidx9 (optional)

A new routing number name for VMRN index 9.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

none—deletes the routing number name associated with an index

Default:

No change to the current value

Example

The following example updates the specified VMS ID with a new routing number name for index 5. It also removes the routing number name associated with index 1.

```
chg-vflx-vmsid:id=1234ae5:nidx1=none:nidx5=rname1
```

Dependencies

The V-Flex feature must be enabled before this command can be entered.

The value specified for the id parameter must already exist in the VMSID table.

The routing number name of the entry specified by the id parameter must already exist in the Routing Number table.

At least one of the optional parameters must be specified.

At least one parameter value must be different from the values provisioned for the table entry.

The value specified for the rnname parameter must already exist in the Routing Number table.

Output

```
chg-vflx-vmsid:id=1234ae5:nidx1=none:nidx5=rname1

    rlghncxa03w 08-05-07 11:43:04 EST  EAGLE 39.0.0
    CHG-VFLX-VMSID: MASP A - COMPLTD
;
```

Related Commands

dlt-vflx-vmsid, *ent-vflx-vmsid*, *rtrv-vflx-vmsid*

chk-unref-ent — Check Unreferenced Entities

Use this command to check for unreferenced entities in the STP gateway screening entity sets. Unreferenced entities are those entities not referenced by another entity using the next screening function identifier and next screening reference combination, or using the linkset screening reference.

Parameters

aftpc (optional)

This parameter specifies whether to audit the affected PC/SSN entity set.

Range:

yes

no

Default:

no

all (optional)

This parameter specifies whether to audit all of the entity sets.

Range:

yes

no

Default:

no

blkdpc (optional)

This parameter specifies whether to audit the blocked DPC entity set.

Range:

yes

no

Default:

no

blkopc (optional)

This parameter specifies whether to audit the blocked OPC entity set.

Range:

yes

no

Default:

no

cdpa (optional)

This parameter specifies whether to audit the allowed CDPA entity set.

Range:

yes

no

Default:

no

cgpa (optional)

This parameter specifies whether to audit the allowed CGPA entity set.

Range:

yes

no

Default:

no

destfld (optional)

This parameter specifies whether to audit the affected DESTFLD entity set.

Range:

yes

no

Default:

no

dpc (optional)

This parameter specifies whether to audit the allowed DPC entity set.

Range:

yes

no

Default:

no

isup (optional)

This parameter specifies whether to audit the ISUP message type entity set.

Range:

yes

no

Default:

no

opc (optional)

This parameter specifies whether to audit the allowed OPC entity set.

Range:

yes

no

Default:

no

sio (optional)

This parameter specifies whether to audit the allowed SIO entity set.

Range:

yes

no

Default:

no

tt (optional)

This parameter specifies whether to audit the allowed TT entity set.

Range:

yes

no

Default:

no

Example

```
chk-unref-ent:opc=yes:dpc=yes:sio=yes
```

```
chk-unref-ent:all=yes
```

```
chk-unref-ent:all=yes:blkopc=no:blkdpc=no
```

Dependencies

At least one entity set name must be specified.

Notes

None

Output

```
chk-unref-ent:opc=yes:dpc=yes:sio=yes
```

```
    rlghncxa03w 04-01-18 08:29:15 EST  EAGLE 31.3.0
    ENTITY        UNREFERENCED
    TYPE          ENTITIES
    -----------   ------------
    OPC           <NONE>
    DPC           DPC1
    DPC           DPC2
    SIO           <NONE>
;
```

```
chk-unref-ent:all=yes
```

```
    rlghncxa03w 04-01-18 08:29:15 EST  EAGLE 31.3.0
    ENTITY        UNREFERENCED
    TYPE          ENTITIES
    -----------   ------------
    OPC           <NONE>
    DPC           dpc1
                  dpc2
    BLKOPC        <NONE>
    BLKDPC        <NONE>
```

```
    SIO             <NONE>
    CGPA            <NONE>
    CDPA            <NONE>
    TT              tt0-1
                    tt-05
    DESTFLD         <NONE>
    AFTPC           <NONE>
    ISUP            <NONE>
;
```

```
chk-unref-ent:all=yes:blkopc=no:blkdpc=no
```

```
    rlghncxa03w 04-01-18 08:29:15 EST  EAGLE 31.3.0
    ENTITY          UNREFERENCED
    TYPE            ENTITIES
    -----------     ------------
    OPC             <NONE>
    DPC             dpc1
                    dpc2
    SIO             <NONE>
    CGPA            <NONE>
    CDPA            <NONE>
    TT              tt01
                    tt05
    AFTPC           <NONE>
;
```

Legend

- **ENTITY TYPE**—This field displays which entity type is being checked.
- **UNREFERENCED ENTITIES**—This field displays whether the entity type listed is referenced by another entity.

Related Commands

aud-data, *chg-scr-aftpc*, *chg-scr-blkdpc*, *chg-scr-blkopc*, *chg-scr-cdpa*, *chg-scr-cgpa*, *chg-scr-destfld*, *chg-scr-dpc*, *chg-scr-opc*, *chg-scr-sio*, *chg-scr-tt*, *chg-scrset*, *dlt-scr-aftpc*, *dlt-scr-blkdpc*, *dlt-scr-blkopc*, *dlt-scr-cdpa*, *dlt-scr-cgpa*, *dlt-scr-destfld*, *dlt-scr-dpc*, *dlt-scr-opc*, *dlt-scr-sio*, *dlt-scr-tt*, *dlt-scrset*, *ent-scr-aftpc*, *ent-scr-blkdpc*, *ent-scr-blkopc*, *ent-scr-cdpa*, *ent-scr-cgpa*, *ent-scr-destfld*, *ent-scr-dpc*, *ent-scr-opc*, *ent-scr-sio*, *ent-scr-tt*, *ent-scrset*

clr-imt-stats

Clear IMT Statistics

Every card in the system has a card location identifier (stenciled on the shelf and provided in all output) and an IMT address. Use this command to clear the following statistics:

- IMT level 1 and level 2 statistics for specified IMT addresses and hourly time period statistics for IMT errors
- Card error and hourly time period statistics for the MUX cards
- All IMT and MUX error and hourly time period statistics. When hourly time period statistics for the errors are cleared, the current hourly time period number is reset to 0 (zero) on all cards.

Parameters

all (optional)

Clear all IMT and MUX statistics.

Range:

yes

no

Default:

no

e (optional)

End address. The IMT address of the last card in the range.

Range:

0 - 251

(See the *Installation Guide* for an illustration with IMT addresses).

eloc (optional)

End location. The card location of the last card in the range.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

Default:

If sloc is specified—current sloc value

If sloc is not specified—*1115* which corresponds to IMT address 251 (e=251)

eshelf (optional)

End shelf location for MUX statistics. The shelf location of the last shelf in the range. (MUX statistics will be cleared if they exist in the range between and including the sshelf and eshelf locations).

Range:

1100, 1200 - 6100

Default:

If sshelf is specified—current sshelf value

If sshelf is not specified— *6100*

s (optional)

Start address. The IMT address of the first (or only) card in the range.

Range:

0 - 251

See the *Installation Guide* of your current documentation set for an illustration with IMT addresses.

sloc (optional)

Start location. Specifies the card location of the first card in the range.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

Default:

If eloc is specified—current eloc value

If eloc is not specified— *1201* which corresponds to IMT address 0 (s=0).

sshelf (optional)

Start shelf location for MUX statistics. This parameter specifies the shelf location of the first shelf in the range. (MUX statistics will be cleared if they exist in the range between and including the *sshelf* and *eshelf* locations).

Range:

1100, 1200 - 6100

Default:

If eshelf is specified—current eshelf value

If eshelf is not specified— *1100*

Example

```
clr-imt-stats:s=00
```

Dependencies

The command cannot be entered if the `rept-imt-info, rept-imt-lvl1, rept-imt-lvl2`, or `tst-imt` command is running.

The s and e parameters and the sloc and eloc parameters cannot be specified in the same command.

This command cannot be entered during IMT statistics collection following an hourly boundary.

The s, sloc, or shelf parameter must be specified.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

Notes

The sloc and eloc parameters allow individual MUX cards to be cleared.

The s and e parameters will not clear MUX cards.

The sshelf and eshelf parameters clear MUX cards on bus A and bus B.

Output

```
clr-imt-stats:all=yes
```

```
    rlghncxa03w 04-01-07 11:02:30 EST  EAGLE 35.0.0
    Clear IMT Statistics command(s) issued...
    Command Completed.
;
```

Related Commands

conn-imt, *disc-imt*, *rept-imt-info*, *rept-imt-lvl1*, *rept-imt-lvl2*, *rmv-imt*, *rst-imt*, *tst-imt*

conn-imt

Connect IMT

Use this command to connect a manually disconnected card to the specified IMT bus. The card must have been manually disconnected from the bus previously by the `disc-imt` command. If the card was disconnected from the bus for other reasons, this command has no effect.

Parameters

bus (mandatory)

IMT bus to which the specified card is to be connected.

Range:

a

b

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
conn-imt:loc=1201:bus=a
```

Dependencies

The card being reconnected must first be disconnected manually from the bus by using the `disc-imt` command.

This command cannot be entered during an IMT Fault Isolation Test or an Extended Bit Error Rate Test (BERT).

The card location, frame, shelf, or slot must be within the allowed range.

Valid IMT bus entries are "A" or "B".

Notes

This command has no effect if the card was disconnected from the IMT bus in any way other than manually using the `disc-imt` command.

Output

`conn-imt:loc=1201:bus=a`

```
    rlghncxa03w 04-01-07 11:02:30 EST  EAGLE 31.3.0
    Connect IMT Bus A command issued to card 1201

    rlghncxa03w 04-01-07 11:02:30 EST EAGLE 31.3.0
    0100.0006 IMT Bus A Card connected to IMT

    rlghncxa03w 04-01-07 11:02:30 EST EAGLE 31.3.0
    3112.0006    CARD 1201 CCS7ITU     Card connected to IMT
;
```

Related Commands

clr-imt-stats, *disc-imt*, *rept-imt-lvl1*, *rept-imt-lvl2*, *rept-stat-imt*, *rmv-imt*, *rst-imt*

copy-disk

Copy Disk

Use this command to copy a mirror image of the active fixed disk to the standby fixed disk. When the fixed disk requires replacement, or needs to be repaired or updated, this command formats the standby fixed disk and copies the contents of the active fixed disk to the standby fixed disk.

Caution: Before entering this command, contact the Customer Care Center.

Caution: If this command fails and the standby E5-TDM boots continuously, insert a removable disk with the same release as the fixed disks in the latched USB port of the standby E5-MCAP. The standby E5-MASP should successfully boot off the removable disk. After the E5-MASP has booted completely, re-enter the command.

Parameters

dloc (mandatory)

The location of the standby fixed disk. This is the destination drive for this function.

Range:

1114, 116

(TDM)

force (optional)

This parameter provides some protection against data loss from copying over a fixed disk. If the target medium is recognized as a valid system medium, the force=yes parameter must be specified.

Range:

yes

no

Default:

no

format (optional)

This parameter specifies whether to format the standby fixed disk before executing the copy. If a format is not necessary, specifying *no* can save a significant amount of time.

Range:

yes

no

Default:

yes

sloc (optional)

The location of the active fixed disk. This will be the source drive for this function.

Range:

1114, 1116

(TDM)

Default:

The location of the active fixed disk

Example

```
copy-disk:sloc=1114:dloc=1116:force=yes
```

Dependencies

Caution: Do not turn off measurements at midnight because doing so can cause the loss of an entire day of measurements. Do not turn off measurements during the 30 minute measurements processing period, because this can result in the loss of the measurements for the 30 minute period being processed.

Measurements collection must be turned off before this command can be executed. Do not issue the `chg-meas` command while the `copy-disk` command is in progress. This results in read and write errors, because the standby fixed disk is not accessible and the active fixed disk only allows read-only access.

OAM Measurements collection cannot be in progress when this command is entered. Retry the command after a period of waiting for the measurements collection to complete.

The `copy-disk` command reserves both the active and standby disks, preventing database updates for the duration of the command. Access is allowed for read-only; writing to the disk is prohibited.

All commands that affect the database are not allowed for the duration of the command. Attempts to use such commands are rejected, and an error message is displayed indicating that the command has been rejected because the `copy-disk` command is in use.

The OAMHC GPL version that is running in the active OAM card location must be the same GPL version that is running in the standby OAM card location.

The sloc and dloc fixed disks must be available and compatible.

The sloc fixed disk must be coherent.

The dloc parameter must specify the standby fixed disk.

The sloc parameter must specify the active fixed disk.

The standby fixed disk cannot be initialized while un-uploaded security log entries exist.

The force=yes parameter is required if the destination medium is recognized as a system medium. This parameter is optional if the destination medium is not a system medium. Only media that contain the **dms.cfg** file are recognized as system media.

If the force=yes parameter is specified, the disk should not require low-level formatting, and the format=no parameter should also be specified.

If the OAM is in mixed mode, and the 10,000 Routesets or Integrated GLS feature is enabled or the Integrated Measurements feature is turned on, then this command cannot be entered.

Notes

If this command is initiated and the standby OAM initialization is not complete, command processing will be delayed. If standby initialization fails, the command proceeds to allow the standby TDM to recover from a previous `format-disk` or `copy-disk` failure. In such cases, the following messages appear:

```
Standby MASP has not finished initializing - please wait...
```

```
Standby MASP initialization timed out - continuing...
```

Specify the format=no parameter when upgrading a spare TDM. Specify the format=yes parameter when there is a suspected hardware problem.

When the active command is processing, the system cannot log other commands to the security log because the active fixed disk is set to read-only. During this time, commands that would alter the database fail when entered.

The performance time required to copy a fixed disk to another fixed disk varies depending on database size and system activity. This operation should typically take no longer than 2.5 hours. (If the low-level format (format=no) is not being performed, the operation should take no longer than an hour.) If the `copy-disk` operation exceeds three hours, or if the operation without the low-level format exceeds 1.5 hours, contact My Oracle Support. See the "My Oracle Support" section in Chapter 1 of this manual.

Output

`copy-disk:sloc=1114:dloc=1116:force=yes`

```
rlghncxa03w 04-01-07 11:02:30 EST  EAGLE 31.3.0
copy-disk:sloc=1114:dloc=1116:force=yes
Command entered at terminal #3.
Copy-disk (fixed): from active (1114) to standby (1116) started.
Extended processing required, please wait.
Copy-disk (fixed): from active (1114) to standby (1116) completed.
Measurements collection may be turned on now if desired.
```

Related Commands

chg-db, *copy-gpl*, *copy-meas*, *disp-disk-dir* , *format-disk*, *rept-stat-db*

copy-ext-stats — Copy Extended Statistics

Use this command to copy the HIPR2 Extended Statistics information from the HIPR2 cards to the EXTSTATS.SYS file.

Parameters

bus (optional)

The IMT bus containing the HIPR2 cards with the extended statistics to be copied.

Range:

a

HIPR2 cards on the A bus

b

HIPR2 cards on the B bus

both

HIPR2 cards on both buses

Default:

both

eloc (optional)

The ending card location for a range of HIPR2 cards that contain extended statistics to be copied.

Note: Statistics are copied from only valid In-Service Normal HIPR2 cards within the range.

Range:

1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110

Default:

6110

loc (optional)

The location of a single HIPR2 card that contains extended statistics to be copied.

Range:

1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110

Default:

all HIPR2 cards within the range specified by the sloc and eloc parameters

mode (optional)

A bitmask where the numeric value entered is converted to its binary value. Each bit represents a unique set of data to retrieve.

Note: This parameter is currently unused.

Range: ***0 - 65535***

Default:

0

sloc (optional)

The starting card location of a range of HIPR2 cards that contain extended statistics to be copied.

Note: Statistics are copied from only valid In-Service Normal HIPR2 cards within the range.

Range:

1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110

Default:

1109

Example

```
copy-ext-stats
copy-ext-stats:loc=1110
copy-ext-stats:mode=1:loc=1109
copy-ext-stats:sloc=1101:eloc=6118:b=a
copy-ext-stats:sloc=1209:eloc=1210
```

Dependencies

Numeric values must be specified for the loc, sloc, and eloc parameters. These values must indicate valid card locations. See the associated parameter definitions for lists of valid values.

The value specified for the mode parameter must be from 0 - 65535.

A value of *a*, *b*, or *both* must be specified for the bus parameter.

No other `init/copy-ext-stats` command can be in progress when this command is entered.

The loc parameter cannot be specified in the same command with the sloc and eloc or bus parameters.

The value specified for the loc parameter must be a valid MUX card location.

The range specified by the sloc and eloc parameters must include an MUX card location.

Output

`copy-exts-stats`

```
    e5oam 10-02-10 23:07:15 EST  EAGLE 42.0.0
    copy-ext-stats
    Command entered at terminal #6.

;
    e5oam 10-02-10 23:07:15 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieval starting for MUX card 1209

;

    e5oam 10-02-10 23:07:15 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieval completed for MUX card 1209

;

    e5oam 10-02-10 23:07:15 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieval starting for MUX card 1210

;

    e5oam 10-02-10 23:07:35 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieval completed for MUX card 1210

;
```

```
    e5oam 10-02-10 23:07:35 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieval starting for MUX card 1109

;
    e5oam 10-02-10 23:07:36 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieval completed for MUX card 1109

;
    e5oam 10-02-10 23:07:36 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieval starting for MUX card 1110

;
    e5oam 10-02-10 23:07:36 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieval completed for MUX card 1110

;
    e5oam 10-02-10 23:07:36 EST  EAGLE 42.0.0
    COPY-EXT-STATS: Data retrieved from the following MUX cards:
        CARD Location: 1209 : PASSED
        CARD Location: 1210 : PASSED
        CARD Location: 1109 : PASSED
        CARD Location: 1110 : PASSED

;
    e5oam 10-02-10 23:07:36 EST  EAGLE 42.0.0
    Command Completed.

;
```

Related Commands

init-ext-stats

copy-fta

Copy to or from the File Transfer Area

Use this command to copy tables into or from the file transfer area (FTA).

Parameters

dloc (mandatory)

The card location of the destination or table.

Range:

1114

The TDM

1116

The TDM

1113

The latched USB port

1115

The latched USB port

sloc (mandatory)

The card location of the source location or table.

Range:

1114

The TDM

1116

The TDM

1113

The latched USB port

1115

The latched USB port

dfile (optional)

The name of the file that was copied into the FTA.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

The name of the file with its extension

dtbl (optional)

The identifying number of the destination table.

Range:

0 - 1023

sfile (optional)

The name of the file in the FTA to be copied.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

The name of the file with its extension

stbl (optional)

The identifying number of the source table.

Range:

0 - 1023

Example

```
copy-fta:sloc=1114:dloc=1114:stbl=2:dfile=”F1_name.OUT”
copy-fta:sfile=dms.cfg:dtbl=0:sloc=1114:dloc=1116
```

Dependencies

A destination table must be specified when a source file is specified.

A destination file must be specified when a source table is specified.

A source and a destination must be specified.

Only one source parameter and one destination parameter can be specified.

This command cannot be entered to modify the security log.

File name formats are limited to 8 + 3 DOS-compatible characters.

When using DOS file names, if the file name contains a special character such as an underscore (_) or begins with a numeric, the file name must be in quotes (" "), for example,*"92_name.ext"*.

Only one file transfer can be active at a time.

The 1113 and 1115 locations are used by E5-MCAP cards. The 1114 and 1116 locations are used by E5-TDM cards.

Legacy TDM, GPSM-II, and MDAL cards cannot be installed in the same system as E5-TDM, E5-MCAP, and E5-MDAL cards.

The source file and destination file combination is not allowed.

The source table and destination table combination is not allowed.

The removable drive must have a File Transfer Area to be used as the source or destination.

Notes

This command is used to copy into the file transfer area or out of the file transfer area. The stbl, dfile, sfile, and dtbl parameters are used to describe the nature of the copy. A copy from a DMS table into the file transfer area would use the stbl (source table) and dfile (destination file) parameters. Thus, data would move from a table into a transfer area file. To copy from the file transfer area to a DMS table, use the sfile (source file) and dtbl (destination table) parameters. Any other combination of these 4 parameters is invalid.

Output

```
copy-fta:stbl=1:dfile="2F1.OUT":sloc=1114:dloc=1114
```

```
    rlghncxa03w 15-01-05 14:59:10 EST  EAGLE 46.2.0
    copy-fta:stbl=1:dfile="2F1.OUT":sloc=1114:dloc=1114
    Command entered at terminal #1.
;
    rlghncxa03w 15-01-05 14:59:26 EST  EAGLE 46.2.0
    Copied Table 1 successfully from FIXED to 2F1.OUT in FTA.
;
    rlghncxa03w 15-01-05 15:00:49 EST  EAGLE 46.2.0
    copy-fta:sfile=dms.cfg:dtbl=0:sloc=1114:dloc=1113
    Command entered at terminal #1.
;
    rlghncxa03w 15-01-05 15:01:12 EST  EAGLE 46.2.0
```

```
    Copied DMS.CFG successfully from FTA to Table 0 on REMOVABLE.
;
```

Related Commands

act-file-trns, *disp-fta-dir*, *dlt-fta*

copy-gpl

Copy Generic Program Load

Use this command to copy all approved GPLs from one drive to another. The GPLs can be copied only from the fixed disk on the active TDM to the removable drive, or from the removable drive to the fixed disk on the standby TDM.

Parameters

ddrv (optional)

Destination drive. The identification of the disk to which the GPL is copied.

Range:

fixed

The fixed disk

remove

The removable drive

usb

Argument to be used by Oracle personnel only.

dloc (optional)

The destination location of the GPLs to be copied.

Range:

1114

The TDM

1116

The TDM

1113

The latched USB port

1115

The latched USB port

Default:

none

sdrv (optional)

Source drive. The identification of the disk from which the GPL is copied.

Range:

fixed

The fixed disk

remove

The removable cartridge or drive

usb

Argument to be used by Oracle personnel only.

sloc (optional)

The source location of the GPLs to be copied.

Range:

1114

The TDM

1116

The TDM

1113

The latched USB port

1115

The latched USB port

Default:

The location of the active TDM

Example

```
copy-gpl
copy-gpl:sloc=1115:dloc=1116
copy-gpl:sloc=1116
```

Dependencies

While this command is executing, the `act/chg-gpl` commands cannot be entered.

The GPLs can be copied only from the fixed disk on the active TDM (sloc=1114 or sloc=1116) to the removable drive (dloc=1113 or dloc=1115), or from the removable drive (sloc=1113 or sloc=1115) to the fixed disk on the standby TDM (dloc=1114 or dloc=1116).

The source drive must be coherent when the command is executed.

The 1113 and 1115 locations are used by E5-MCAP cards. The 1114 and 1116 locations are used by E5-TDM cards.

An E5-MCAP card must be installed before a value of *usb* can be specified for the ddrv or sdrv parameter.

The plug-in flash drive must be accessible in the Active OAM's flush-mounted USB port.

The specified disk type must match the specified location.

Notes

This command has no effect on the GPLs stored on other cards (for example, SCCP).

Output

Copying the GPLs from the fixed disk on the active TDM (card location 1114) to the removable drive (card location 1113).

```
copy-gpl:sloc=1114:dloc=1113
```

```
    rlghncxa03w 09-01-07 00:57:31 EST  EAGLE 40.1.0
    COPY GPL:  MASP A - COPY STARTS ON ACTIVE MASP
    COPY GPL:  MASP A - COPY TO REMOVABLE CARTRIDGE COMPLETE
;
```

Copying the GPLs from the removable drive (card location 1115) to the fixed disk on the standby TDM (card location 1116).

```
copy-gpl:sloc=1115:dloc=1116
```

```
    rlghncxa03w 09-01-07 00:57:31 EST  EAGLE 40.1.0
    COPY GPL:  MASP B - COPY STARTS ON REMOVABLE DRIVE
;

    rlghncxa03w 09-01-07 01:01:27 EST  EAGLE 40.1.0
    COPY GPL:  MASP B - COPY TO STANDBY MASP COMPLETE
;
```

Copying the GPLs from the fixed disk on the active USB drive.

```
copy-gpl:sloc=1114:ddrv=usb
```

```
    e5oam 09-01-09 05:14:23 MST  EAGLE 40.1.0
    COPY GPL: MASP A - COPY STARTS ON ACTIVE MASP
;

    e5oam 09-01-09 05:22:30 MST  EAGLE 40.1.0
    COPY GPL: MASP A - COPY TO USB DRIVE COMPLETE
```

Related Commands

act-gpl, *alw-card*, *chg-gpl*, *init-card*, *init-sys*, *rept-stat-gpl*, *rtrv-gpl*

copy-meas

Copy Measurements

Use this command to copy all measurements tables on the active fixed disk to a measurements removable drive. Do this when you need to perform off-line analysis of the raw measurements data.

Note: This command is not supported on the Measurements Platform feature.

Parameters

None

Example

```
copy-meas
```

Dependencies

The removable drive:

- must be inserted
- must be initialized
- must be a MEAS disk
- cannot be a SYSTEM disk

Notes

To execute this command, measurement collection must be turned off. If measurement collection is on, enter the `chg-meas:collect=off` command to turn off measurement collection.

The *Maintenance Guide* provides a description of all measurement report parameters.

To copy the raw measurements data from the active fixed disk to the measurements removable drive requires approximately 2 minutes. This period is the minimum time and is dependent on system activity.

The removable drive must be accessible.

Output

`copy-meas`

```
    COPY MEASUREMENTS: MASP A - COPY STARTS ON ACTIVE MASP
    COPY MEASUREMENTS: MASP A - COPY TO REMOVABLE CARTRIDGE COMPLETE
;
```

Related Commands

chg-meas, *rept-meas*, *rtrv-meas-sched*

copy-seculog

Copy Security Log Contents to FTA Area

Use this command to copy the contents of a security log to the file transfer area (FTA). If no parameters are specified, a file called *yymmdda.log* (see the description of the dfile parameter) is created in the FTA

on the active fixed disk. The contents of the security log on the active fixed disk are copied into this file.

Parameters

dfile (optional)

Target file name. The name of the file that is to be created in the FTA and initialized with the security log contents.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

1–32 characters

Default:

the file is named *yymmddx.log*, where *yymmdd* is the current year, month, and day, and *x* is *a* or *s*, depending on whether the log on the active or standby fixed disk was copied

dloc (optional)

Destination FTA. The FTA that will receive the copy of the log.

Range:

act

Copies the log to the active fixed disk's FTA

stb

Copies the log to the standby fixed disk's FTA

Default:

act

slog (optional)

Source log indicator. The log that is to be copied to the FTA.

Range:

act

Copies the log on the active fixed disk

stb

Copies the log on the standby fixed disk

Default:

act

Example

```
copy-seculog
copy-seculog:dfile="somename.log"
```

```
copy-seculog:slog=stb
copy-seculog:slog=act
copy-seculog:slog=act:dloc=stb
```

Dependencies

No other security log command can be in progress when this command is entered.

No `copy-fta` command can be in progress when this command is entered.

GPSM-II and E5-MCAP cards cannot be provisioned in the system at the same time.

The source log and destination file combination is not allowed.

The removable drive must have a File Transfer Area to be used as the destination.

Notes

For the dfile parameter, if the file name is not accepted by the system because it contains special characters such as blanks, colons, dashes, ampersands, or others; or because it does not start with an alphabetic character, enclose the file name in double quotes as in this example: "seculog-1.ext".

Any scroll area failure message that can be produced by the `copy-fta` command can be produced also by the `copy-seculog` command.

Output

This example shows that the log on the active fixed disk is copied to the FTA on the active fixed disk and given the default name (note the *a* in the log name).

`copy-seculog`

```
    rlghncxa03w 04-01-04 15:59:06 EST  EAGLE 31.3.0
    Security log on TDM 1114 copied to file 040104a.log on TDM 1114
```

This example shows that the log on the active fixed disk is copied to the FTA on the active fixed disk and given a user-specified name.

`copy-seculog:dfile=”somename.log”`

```
    rlghncxa03w 04-01-04 15:59:06 EST  EAGLE 31.3.0
    Security log on TDM 1116 copied to file somename.log on TDM 1114
```

This example shows that the log on the standby fixed disk is copied to the FTA on the active fixed disk and given the default name (note the *s* in the log name).

`copy-seculog:slog=stb`

```
    rlghncxa03w 04-01-04 15:59:06 EST  EAGLE 31.3.0
    Security log on TDM 1114 copied to file 040104s.log on TDM 1116
```

This example shows that the copy of the log fails because a file already exists in the FTA with the same name.

```
copy-seculog:slog=act
```

```
    rlghncxa03w 04-01-04 15:59:06 EST  EAGLE 31.3.0
    Command Failed - Destination File already exists in the File Transfer Area
```

This example shows that the copy fails because there is not enough room in the FTA to contain the copy.

```
copy-seculog:slog=act:dloc=stb
```

```
    rlghncxa03w 04-01-04 15:59:06 EST  EAGLE 31.3.0
    Command Failed - Not enough room exists in the File Transfer Area
```

Related Commands

act-file-trns, *copy-tbl* , *disp-fta-dir*, *dlt-fta*

dact-alm-trns

Deactivate Alarm Transfer

Use this command to return all audible alarm indications to the local office.

Parameters

This command has no parameters.

Example

```
dact-alm-trns
```

Dependencies

None

Notes

After you enter `dact-alm-trns`, enter `rept-stat-alm` to verify the status of the alarms.

Output

```
dact-alm-trns
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Alarms returned to Local Maintenance Center
;
```

Related Commands

act-alm-trns, *rept-stat-clk*, *rept-stat-trbl*, *rls-alm*, *rtrv-obit*, *rtrv-trbl*

dact-cdl

Deactivate Command Driven Loopback

Use this command to deactivate a previously initiated command driven loopback for testing a signaling link, if the test is active. If it is not active, the command will attempt to clear both near-end and far-end latched loopback points

Parameters

link (mandatory)

SS7 signaling ports. The signaling port to which the SS7 signaling link being tested is assigned.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
dact-cdl:loc=1205:link=b
```

Dependencies

The card location specified in the loc parameter must be equipped.

The signaling link specified in the link parameter must be equipped.

Link Fault Sectionalization (LFS) must not be running on the specified signaling link when this command is entered.

Command Driven Loopback testing is not available during upgrade.

A link diagnostic test is in progress on the signaling link specified in the link parameter, but it is not a Command Driven Loopback.

The card location specified in the loc parameter must be in service.

The signaling link specified in the link parameter must not be active.

The card location specified in the loc parameter cannot be reserved by the system.

Notes

None

Output

`dact-cdl:loc=1205:link=b`

```
    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Command Accepted: Stop Command Driven Loopback message is sent.
;

    tekelecstp 05-01-21 17:00:36 EST  EAGLE5 33.0.0
    Command Completed.
;
```

Related Commands

act-cdl, *act-lbp*, *dact-lbp*, *rept-stat-cdl*, *tst-slk*

dact-cmd

Deactivate Command

This command halts processing and output of the following commands: `copy-ext-stats`, `dact-cmd`, `rept-imt-info`, `rept-stat-as`, `rept-stat-assoc`, `rept-stat-card`, `rept-stat-clk`, `rept-stat-dstn`, `rept-stat-ls`, `rept-stat-rte`, `rept-stat-slk`, `rept-stat-trbl`, `rtrv-appl-rtkey`, `rtrv-as rtrv-assoc`, `rtrv-cmd`, `rtrv-dstn`, `rtrv-gta`, `rtrv-gtt`, `rtrv-lbp`, `rtrv-log`, `rtrv-ls`, `rtrv-map`, `rtrv-mrn`, `rtrv-obit (active OAM)`, `rtrv-rte`, `rtrv-seculog`, `rtrv-secu-user`, `rtrv-slk`, `rtrv-tbl-capacity`, `rtrv-trbltx`, `rtrv-uaps`, `rtrv-vflx-cd`, `rtrv-vflx-rn`, `rtrv-vflx-vmsid`

Note: The Basic command class allows use of this command without the trm parameter (for `dact-cmd`); the Security Administration command class is required for use of this command when the trm parameter is specified (`dact-cmd:trm=x`).

Note: Entering this command without the trm parameter executes the command on the terminal that is running the `dact-cmd` command. Entering the command with the trm parameter executes the command on the terminal specified by the trm parameter.

Note: Used without the trm parameter, the `dact-cmd` command is entered on the same terminal that is currently running the command to be cancelled. Used with the trm parameter, the `dact-cmd` command is entered on a terminal other than the one that is currently running the command to be cancelled.

Parameters

trm (optional)

The terminal on which the command is to be canceled.

Range:

1 - 40

Example

```
dact-cmd
```

```
dact-cmd:trm=3
```

Dependencies

The trm parameter cannot be specified in a `dact-cmd` command that entered on the same terminal that is running the command to be cancelled. The terminal will return an error: system is busy .

The `dact-cmd:trm=` command requires the security administration command class for the terminal and for the user.

Notes

The `dact-cmd` command (without the trm parameter) must be entered on the same terminal that is running the command to be cancelled.

If the `dact-cmd` command is entered on a terminal that is not running a command, the `dact-cmd` command completes successfully without returning an error. Likewise, if the `dact-cmd:trm=` command is entered and there is no command running on the specified terminal, the `dact-cmd:trm` command completes successfully without returning an error.

```
Command aborted on terminal 2.
```

Some output may appear after the abort message if output accumulated in the output queue before the `dact-cmd` command was issued. A command is cancelled, the cancellation should take no longer than 25 seconds to take effect.

The **F9** function key provides the same functionality as the `dact-cmd` command (without the trm parameter). On a terminal in KSR mode, pressing <CTRL>I, also provides the same function.

The `dact-cmd` and the **F9** function key cannot be used for pure SEAS commands.

If the `dact-cmd` command is entered to cancel a non-supported command, the terminal accepts the command, but output and processing of the current command continue.

When the `dact-cmd` command is entered, a command status code of AB (command aborted) is logged in the security log as follows:

- When the `dact-cmd` (without the trm parameter) is entered, no entry is logged.
- When the `dact-cmd:trm=` command is entered, an entry is logged.

- When the `dact-cmd` (without the trm parameter) is entered as a SEAS flow-thru command, an entry is logged. The `dact-cmd:trm=` command is not allowed as a SEAS flow-thru command because the `dact-cmd:trm=` command belongs to the Security Administration Command Class.

For examples of the security log entries, see the `rtrv-seculog` command.

Output

`dact-cmd`

```
    rlghncxa03w 04-04-27 17:00:36 EST  EAGLE 31.6.0
    dact-cmd
    Command entered at terminal #2.

    rlghncxa03w 04-04-27 17:00:36 EST  EAGLE 31.6.0
    Command aborted on terminal 2.
;
```

`dact-cmd:trm=2`

```
    rlghncxa03w 04-04-27 17:00:36 EST  EAGLE 31.6.0
    dact-cmd:trm=2
    Command entered at terminal #3.

    rlghncxa03w 04-04-27 17:00:36 EST  EAGLE 31.6.0
    Command aborted on terminal 2.
;
```

Related Commands

copy-ext-stats, *rept-imt-info*, *rept-stat-as*, *rept-stat-assoc*, *rept-stat-card*, *rept-stat-dstn*, *rept-stat-ls*, *rept-stat-slk*, *rtrv-appl-rtkey*, *rtrv-assoc*, *rtrv-dstn*, *rtrv-gta*, *rtrv-gtt*, *rtrv-log*, *rtrv-ls*, *rtrv-map*, *rtrv-obit*, *rtrv-rte*, *rtrv-seculog*, *rtrv-slk*, *rtrv-trbltx*, *rtrv-uaps*

dact-echo

Deactivate Echo

Use this command to halt the echoing of command responses from the user's terminal to other terminals or printers.

Parameters

trm (optional)

The ID number of the terminal for which the echo is being canceled.

Range:

1 - 16

Default:

Cancels all active echoes

Example

```
dact-echo
```

Dependencies

The echo to the same terminal from which the `dact-echo` command is issued cannot be cancelled.

There must be an active echo (`act-echo`) to the terminal specified.

Notes

Only the echoing of command output responses can be halted by this command. To halt the printing of alarm and network messages, use the `chg-trm` command.

Output

`dact-echo`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Command entered at terminal #6.
    Scroll Area Output echo disabled to all terminals.
;
```

`dact-echo:trm=7`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Command entered at terminal #1.
    Scroll Area Output echo disabled for terminal 7.
;
```

Related Commands

act-echo, *alw-trm*, *canc-echo*, *chg-trm*, *inh-trm*, *rept-stat-trm*, *rmv-trm*, *rst-trm*, *rtrv-trm*

dact-lbp

Deactivate Loopback Point Test

Use this command to deactivate a previously activated loopback point test, if a test is active. If no test is active, the command attempts to clear both near-end and far-end latched loopback points.

Parameters

link (mandatory)

SS7 signaling link. The signaling link for which the loopback point test is being deactivated.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

Card location. The unique identifier of the card containing the signaling link on which loopback point testing is to be deactivated.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
dact-lbp:loc=1205:link=b
```

Dependencies

The specified signaling link must be equipped.

For clearing a remotely initiated loopback or LFS test stop, the card location (loc parameter) must be an HC-MIM, E5-E1T1, or E5-E1T1-B card, provisioned with the LIMT1 card type, configured with either the SS7ANSI or CCS7ITU application.

This command cannot be entered until any previously issued `act-lbp` or `dact-lbp` command is accepted.

If an LFS test is about to complete, a new `dact-lbp` command cannot be entered until the test completes.

This command cannot be entered to cancel a signaling link test (a `tst-slk` test).

This command cannot be entered to cancel a Command Driven Loopback test.

The specified link must exist, and the maximum number of allowed LFS or signaling link tests must not already be in progress. At least one active LFS or signaling link test must be completed before this command can be entered again.

This command cannot be entered during upgrade.

The specified signaling link must not be active.

For clearing a remotely initiated loopback, the card location specified in the loc parameter must be equipped.

For clearing a remotely initiated loopback, the card location specified in the loc parameter must be in service (**IS-NR**).

For clearing a remotely initiated loopback, the card location specified in the loc parameter cannot be reserved by the system.

Notes

After the deactivation of loopback point testing has started, you cannot cancel the process.

If an LFS test is aborted by a card reset, it could leave the remote far-end loop-back condition active. Use the `dact-lbp` command to cancel LFS tests.

Output

The following example output is generated only when a latched loopback is cleared and when there were no active loopback tests in progress.

Note: This situation could occur even if there were no latched loopbacks to be cleared.

```
dact-lbp:loc=1205:link=b
```

```
    rlghncxa03w 04-02-17 16:02:05 EST  EAGLE5 33.0.0
    LOC = 1205  LINK = B
    CLEAR STATUS = PASS, loopback was cleared.
;
```

The following example output is generated only when a latched loopback could not be cleared when there were no active loopback tests in progress.

```
dact-lbp:loc=1205:link=b
```

```
    rlghncxa03w 04-02-17 16:02:05 EST  EAGLE5 33.0.0
    LOC = 1205  LINK = B
    CLEAR STATUS = ERROR, loopback could not be cleared.
;
```

Related Commands

act-lbp, *chg-lbp*, *dlt-lbp*, *ent-lbp*, *rept-stat-lfs*, *rtrv-lbp*

dact-rstst

Deactivate Route Set Test

Use this command to request deactivation of the routeset test being performed by the LIMs running the *ss7ansi* application. The system verifies that the point code and the linkset exist, and that the specified linkset is in the routeset of the specified point code. If it is, then a request to stop routeset testing procedures for the specified destination-linkset combination is sent to the LIM.

Parameters

dpc (mandatory)

The ANSI destination point code of the destination, x-list entry, or cluster whose routeset testing is to be stopped, with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

lsn (mandatory)

The name of the linkset associated with the destination point code that is to have routeset testing stopped.

Range:

ayyyyyyyyy

1 alphabetic character followed by 9 alphanumeric characters

Example

```
dact-rstst:dpc=1-2-*:lsn=lsn1a
dact-rstst:dpc=1-2-33:lsn=lsn1b
```

Dependencies

The specified DPC must be either provisioned or an x-list entry.

The specified linkset must be in the DPC's routeset.

The destination address must be a full point code or a cluster point code specified as *ni-nc*-*. A DPC cannot be specified as *ni-nc*-** or *ni-nc*-*** for the this command.

The specified linkset must exist in the linkset table.

Notes

None

Output

```
dact-rstst:dpc=1-2-*:lsn=lsn1a
```

```
    rlghncxa03w 04-01-05 16:40:40 EST  EAGLE 31.3.0
    Stop routeset testing request sent to SNM (scroll area)

    rlghncxa03w 04-01-05 16:40:40 EST  EAGLE 31.3.0
    Command Completed.
;
```

Related Commands

None.

dact-slk

Deactivate Signaling Link

Use this command to change the state of the specified link to OOS-MT-DSBLD (out-of-service maintenance-disabled).

Caution: This command impacts network performance, and should be used only during periods of low traffic.

Parameters

link (mandatory)

Signaling link on the card specified in the loc parameter. The signaling links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
dact-slk:loc=1301:link=a
```

Dependencies

Valid IMT bus entries are "A" or "B".

A card location must be specified that is valid and defined in the database.

No other action command can be in progress when this command is entered.

The value specified for the loc parameter must refer to one of the following cards, and the referenced card must be equipped:

- E5-E1T1, E5-E1T1-B, or HC MIM card running the SS7ANSI or CCS7ITU application
- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPGWI, IPLIM, IPLIMI, IPSG, or SS7IPGW application

The card must contain signaling links.

The signaling link must be equipped in the database.

The card must be equipped in the specified card location.

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

This command is not valid for IPSG-M3UA signaling links.

Notes

The *Installation Guide* provides an illustration of card locations.

After the `dact-slk` command is entered, verify the cancellation by issuing the `rept-stat-slk` command.

Output

```
dact-slk:loc=1301:link=a
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE5 33.0.0
    Deactivate Link message sent to card
;
```

Related Commands

act-slk, *blk-slk*, *dlt-slk*, *ent-slk*, *inh-slk*, *rept-stat-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

dact-user

Deactivate User

Use this command to end a user session. The `logout` command has the same affect as the `dact-user` command.

Parameters

This command has no parameters.

Example

```
dact-user
```

Dependencies

None

Notes

The `logout` or `canc-user` commands can be used in place of `dact-user`.

Output

Not applicable.

Related Commands

act-user, *chg-pid*, *chg-user*, *dlt-user*, *ent-user*, *login*, *logout*, *rept-stat-user*, *rtrv-secu-user*, *rtrv-user*

disc-imt — Disconnect IMT

The interprocessor message transport bus (IMT bus) is the main communications artery between all subsystems in the system. Use this command to disconnect a card from the specified IMT bus.

Note: When a card is disconnected from the IMT Bus, it may take several seconds for the card IMT Status to be updated. If an `init-mux` or `disc-imt` command is entered for the alternate IMT Bus before the card IMT Status is updated, then the card may reboot. After disconnecting the card from the IMT bus, use the `rept-stat-imt` or `rept-stat-card` command to determine whether the card IMT status is updated. Do not issue the `disc-imt` or `init-mux` command for the alternate IMT bus until the card status is updated.

Parameters

bus (mandatory)

IMT bus to be disconnected from.

Range:

a, b

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
disc-imt:loc=1213:bus=b
```

Dependencies

Valid IMT bus entries are "A" or "B".

This command cannot be entered during an IMT Fault Isolation Test. The card cannot be isolated from both IMT busses.

When disconnecting a card from one IMT bus, the other (alternate) IMT bus must be in a known, good (IS-NR) state.

The card location, frame, shelf, or slot must be within the allowed range.

This command cannot be entered if an IMT Rate Change sequence is in progress.

This command cannot be entered during an IMT Fault Isolation Test or an Extended Bit Error Rate Test (BERT).

Notes

The card can be reconnected by issuing the `conn-imt` command, or by re-inserting the card. A software reset does not affect connect status. (The `init-card` command performs a software reset.)

Output

```
disc-imt:loc=1213:bus=b
```

```
    rlghncxa03w 04-01-07 11:02:30 EST  EAGLE 31.3.0
    Disconnect IMT Bus B command issued to card 1213
;
```

Related Commands

clr-imt-stats, *conn-imt*, *rept-imt-lvl1*, *rept-imt-lvl2*, *rept-stat-imt*, *rmv-imt*, *rst-imt*

disp-fta-dir

Display Contents of the File Transfer Area

Use this command to display the files that are in the file transfer area (FTA) the layout of FTA, and the amount of free space in the FTA.

Parameters

loc (optional)

The location of the fixed disk whose FTA is to be displayed.

Range:

1114, 1116

(TDMs)

Default:

The active TDM location

Example

```
disp-fta-dir:loc=1114
```

Dependencies

This command must display the files (along with deleted files and free slots) in the order in which they appear in the file transfer area.

The loc parameter must specify a TDM card.

Only one file transfer can be active at a time.

TDM and E5-TDM cards cannot co-exist in the system.

Notes

None

Output

```
disp-fta-dir:loc=1114
```

```
    rlghncxa03w 05-07-01 16:21:12 EST  EAGLE 31.3.0
    File Transfer Area Directory of fixed disk 1114:

    FILENAME                    LENGTH   LAST MODIFIED   LBA
    oam.elf                     1048576  05-07-01 16:51  40960
    <deleted>                     65536  -------- -----  43008
    sccp.elf                    1048576  05-07-01 18:30  43136
    <deleted>                   1048576  -------- -----  46704
    tbl213.out                   640000  05-07-01 06:39  48752
       5 File(s)  21584896 bytes free
;
```

Related Commands

act-file-trns, *copy-fta*, *dlt-fta*

dlt-acg-mic

Delete ACG Manually Initiated Control

Use this command to delete ACG controls that apply to certain queries. The control can apply to all queries or to specific query services and called party digits. A particular control is selected to be deleted by either specifying that it is the type=all control or specifying its service and digits.

Parameters

dgts (optional)

Digits

Range:

000 - 999, 000000 - 9999999999

Specify 3 digits or 6-10 digits.

serv (optional)

Query service

Range:

ain

in

type (optional)

Type of control

Range:

all

sd

Default:

sd

Example

```
dlt-acg-mic:type=all
dlt-acg-mic:serv=ain:dgts=9194602132
```

Dependencies

If the type=all parameter is specified, then the serv and dgts parameters cannot be specified.

If the type=sd parameter is specified, then the serv and dgts parameters must be specified.

If the type=all parameter is specified, a MIC with type=all must exist.

If the type=sd parameter is specified, a MIC with the same service and digits must exist.

The LNP feature must be turned on before this command can be entered.

The dgts parameter value must be 3 digits or 6-10 digits in length.

Notes

None

Output

`dlt-acg-mic:type=all`

```
    rlghncxa03w 04-02-28 08:50:12 EST  EAGLE 31.3.0
    ACG MIC table is (10 of 256) 4% full of type SD
    DLT-ACG-MIC: MASP A - COMPLTD
;
```

Related Commands

chg-acg-mic, *ent-acg-mic*, *rept-stat-lnp*, *rtrv-acg-mic*

dlt-acg-noc

Delete ACG Node Overload Control

Use this command to delete the definition of a node overload level. The definition is comprised of the threshold LNP query rates for node overload levels and the values for the Automatic Call Gappings (ACG) to be sent when at the level. If a level is not defined, it is not used. Level 10 cannot be deleted.

Parameters

lvl (mandatory)

Overload level.

Range:

1 - 9

Example

`dlt-acg-noc:lvl=3`

Dependencies

The specified overload level must be defined.

The LNP feature must be turned on before this command can be entered.

Notes

None

Output

`dlt-acg-noc:lvl=3`

```
    rlghncxa03w 04-02-28 08:50:12 EST  EAGLE 31.3.0
    DLT-ACG-NOC: MASP A - COMPLTD
;
```

Related Commands

chg-acg-noc, *ent-acg-noc*, *rept-stat-lnp*, *rtrv-acg-noc*

dlt-appl-rtkey

Delete Application Route Key Table

Use this command to delete static entries from the Routing Key table. These entries are used to associate a routing key with a socket name. A static entry is created using the `ent-appl-rtkey` command.

There are three types of routing keys, as follows:

- DPC, SI, SSN routing keys, which are used to route SCCP messages
- DPC, SI routing keys, which are used to route non-SCCP and non-ISUP messages
- DPC, SI, CIC routing keys, which are used to route ISUP messages

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

asname (optional)

Application Server (AS) name; AS assigned to this routing key.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

cice (optional)

The end range of circuit identification codes assigned to the routing key. The cice and cics parameters identify the routing key to be changed. Valid only and required if a value of 4, 5, or 13 is specified for the si parameter.

Range:

0 - 4294967295

See *Table 57: Valid CIC Ranges for SI and MSU Types* for valid CIC values for specified SI and MSU types.

cics (optional)

The end range of circuit identification codes assigned to the routing key. The cice and cics parameters identify the routing key to be changed. Valid only and required if a value of 4, 5, or 13 is specified for the si parameter.

Range:

0 - 4294967295

See *Table 57: Valid CIC Ranges for SI and MSU Types* for valid CIC values for specified SI and MSU types.

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area (un-sna-mna)*.

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un-000-127

sna-000-15

mna-000-31

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Originating point code. Valid only and required if the si parameter has a value of 4, 5, or 13.

opci (optional)

ITU international originating point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area (un-sna-mna)*.

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un-000-127

sna-000-15

mna-000-31

rcontext (optional)

Identify a routing key by its routing context when a routing key needs to be deleted as an optional alternative to entering the dpc/si/ssn/opc/cics/cice/type key parameters.

Range:

0 - 4294967295

si (optional)

Service indicator.

Range:

0 - 15

0-15 or equivalent text values

Number = **Text—Description**

0=snm—Signaling network management messages

1=regtest—Signaling network testing and maintenance regular

2=spltest—Signaling network testing and maintenance special

3=sccp—SCCP

4=tup—Telephone user part

5= isup—ISDN user part

13= qbicc

ssn (optional)

Subsystem number.

Range:

0 - 255

type (optional)

Type of routing key that is being changed.

Range:

full

partial

default

Default:

full

Example

```
dlt-appl-rtkey:dpc=1-1-1:si=3:asname=as1:ssn=255
dlt-appl-rtkey:dpci=s-3-11-1:si=5:opci=s-4-11-2:
cics=1:cice=1000:asname=asitu
dlt-appl-rtkey:rcontext=100
dlt-appl-rtkey:dpcn16=121-10-5:si=5:opcn16=121-10-6:cics=1:cice=1000:
asname=asitu
```

Dependencies

The SSN is valid and must be specified only when the si=3 (or sccp) parameter is specified. When the si=3 (or sccp) parameter is not specified, the ssn parameter must not be specified.

The value entered for the cics parameter must be less than or equal to the value entered for the ending circuit identification code cice parameter.

A circuit identification code range (cics to cice) that overlaps an existing routing key cannot be specified.

When the DPC is ANSI and the si=4 parameter is specified, a DPC/SI routing key must be specified (TUP is used only in an ITU network).

The opc, cics, and cice parameters are required and can be entered only if the si parameter value is 4, 5, or 13.

If the si parameter has a value of 4, 5, or 13 (*tup, isup*), or the qbicc parameter is specified, the opc, cics, and cice parameters used to route ISUP messages must be specified. The opc, cics, and cice parameters can be specified only if the si parameter has a value of 4, 5, or 13 (*tup, isup*), or if the qbicc parameter is specified.

Table 57: Valid CIC Ranges for SI and MSU Types shows valid CIC values for SI types 4, 5, and 13.

The routing key must be in the Routing Key table.

If the asname parameter is specified, the AS name must already be defined in the AS table. The AS name and parameters specified for a routing key must use an address format that is valid for the adapter type used by the ASP associations assigned to the AS.

When the type=full parameter is specified, the dpc and si parameters must be specified.

The following types of partial routing keys are supported:

- DPC-SI-OPC (ignore CIC) can be used as a partial match key for CIC- based traffic.
- DPC-SI (ignore all other fields) can be used as a partial match key for CIC- based traffic or SCCP traffic.
- DPC only (ignore all other fields) can be used as a partial match for any type of traffic.
- SI only (ignore all other fields) can be used as a partial match for any type of traffic.

The following card locations are not valid for this command: 1113, 1115, 1117, 1118, and all xy09 and xy10 locations (where *x* is the frame and *y* is the shelf). The card must be equipped and in service.

If the type=default parameter is specified, then the dpc, si, ssn, opc, cice, and cics parameters cannot be specified.

The asname or the rcontext parameter must be specified in the command.

Notes

A specific routing key/socket name association can be deleted by specifying a fully qualified routing key (dpc/dpca, si, ssn, and asname). By default, socket associations in the static key entries are deleted using the `dlt-appl-rtkey` command.

The OPC and DPC cannot specify a cluster route.

Group codes are required for ITU-N point codes (DPCN/OPCN) when the Duplicate Point Code feature is turned on.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (*s-*).

Output

`dlt-appl-rtkey:asname=tekelec:si=3:ssn=255:type=full:dpc=2-2-2`

```
    rlghncxa03w 08-03-17 15:35:05 EST  EAGLE 38.0.0
    DLT-APPL-RTKEY: MASP A - COMPLTD
;
```

Related Commands

ent-appl-rtkey, *rtrv-appl-rtkey*

dlt-as — Delete Application Server

Use this command to delete an AS.

Parameters

aname (mandatory)

Name of the M3UA/SUA SCTP association to be deleted.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter.

asname (mandatory)

Application Server assigned to the routing key.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

Example

```
dlt-as:as=asx:aname=asxp1
```

Dependencies

An AS that is still assigned to a routing key cannot be deleted.

The connection state for the associations assigned to the AS must be open=no before the AS can be deleted.

The AS must be defined in the AS table.

The specified associaton name (aname) parameter must be defined in the AS.

Notes

None

Output

```
dlt-as:as=asx:as=asxp1
```

```
    rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
    DLT-AS: MASP A - COMPLTD
;
```

Related Commands

chg-as, *ent-as*, *rept-stat-as*, *rtrv-as*

dlt-assoc Delete Association

Use this command to delete the SCTP associations from the IPAPSOCK table.

Parameters

aname (mandatory)

Name assigned to the association to be deleted.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

Example

```
dlt-assoc:aname=tekelec
```

Dependencies

The value specified for the aname parameter must already exist in the IP Socket/Association (IPAPSOCK) table.

An association that exists on any AS cannot be deleted from the IPAPSOCK table.

An AS assigned to a routing key cannot be deleted from the IPAPSOCK table.

The connection state must be open=no to delete the association from the IPAPSOCK table.

If the association on an IPSG card is referenced by a signaling link, then the association cannot be deleted.

An association that is already assigned to a diameter connection in the DCONN table cannot be deleted from the IPAPSOCK table.

Notes

None.

Output

```
dlt-assoc:aname=tekelec
```

```
    rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
    DLT-ASSOC: MASP A - COMPLTD
;
```

Related Commands

chg-assoc, *ent-assoc*, *rtrv-assoc*

dlt-card

Delete Card

Use this command to remove a card entry from the system database.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 6201 - 6208, 6211 - 6218, 6301 - 6308, 6311 - 6318

Example

```
dlt-card:loc=1201
```

```
dlt-card:loc=6201
```

Dependencies

The card location slot must be between 1 - 18, but not 9 or 10.

The card location cannot be 1113–1118.

The shelf and card must be equipped.

Before this command can be entered, all TCP/IP data links assigned to the card must be deleted.

Before an E1 card can be deleted, any E1 interfaces assigned to the card must be deleted.

Before a T1 card can be deleted, any T1 interfaces assigned to the card must be deleted.

After the links are deleted, the card must be inhibited before it can be deleted. Use the `inh-card` command to set the card to the OOS-MT-DSBLD state.

Before this command can be entered, SS7 signaling links assigned to the card must be deleted. E5-APP-B cards do not need to be inhibited first before they can be deleted.

Only one database change, action, backup, or restore can be in progress at a time.

Before a J1 card can be deleted, any J1 interfaces assigned to the card must be deleted.

Notes

If a SEAS terminal is configured for a location, then entering the `dlt-card` command causes the warning "Invalidating the Terminal data in SEASCFG table" to appear.

Output

`dlt-card:loc=1201`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    DLT-CARD: MASP A - COMPLTD
;
```

`dlt-card:loc=6201`

```
tekelecstp 13-02-28 12:40:29 EST 45.0.0
DLT-CARD: MASP A - COMPLTD
;
```

Related Commands

init-card, *rept-stat-card*, *rmv-card*, *rst-card*, *rtrv-card*

dlt-csl

Delete Common Screening List

Use this command to delete an existing entry from the Common Screening List (CSL). The Common Screening List commands are used to tailor certain types of general screening information to specific features.

Parameters

Note: Either the ds parameter or the pc parameter must be specified in the command. Both parameters cannot be specified in the same command.

ds (optional)

Digit string. A unique string of digits that is used by the specified screening feature.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9*, *a-f*, *A-F*

- 1-6 digits—Prepaid IDP Query Relay CCNC list

- 1-15 digits—Prepaid IDP Query Relay GT list
- 1-10 digits—Prepaid IDP Query Relay SKBCSM list
- 4 digits—IDP Screening for Prepaid SKTS list
- 1-15 digits—IDP Screening for Prepaid INSL list
- 1-15 digits—VFLEX VMPFX list
- 1-6 digits—Info Analyzed Relay Base CCNC list
- 1-15 digits—Info Analyzed Relay Base GT list
- 2 digits—Info Analyzed Relay Base TRIG list
- 1 - 15 digits — EIR *imsipfx* list

Table 27: TRIGTYPE Hexadecimal Codes lists valid hexadecimal values for the Info Analyzed Relay Base TRIG list DS entries.

feature (optional)

Feature name. The name of the enabled screening feature for which the command is entered.

Range:

*a*zzzzzzzzzzzzzzzzzzzzzzzz

1 alphabetic character followed by up to 24 optional alphanumeric characters, including spaces and special characters, enclosed in double quotation marks (" ").

Enter enough of the feature name to make the name unique if two features begin with the same word or acronym. The following feature names are valid for this command:

- EIR
- IDP Screening for Prepaid
- IDP Service Key Routing
- Info Analyzed Relay Base
- Prepaid IDP Query Relay
- VFLEX

list (optional)

Name of the Common Screening List associated with the feature.

This parameter must be specified when the feature uses more than one type of Common Screening List.

Range:

ccnc

CC+NC List

delpfx

Delete Prefix List

gt

Global Title List

imsipfx

IMSI Screening Prefix List

insl

In Network Subscriber List

npbypass

SIP NPBYPASS List

skbcsm

SK+BCSM List

skts

Service Key + Teleservice List

trig

Trigger List

vmpfx

Voice Mail Prefix List

The following screening lists are valid for the indicated features:

- *ccnc, gt*—Prepaid IDP Query Relay and Info Analyzed Relay Base
- *imsipfx* --- EIR

  Note: If list argument is not specified in this command for EIR feature then list = imsipfx by default is taken

- *insl, skts*—IDP Screening for Prepaid
- *npbypass* — SIP Number Portability
- *skbcsm*—Prepaid IDP Query Relay and IDP Service Key Routing
- *trig*—Info Analyzed Relay Base
- *vmpfx*—VFLEX

The *delpfx* list is not supported at this time. This list should only be used by Oracle personnel.

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

pc/pca/pci/pcn/pcn24 (optional)

Point code. The ds parameter or a point code parameter must be specified.

pci (optional)

ITU international point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pn (optional)

Part Number. The 9-digit "893xxxxxx" part number of the feature for which the command is entered. The `rtrv-ctrl-feat` command description shows the part number in the command output example.

Range:

893000000 - 893999999

The first 3 digits are *893*. Do not separate the digits with dashes or spaces. The following part numbers are valid for this command:

- *893012301*— EIR
- *893015501*—IDP Screening for Prepaid
- *893016001*—Prepaid IDP Query Relay
- *893034201*—Info Analyzed Relay Base
- *893016701*—VFLEX

Example

```
dlt-csl:feature="IDP Screening for Prepaid":list=insl:ds=246810
dlt-csl:pn=893015501:list=skts:ds=36ab
dlt-csl:feature="VFLEX":list=vmpfx:ds=123456789abcdEF
dlt-csl:pn=893040601:list=npbypass:ds=0000000056
dlt-csl:feature="EIR":list=imsipfx:ds=4012312312
```

Dependencies

An enabled feature must be specified using a valid part number (pn parameter) or feature name (feature parameter). The specified feature must use a Common Screening List.

The value specified for the feature parameter must be a valid feature name for a feature that uses a Common Screening List. The feature name must be specified as it appears in the `rtrv-ctrl-feat` command output. Enough of the name must be specified to make the name unique when two features begin with the same word or acronym.

The feature that is specified in the feature parameter must be enabled.

The list parameter must be specified for features that use more than one type of screening list.

The value specified for the list parameter must be valid for the specified screening feature.

The specified screening list entry must exist in the screening list that is used by the feature.

The following parameters are allowed with the indicated common screening list type:

- list=gt— ds parameter
- list=ccnc—ds parameter

- list=imsipfx--- ds parameters
- list=skbcsm—ds parameter
- list=skts—ds parameter
- list=insl—ds parameter
- list=vmpfx—ds parameter
- list=trig—ds parameter

The pc and ds parameters cannot be specified together in the command.

The parameter p1 or p2 cannot be specified in the command.

Notes

None

Output

```
dlt-csl:pn=893015501:list=insl:ds=123456789abcdEF
```

```
    tekelecstp 05-08-21 15:18:41 EST  EAGLE 34.3.0
    INSL List table is (5 of 50) 10% full
    DLT-CSL: MASP A - COMPLTD
;
```

```
dlt-csl:pn=893040601:list=npbypass:ds=0000000012
```

```
tekelecstp 12-06-25 15:29:14 EST EAGLE 45.0.0
dlt-csl:pn=893040601:list=npbypass:ds=0000000012
Command entered at terminal #4.
PFX List (2 of 1000) 1%
DLT-CSL: MASP A-COMPLTD
;
```

Related Commands

chg-csl, *ent-csl*, *rtrv-csl*, *rtrv-ctrl-feat*

dlt-cspc Delete Concerned Signaling Point Code

Use this command to remove a CSPC or an entire CSPC group.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

One, but not both, of these optional parameters must be specified: all, pc/pca/pci/pcn/pcn24.

grp (mandatory)

Group name

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

all (optional)

Use this parameter to confirm that all entries for this concerned signaling point code group are to be removed.

Range:

yes

no

Default:

no

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (optional)

Concerned signaling point code.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. The *prefix* subfield indicates a private point code.

Range:

p--, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

Example

```
dlt-cspc:grp=grp01:pc=144-201-001
dlt-cspc:grp=grp01:pci=s-144-201-001
dlt-cspc:grp=grp01:all=yes
dlt-cspc:grp=grp01:pcn16=123-7-20
```

Dependencies

A CPC group name must be specified. The specified group name must exist in the database.

The grp parameter and the all=yes parameter must be entered with no point code parameter, to remove a group and all of its point codes.

If a PC is specified, then the PC network type must match the group network type, and the PC must exist in the specified CPC group. The specified PC is removed from the CPC group.

Either a PC parameter or the all=yes parameter must be specified.

The Spare Point Code Support feature must be enabled before the spare PC prefix *s-* can be specified for an ITU-I or ITU-N point code.

The pc/pca/pci/pcn/pcn24 parameter and the all parameter cannot be specified in the same command.

The specified CSPC group must not be referred to by any Mate Application entity.

If the Flexible GTT Load Sharing feature is not enabled, a CAUTION is displayed. When the feature is enabled, the command is rejected with message E4534.

Notes

The system issues a warning if a mate application entity could potentially use a group name that is being deleted.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

```
dlt-cspc:grp=grp01:pci=2-2-2
```

```
    tekelecstp 04-04-08 12:42:47 EST  EAGLE 31.3.0
    DLT-CSPC: MASP A - COMPLTD
;
```

Related Commands

ent-cspc, *rtrv-cspc*

dlt-dconn — Delete Diameter Connection

Use this command to delete existing Diameter connection information. The DCONN table supports the provisioning information related to the Diameter connections.

Parameters

dcname (mandatory)

Diameter connection name. This parameter specifies the unique logical name assigned to each diameter connection.

Range:

ayyyyyyyyyyyyyy

A string of alphanumeric characters, beginning with a letter and up to 15 characters in length. Valid values are *a..z, A..Z, 0..9*.

Default:

No change to the current value

System Default:

null

Example

```
dlt-dconn:dcname=conn1
```

Dependencies

S13 feature must be enabled before deleting any existing diameter connection.

DCONN table should be accessible.

The value specified for the **DCNAME** parameter must already exist in the DCONN table.

Any Diameter Connection that is still OPEN to receive traffic cannot be deleted (the open parameter set to yes with the chg-assoc command).

Notes

None

Output

```
dlt-dconn:dcname=conn1
```

```
tekelecstp 13-03-19 15:29:14 EST EAGLE 45.1.0
dlt-dconn:dcname=conn1
Command entered at terminal #4.
DLT-DCONN: MASP A - COMPLTD
;
```

Related Commands

chg-dconn, *ent-dconn*, *rtrv-dconn*

dlt-dlk

Delete Data Link

Use this command to remove a TCP/IP data link from the database. The TCP/IP data link is used for the STP LAN feature, connecting the system to a remote host for message processing.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
dlt-dlk:loc=1201
```

Dependencies

The value specified for the loc parameter must indicate an STPLAN card.

The shelf and card must be equipped.

The location specified by the loc parameter must already have a TCP/IP data link assigned to it.

The specified card and data link must be out-of-service maintenance-disabled (OOS-MT-DSBLD).

Notes

None

Output

`dlt-dlk:loc=1201`

```
    rlghncxa03w 04-02-10 11:43:02 EST  EAGLE 31.3.0
    DLT-DLK: MASP A - COMPLTD
;
```

Related Commands

act-dlk, *canc-dlk*, *ent-dlk*, *rept-stat-dlk*, *rtrv-dlk*, *tst-dlk*

dlt-dstn

Delete Destination

Use this command to delete destinations from the Destination entity set after the STP no longer routes to those destinations.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dpc (mandatory)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (mandatory)

Destination point code.

dpci (mandatory)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (mandatory)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code (*gc*) must be specified when the ITUDUPPC feature is turned on. The *prefix* indicates a spare point code, private point code, or private and spare point code.

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (mandatory)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (un-sna-mna). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

Example

To delete destination 11-222-111:

```
dlt-dstn:dpc=111-222-111
```

To delete a network destination:

```
dlt-dstn:dpc=21-*-*
```

To delete destination 8112-ge:

```
dlt-dstn:dpcn=8112-ge
```

To delete ITU-N 24-bit destination 13-100-10:

```
dlt-dstn:dpcn24=13-100-10
```

To delete destination spare point code s-8112:

```
dlt-dstn:dpcn=s-8112
```

Dependencies

The destination address must be either a full point code, a cluster point code, or a network destination point code.

The format of the specified dpcn parameter must match the format for ITU national point codes that was assigned with the `chg-stpopts:npcfmti` parameter.

The specified destination point code must already exist in the Destination entity set.

The destination cannot have routes assigned to it.

The specified destination point code cannot already be defined as a remote application internal point code (IPC).

The dpc parameter must be defined as a destination point code.

The specified destination point code cannot already be defined as an adjacent point code or a secondary adjacent point code.

The specified destination cannot be referenced by SCCP as a destination point codes in the Mate Application table.

The specified destination cannot be referenced by SCCP as a destination point code in the Mated Relay Node (MRN) table.

Network routing is valid only if the Network Routing (NRT) feature is turned on.

When using network routing, if the destination point code has a value of * in the *nc* subfield, the *ncm* subfield must also be * (for example, dpc=21-*-*).

A destination point code that is used as a proxy point code cannot be deleted.

If an exception route is associated with a cluster member, then the cluster member cannot be deleted.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Output

This example shows the output with the NCR, NRT, and CRMD features off (disabled) and all Routes and Routesets features off:

```
dlt-dstn:dpc=111-222-111
```

```
    rlghncxa03w 04-08-17 15:35:05 EST  EAGLE 31.8.0
    Destination table is (10 of 2000) 1% full
    Alias table is (8 of 12000) 1% full
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with the NCR, NRT, and CRMD features off and the DSTN5000 (5000 Routes) feature on:

```
dlt-dstn:dpc=111-222-111
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (10 of 5000) 1% full
    Alias table is (8 of 12000) 1% full
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with one or more of the NCR, NRT, or CRMD features on and the DSTN5000 (5000 Routes) feature on:

```
dlt-dstn:dpc=111-222-111
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   5000
        FULL DPC(s):                    9
        NETWORK DPC(s):                 0
```

```
        CLUSTER DPC(s):                1
        TOTAL DPC(s):                 10
        CAPACITY (% FULL):             1%
    ALIASES ALLOCATED:              12000
        ALIASES USED:                  8
        CAPACITY (% FULL):             1%
    X-LIST ENTRIES ALLOCATED:        500
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with the NCR, NRT, and CRMD features off and the 6000 Routesets feature on:

```
dlt-dstn:dpc=111-222-111
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (60 of 6000) 1% full
    Alias table is (8 of 12000) 1% full
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with one or more of the NCR, NRT, or CRMD features on and the 6000 Routesets feature on:

```
dlt-dstn:dpc=111-222-111
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   6000
        FULL DPC(s):                   46
        NETWORK DPC(s):                 1
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  12
        CAPACITY (% FULL):             1%
    ALIASES ALLOCATED:              12000
        ALIASES USED:                  8
        CAPACITY (% FULL):             1%
    X-LIST ENTRIES ALLOCATED:        500
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with the NCR, NRT, and CRMD features off. When the 7000 Routesets quantity feature is on, the Destination table line shows "...of 7000". When the 8000 Routesets quantity feature is on, the Destination table line shows "...of 8000."

```
dlt-dstn:dpc=111-222-111
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (10 of 7000) 1% full
    Alias table is (8 of 8000) 1% full
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with one or more of the NCR, NRT, or CRMD features on. When the 8000 Routesets quantity feature is on, the DESTINATION ENTRIES ALLOCATED line shows "8000". When the 7000 Routesets quantity feature is on, the DESTINATION ENTRIES ALLOCATED line shows "7000."

```
dlt-dstn:dpc=111-222-111
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   8000
        FULL DPC(s):                   46
        NETWORK DPC(s):                 1
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  12
        CAPACITY (% FULL):             1%
    ALIASES ALLOCATED:                8000
        ALIASES USED:                     8
        CAPACITY (% FULL):             1%
    X-LIST ENTRIES ALLOCATED:          500
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with none of the NCR, NRT, or CRMD features on. A proxy destination is being deleted.

```
dlt-dstn:dpc=11-11-11
```

```
    tekelecstp 07-03-07 16:34:32 EST  EAGLE 37.5.0
    Destination table is (11 of 2000) 1% full
    Alias table is (0 of 12000) 0% full
    PPC table is (1 of 10) 10% full
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output when the NCR, NRT, and CRMD features are off and the 10,000 Routesets feature is on:

```
dlt-dstn:dpc=11-222-11
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0
    Destination table is (10 of 10000) 1% full
    Alias table is (8 of 10000) 1% full
    DLT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with one or more of the NCR, NRT, or CRMD features and the 10,000 Routesets feature on:

```
dlt-dstn:dpc=11-222-11
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0
    DESTINATION ENTRIES ALLOCATED:   10000
        FULL DPC(s):                   9
        NETWORK DPC(s):                0
        CLUSTER DPC(s):                1
        TOTAL DPC(s):                 10
        CAPACITY (% FULL):             1%
    ALIASES ALLOCATED:                10000
        ALIASES USED:                     8
        CAPACITY (% FULL):             1%
    X-LIST ENTRIES ALLOCATED:          500
    DLT-DSTN: MASP A - COMPLTD
;
```

Related Commands

chg-dstn, *chg-rte*, *dlt-rte*, *ent-dstn*, *ent-rte*, *rept-stat-dstn*, *rept-stat-rte*, *rtrv-dstn*, *rtrv-rte*

dlt-e1 Delete E1 Interface

Use this command to delete an interface for HC-MIM, E5-E1T1, or E5-E1T1-B cards used as E1 or SE-HSL cards.

E1 ports 1, 3, 5, and 7 (master ports) can be independently channel bridged with their adjacent even-numbered (slave) ports 2, 4, 6, and 8 to allow non-signaling data pass-through. The slave port interface is automatically deleted with the command that deletes its master port interface.

Parameters

e1port (mandatory)

E1 port number.

Range:

1 - 8

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
dlt-e1:loc=1205:e1port=1
```

Dependencies

The card in the location specified by the loc parameter must be equipped.

The card in the location specified by the loc parameter must be a LIME1 card type.

The port specified by the e1port parameter must be already equipped with an E1 interface.

All signaling links providing timeslots serviced by the specified E1 interface must be deleted before the E1 interface can be deleted. See the `dlt-slk` command to delete the signaling links providing the timeslots.

A channel bridged slave (even-numbered) port cannot be specified in the e1port parameter. To delete channel bridged port interfaces, specify the master (odd-numbered) port in the e1port parameter. The slave port interface is automatically deleted when its master port interface is deleted.

Card locations 1113 - 1118 (control cards) cannot be specified as values for the loc parameter.

Notes

None.

Output

```
dlt-e1:loc=1205:e1port=1
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
    dlt-E1: MASP A - COMPLTD
;
```

Related Commands

chg-e1, *ent-e1*, *rtrv-e1*, *tst-e1*

dlt-enum-acl

Delete ENUM ACL Table Entry

Use this command to delete an entry in the ENUM Access Control List (ACL) Table. The ENUM ACL Table supports the provisioning information related to the allowed IP Addresses for the ENUM application.

Parameters

ipaddr (mandatory)

This is a TCP/IP address expressed in standard dot notation. It specifies allowed IP addresses for the ENUM application.

Range:

Four numbers separated by dots, with each number in the range of 0-255, *.

Note: It also supports wildcard characters as follows:

xxx.xxx.xxx.*
xxx.xxx.*.*
xxx.*.*.*

where xxx can be any number in range of 0-255.

System Default:

0.0.0.0

Example

```
dlt-enum-acl:ipaddr=10.248.13.9
```

```
dlt-enum-acl:ipaddr=10.248.13.*
```

```
dlt-enum-acl:ipaddr=10.248.*.*
dlt-enum-acl:ipaddr=10.*.*.*
```

Dependencies

The ENUM ACL Table should be accessible.

The IP Address specified by the IPADDR parameter should be provisioned in the ENUM ACL Table.

The IP Address specified by the IPADDR parameter must be a valid IP address.

Notes

Wildcard IP addresses are allowed to support the ranges of IP addresses.

Output

```
dlt-enum-acl:ipaddr=10.248.13.*
```

```
    tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    dlt-enum-acl:ipaddr=10.248.13.*
    Command entered at terminal #4.
    DLT-ENUM-ACL: MASP A - COMPLTD
;
```

Related Commands

ent-enum-acl, *rtrv-enum-acl*

dlt-enum-prof

Delete ENUM Profile Table Entry

Use this command to delete the existing profile entry which has data used to generate the ENUM response for three supported resource record formats such as NAPTR, NS and CNAME. The ENUM Profile Table is used to configure the profile entry.

Parameters

prn (mandatory)

Profile name. This parameter specifies the unique logical name assigned to the profile entry used to generate the ENUM response.

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 10 characters in length. Valid values are a..z, A..Z, 0..9.

Example

```
dlt-enum-prof:prn=pr1
```

Dependencies

The ENUM Profile Table should be accessible.

The profile name must be present in the ENUM Profile Table.

The profile name cannot be referenced in either the ENUM Profile Selection Table or the ENUM DN Block Table.

The default profile cannot be deleted.

Notes

None.

Output

```
> dlt-enum-prof:prn=pr1
    tekelecstp 18-05-29 04:35:20 MST  EST EAGLE 46.1.0
    dlt-enum-prof:prn=pr1
    Command entered at terminal #19.
;

Command Accepted - Processing
    tekelecstp 18-05-29 04:35:20 MST  EST EAGLE 46.1.0
    DLT-ENUM-PROF: MASP B - COMPLTD
;
```

Related Commands

chg-enum-prof, *ent-enum-prof*, *rtrv-enum-prof*

dlt-enum-profsel

Delete ENUM Profile Selection Table or DN Block Table Entry

Use this command to delete an entry from the ENUM Profile Selection Table or the ENUM DN Block Table. The ENUM Profile Selection Table supports the provisioning information related to the mapping of Entity Id to Profile Id. The ENUM DN Block Table supports the provisioning information related to the mapping of DN Block to Profile Id.

Parameters

edn (optional)

End Dialed Number

Range:

5-15 digits

entityid (optional)

Network Entity

Range:

1-15 hex-digits (0-9, a-f)

sdn (optional)

Start Dialed Number

Range:

5-15 digits

Example

```
dlt-enum-profsel:entityid=12345
dlt-enum-profsel:sdn=11223344
dlt-enum-profsel:edn=1324566
```

Dependencies

The ENUM Profile Selection Table should be accessible.

The ENUM DN Block Table should be accessible.

The ENUM Profile Table should be accessible.

At least one optional parameter must be specified.

The Entity Id, SDN or EDN must already exist in the ENUM Profile Selection Table and the ENUM DN Block Table respectively.

ENTITYID cannot be specified with SDN or EDN.

Output

This example displays output when ENTITYID is specified:

```
dlt-enum-profsel:entityid=1234

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    dlt-enum-profsel:entityid=1234
    Command entered at terminal #4.
    DLT-ENUM-PROSEL: MASP A - COMPLTD
;
```

This example displays output when SDN is specified:

```
dlt-enum-profsel:sdn=1234567

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    dlt-enum-profsel:sdn=1234567
    Command entered at terminal #4.
    DLT-ENUM-PROFSEL: MASP A - COMPLTD
;
```

This example displays output when EDN is specified:

```
dlt-enum-profsel:edn=11223344

tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    dlt-enum-profsel:edn=11223344
    Command entered at terminal #4.
    DLT-ENUM-PROFSEL: MASP A - COMPLTD
;
```

Related Commands

chg-enum-profsel, *ent-enum-profsel*, *rtrv-enum-profsel*

dlt-frm-pwr — Delete Frame Power Threshold

Use this command to delete the existing power threshold entry from the Frame Power Threshold table for the specified frame. After the power threshold value is deleted, the default power threshold value of 30 Amps is assumed for the specified frame.

Parameters

frm (mandatory)

Frame ID

Range:

cf00

Control frame

ef00

First extension frame

ef01

Second extension frame

ef02

Third extension frame

ef03

Fourth extension frame

ef04

Fifth extension frame

Example

Delete the frame power threshold value for the third extension frame.

```
dlt-frm-pwr:frm=ef02
```

Dependencies

The following values are valid for the frm parameter: *cf00, ef00, ef01, ef02, ef03, ef04*.

A power threshold value must already be provisioned for the specified frame.

Output

```
dlt-frm-pwr:frm=ef02
```

```
    tekelecstp 06-04-11 16:07:11 EST  EAGLE 35.0.0

    FRAME POWER THRESHOLD table is (3 of 10) 30% full
    DLT-FRM-PWR: MASP A - COMPLTD
;
```

Related Commands

chg-frm-pwr, *ent-frm-pwr*, *rtrv-frm-pwr*, *rtrv-stp*

dlt-fta

Delete Entry from the File Transfer Area

This command removes a file from the file transfer area (FTA).

Parameters

Note: At least one of these parameters but not both, must be specified:`all`,`file`.

all (optional)

This parameter allows all files to be removed from the FTA.

Range:

yes

no

Default:

no

file (optional)

Name of the file to be removed.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

The name of the file with its extension.

force (optional)

This parameter is required to delete the last file in the FTA. In such cases, the value must be set to force=yes.

Range:

yes

no

Default:

no

loc (optional)

The card location of the fixed disk containing the FTA.

Range:

1114, 1116

(TDM)

Default:

The location of the active TDM

Example

```
dlt-fta:loc=1114:file="CAM.ELF"
dlt-fta:loc=1114:file="CAM.ELF":force=yes
dlt-fta:loc=1116:all=yes
```

Dependencies

Removing an individual file only frees up that file name for another transfer of that file.

The all=yes parameter must be specified when a specific filename is not supplied.

The all=yes parameter not only removes all files from the FTA, but frees up the space in the FTA.

When using DOS file names, if the file name contains a special character such as an underscore (_) or begins with a numeric, the file name must be in quotes (" "), for example, “92_name.ext”.

Removing an individual file only frees up that file name for another transfer of that file.

The force=yes parameter must be specified to remove the last file in the FTA.

The loc parameter must specify a TDM card.

A specific filename and all=yes cannot be specified at the same time.

Only one file transfer can be active at a time.

TDM and E5-TDM cards cannot be installed in the same system.

Notes

None

Output

```
dlt-fta:file=oam.elf:loc=1114
```

```
    rlghncxa03w 04-02-05 15:31:59 EST  EAGLE 31.3.0
    File OAM.ELF deleted from File Transfer Area on fixed disk 1114.
;
```

```
dlt-fta:all=yes:loc=116
```

```
    rlghncxa03w 04-02-05 15:33:32 EST  EAGLE 31.3.0
    All files deleted from File Transfer Area on fixed disk 1116.
;
```

Related Commands

act-file-trns, *copy-fta*, *disp-disk-dir*

dlt-ftp-serv — Delete FTP Server Entry

Use this command to delete an entry for an FTP server from the FTP Server table.

Parameters

app (mandatory)

Application. The FTP Client application at the EAGLE STP that interfaces with the FTP Server.

Range:

meas

Measurements Platform application

user

FTP-based Table Retrieve Application (FTRA)

db

Database Backup\Restore application

dist

EAGLE Software Release distribution application

ipaddr (mandatory)

IP Address of the FTP Server.

Range:

4 numbers separated by dots, with each number in the range of 0-255.

Example

```
dlt-ftp-serv:app=meas:ipaddr=1.255.0.102
```

Dependencies

Both the app and ipaddr parameters must be entered in the command to delete an FTP server.

An entry must already exist in the FTP Server table for this application at the specified IP address.

The app parameter must specify an application that uses the FTP Support feature.

The ipaddr parameter must specify a valid IP address for the FTP server.

Notes

None

Output

```
dlt-ftp-serv:app=meas:ipaddr=1.255.0.102
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
    FTP SERV table is (1 of 10) 10% full
    DLT-FTP-SERV: MASP A - COMPLTD
;
```

```
dlt-ftp-serv:app=user:ipaddr=1.255.0.102
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
    FTP SERV table is (0 of 10) 0% full
    DLT-FTP-SERV: MASP A - COMPLTD
;
```

Related Commands

chg-ftp-serv, *ent-ftp-serv*, *rtrv-ftp-serv*

dlt-gserv-data

Delete G-Port SRI Query for Prepaid Service Data

Use this command to delete translation type, originating point code, or global title address data from the GSERV table. These values are used to determine whether a Send Routing Information (SRI) request should receive G-Port SRI Query for Prepaid Service or normal G-Port SRI service.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

gta (optional)

Global title address. This parameter specifies a CgPA global title address.

Range:

1 - 21

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24 (optional)

Originating point code. Use these parameters to specify message transfer part (MTP) originating point codes.

opci (optional)

ITU international originating point code with subfields *zone-area-id*.

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

tt (optional)

Translation type. This parameter specifies a called party (CdPA) translation type.

Range: *0 - 255*

Example

```
dlt-gserv-data:tt=26
dlt-gserv-data:opc=1-1-1
dlt-gserv-data:gta=9194605500
```

Dependencies

The tt, opc/opca/opci/opcn/opcn24, or gta parameter must exist in the GSERV table before this command can be entered.

The G-Port SRI Query for Prepaid feature must be enabled before this command can be entered.

Only one of the tt, opc, and gta parameters can be specified in the command.

The G-Port feature must be enabled before this command can be entered.

Output

`dlt-gserv-data:tt=26`

```
    mystp 06-07-20 09:04:21 EST  EAGLE 35.2.0
    DLT-GSERV-DATA: MASP A - CMPLTD
;
```

Related Commands

ent-gserv-data, *rtrv-gserv-data*

dlt-gsmmap-scrn Delete GSM MAP Screening Entry

Use this command to delete the GSM Map Screening CgPA and CdPA entries that are used to filter out or allow SCCP messages containing Map Op-Codes, CGPA GTA+NPV+NAIV, CDPA GTA+NPV+NAIV, and forbidden parameters.

Parameters

cgsr (mandatory)

CgPA Screening Reference.

Range:

ayyy

1 alphabetic character followed by up to 3 optional alphanumeric characters

opname (mandatory)

Operation code name. This value references the operation code OPCODE defined with the `ent-gsms-opcode` command.

Range:

ayyyyyyy

Up to 8 alphanumeric characters

cdsr (optional)

CdPA Screening Reference.

Range:

ayyy

1 alphabetic character followed by up to 3 optional alphanumeric characters

Example

```
dlt-gsmmap-scrn:opname=xyz:cgsr=fela:cdsr=fall
```

```
dlt-gsmmap-scrn:opname=xyz:cgsr=fela
```

Dependencies

The GSM Map Screening feature must be enabled before this command can be entered.

The Enhanced GSM Map Screening (EGMS) feature must be enabled before the cdsr parameter can be specified.

The specified cgsr parameter value must exist in the database.

The specified cdsr parameter value must exist in the database.

A cgpa entry cannot be deleted if it is referred to by cdpa entries.

The specified opname parameter value must exist in the GSM Map Op-Code table.

The opname parameter must be an alphanumeric character.

The cgsr and cdsr parameters must begin with an alphabetic character.

The cgsr and cdsr parameters must each have 1-4 alphanumeric characters.

The opname and cgsr parameters must be entered.

Notes

Unlike GTT (Global Title Translation) entries, the GSM MAP screening commands do not support splits of ranges during deletion or changes of entries.

Output

```
dlt-gsmmap-scrn:opname=xyz:cgsr=fela:cdsr=fall
```

```
    rlghncxa03w 04-02-29 08:51:12 EST  EAGLE 31.4.0
    GSM Map Screening table is (1 of 4000) 1% full
    DLT-GSMMAP-SCRN: MASP A - COMPLTD
;
```

Related Commands

chg-gsmmap-scrn, *ent-gsmmap-scrn*, *rtrv-gsmmap-scrn*

dlt-gsms-opcode

Delete GSM MAP Screening Operation Code

Use this command to delete GSM (Global System for Mobile Telecommunication) MAP (Mobile Application Part) screening operation codes and the default screening action for that operation code.

Parameters

opname (mandatory)

Operation code name.

Range:

ayyyyyyy

Up to 8 alphanumeric characters

Example

```
dlt-gsms-opcode:opname=ati
```

Dependencies

The reserved word *none* cannot be specified as a value for the opname parameter.

The value specified for the opname parameter must exist in the GSM MAP Op-Code table.

The opname value being deleted cannot be referenced in the GSM MAP Screening table.

The GSM Map Screening feature must be enabled before this command can be entered.

The opname parameter must consist of alphanumeric characters.

The opname parameter must be no more than 8 characters long.

Notes

None

Output

```
dlt-gsms-opcode:opname=ati
```

```
    rlghncxa03w 06-02-29 08:50:12 EST  EAGLE 35.0.0
    DLT-GSMS-OPCODE: MASP A - COMPLTD
;
```

Related Commands

chg-gsms-opcode, *ent-gsms-opcode*, *rtrv-gsms-opcode*

dlt-gsmssn-scrn Delete GSM Subsystem Number Screening Entry

Use this command to delete an SSN (subsystem number) from the GSM (Global System for Mobile Telecommunication) SSN screening table.

Parameters

ssn (mandatory)

Subsystem number.

Range: ***000 - 255***

type (mandatory)

Subsystem type.

Range:

orig

The origination SSN

dest

The destination SSN

Example

This example deletes a destination subsystem of 255 from the GMS SSN screening table:

```
dlt-gsmssn-scrn:ssn=255:type=dest
```

Dependencies

The GSM Map Screening feature must be enabled before this command can be entered.

A value for the ssn/type parameter combination must be specified that exists in the GSM SSN screening table.

A valid value must be specified for the ssn parameter.

A valid value must be specified for the type parameter.

Notes

None

Output

```
dlt-gsmssn-scrn:ssn=255:type=dest
```

```
    rlghncxa03w 04-02-20 09:04:21 EST  EAGLE 31.3.0
    DLT-GSMSSN-SCRN: MASP A - COMPLTD
;
```

Related Commands

ent-gsmssn-scrn, *rtrv-gsmssn-scrn*

dlt-gta

Delete Global Title Address Information

Use this command to delete the GTA (global title address) information applicable to a global title selector combination.

This command deletes the routing of SCCP messages for specified global title addresses from designated destinations and their subsystem numbers.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

gttsn (mandatory)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

acn (optional)

Application context name. The ITU TCAP *ACN* field in the incoming MSU.

Range:

0 - 255, ***, *none*

This parameter supports up to 7 subfields separated by a dash (e.g., *1-202-33-104-54-26-007*).

* —any valid value in the ITU TCAP *ACN* field in the incoming MSU

none —there is no value in the ITU TCAP *ACN* field in the incoming MSU

cdssn (optional)

Starting CdPA subsystem number.

Range:

0 - 255

cgpc (optional)

ANSI CgPA point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

cgpa

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

cgpci (optional)

ITU international CgPA point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cgpcn (optional)

ITU national CgPA point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cgpcn24 (optional)

24-bit ITU national CgPA point code with subfields main signaling *area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

cgpcn16 (optional)

16-bit ITU national CgPA point code with subfields *unit number-sub number area-main number area* (*un-sna-mna).*

Range:

000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

cgssn (optional)

Starting CgPA subsystem number.

Range:

0 - 255

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Point Code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national destination point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

ecdssn (optional)

Ending CdPA subsystem number.

Range:

0 - 255

ecgssn (optional)

Ending CgPA subsystem number.

Range:

0 - 255

egta (optional)

End global title address. This parameter specifies the end of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*

Default:

Same as the specified gta value

family (optional)

This parameter specifies the ANSI TCAP *family* field in the incoming MSU.

Range:

*0 - 255, *, none*

* —any valid value in the ANSI TCAP *family* field in the incoming MSU

none —there is no value in the ANSI TCAP *family* field in the incoming MSU

gta (optional)

Global title address. The beginning of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9* .

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

opci (optional)

ITU international originating point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national originating point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

opcode (optional)

This parameter specifies the TCAP *OPCODE* field in the incoming MSU.

Range:

*0 - 255, *, none*

*—any valid value in the TCAP *opcode* field in the incoming MSU

none—there is no value in the TCAP *opcode* field in the incoming MSU

pkgtype (optional)

Package type. The ANSI TCAP and ITU TCAP package type.

Range:

ansiuni
ANSI unidirectional

qwp
Query with Permission

qwop
Query without Permission

cwp
Conversation with Permission

cwop
Conversation without Permission

any
Wildcard value

bgn
Begin

cnt
Continue

ansiabort
ANSI abort

end
End

ituabort
ITU abort

ituuni
ITU unidirectional

resp
Response

ANSI TCAP PKGTYPE—
ansiuni, *qwp*, *qwop*, *resp*, *cwp*, *cwop*, *ansiabort*, *any*

ITU TCAP PKGTYPE—

bgn, ituabort, ituuni, any, end, cnt

Example

```
dlt-gta:gttsn=setcdgta:gta=123456789012345678901:egta=223456789012345678901
dlt-gta:gttsn=t800:gta=919461:egta=919468
dlt-gta:gttsn=setcggta:gta=323456789012345678901:egta=423456789012345678901
dlt-gta:gttsn=setcgpc:cgpca=001-001-001
dlt-gta:gttsn=setopc:opca=002-001-001
dlt-gta:gttsn=setcgssn:cgssn=100:ecgssn=200
```

The following example specifies hexadecimal digits for the GTA and EGTA.

```
dlt-gta:gttsn=set1:gta=abcd:egta=abce
```

The following examples specify the GTA translations when the FLOBR feature is on.

```
dlt-gta:gttsn=setcdssn:cdssn=100:ecdssn=150
dlt-gta:gttsn=setdpc:dpci=1-101-1
dlt-gta:gttsn=gtt1:cgpcn16=45-1-0
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

The gttsn parameter must be specified, cannot have a value of *none*, and must match an existing gttsn.

The length of the specified gta parameter must match the number of digits provisioned for the specified GTT set when the VGTT feature is turned off. If the VGTT feature is turned on, then up to 10 GTA lengths can exist per GTT set. If the Support for 16 GTT Lengths in VGTT feature is turned on, then up to 16 GTA lengths can exist per GTT set.

The specified gta/egta range must exist for the specified GTT set in the STP active database. While an exact match is not required, you cannot specify an overlap with another range. If the range overlaps, an error is generated that displays a list of overlapped global title addresses. An example follows that shows what happens when the user attempts to enter a global title address range (such as 8005550000 to 8005559999) that overlaps an existing range. The overlapping links must match. If they do not, the error message displays the list of overlapped global title addresses:

The following GTA ranges overlap the input GTA range START GTA END GTA 8005550000 8005551999 8005552000 8005553999 8005554000 8005555999 DLT-GTA: MASP A - Command Aborted

If the egta parameter is specified, the gta and egta value must be the same length and the egta value must be greater than the gta value.

The GTT table cannot be full in case a delete command causes a split requiring more entries to be added.

The cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, cgssn, gta, cdssn, opcode/acn/pkgtype, opcode/family/pkgtype, or dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be specified.

The cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16 and dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameters must have a valid value within the range for each subfield.

If specified, the ecgssn/ecdssn parameter must be greater than the cgssn/cdssn parameter.

The Origin-based SCCP Routing feature must be enabled when specifying the cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, or (e)cgssn parameters.

The gta parameter must be specified if the GTTSN set type has a value of cdgta or cggta, and cannot be specified for other set types.

The cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameter must be specified if the GTTSN set type has a value of cgpc, and cannot be specified for other set types.

The opc/opca/opci/opcn/opcn24/opcn16 parameter must be specified if the GTTSN set type has a value of opc, and cannot be specified for other set types.

The cgssn parameter must be specified if the GTTSN set type has a value of cgssn, and cannot be specified for other set types.

If the specified GTT Set is an ANSI set, then the cgpc/cgpca, opc/opca, and dpc/dpca parameters must be valid ANSI point codes. If the specified GTT Set is an ITU set, then the cgpci/cgpcn/cgpcn24/cgpcn16, opci/opcn/opcn24/opcn16, and dpci/dpcn/dpcn24/dpcn16 parameters must be valid ITU point codes.

The range specified by the cgssn/ecgssn and cdssn/ecdssn parameters must exist for the specified GTT set.

The translation entry associated with the specified point code (dpc/dpca/dpci/dpcn/dpcn24/dpcn16, pc/pca/pci/pcn/pcn24/pcn16, or opc/opca/opci/opcn/opcn24/opcn16 or opcode value must already exist.

The range specified by the cgssn/ecgssn and cdssn/ecdssn parameters cannot overlap an existing range for the specified GTT set.

The cgpc, cgssn, gta, opc, cdssn, and opcode parameters cannot be specified together in the command.

If the cgssn and cdssn parameters are both specified in the same command (in any order), then only the value for the last of the two parameters specified is used during processing.

The Hex Digit Support for GTT feature must be enabled and on before hexadecimal digits can be specified for the gta or egta parameters.

If the specified GTT set has a set type of opcode (see the `ent-gttset` command), then the opcode/acn/pkgtype or opcode/family/pkgtype parameters must be specified. These parameters cannot be specified for GTT sets with other set types.

If the specified GTT set has a set type of cdssn (see the `ent-gttset` command), then the cdssn parameter must be specified. The cdssn parameter cannot be specified for GTT sets with other set types.

The value specified for the gttsn parameter must match the name of an existing GTT Set.

A TOBR quantity feature must be turned on before the opcode, pkgtype, acn, or family parameter can be specified.

The opcode, pkgtype, and family parameters must be specified together for ANSI TCAP translations. The opcode, pkgtype, and acn parameters must be specified together for ITU TCAP translations.

If the cgssn parameter is specified, then the ecdssn parameter cannot be specified. If the cdssn parameter is specified, then the ecgssn parameter cannot be specified.

If the family parameter is specified, then the pkgtype parameter must have a value of *ansiuni*, *qwp*, *qwop*, *resp*, *cwp*, *cwop*, *ansiabort*, or *any*.

If the acn parameter is specified, then the pkgtype parameter must have a value of *bgn*, *ituabort*, *ituuni*, *any*, *end*, or *cnt*.

If the pkgtype=ituabort parameter is specified, then a value of *none* must be specified for the acn and opcode parameters.

If the pkgtype=ansiabort parameter is specified, then a value of *none* must be specified for the family and opcode parameters.

If the GTT set specified by the gttsn parameter has a set type of dpc (see the `ent-gttset` command), then the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be specified. If the set type has a value other than dpc, then the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot be specified.

The FLOBR feature must be turned on before the cdssn, ecdssn, or dpc parameter can be specified.

If the translation entry is referenced in GTT Action Path table, then the entry cannot be deleted.

The specified GTT set must have a set type of opcode (see the `ent-gttset` command) before the opcode/acn/pkgtype or opcode/family/pkgtype parameters can be specified. The specified GTT set must have a set type of cdssn, cgssn, cdgta/cgta, opc, or cgpc before the cdssn, cgssn, gta, opc, or cgpc parameter, respectively, can be specified.

The acn and family parameters cannot be specified together in the command.

If the opc or dpc parameter is specified, then the (e)gta, (e)cgssn, (e)cdssn, and opcode parameters cannot be specified.

Notes

If a GTT is being deleted or changed and the point code (DPC or RTE) is not found in the route table (unless the point code is the STP's true point code), the following message is displayed in the terminal scroll area:

```
NOTICE: No DPC and/or RTE found for GTT being deleted or changed.
```

The above situation may occur for the following reasons:

A database was upgraded from a release prior to EAGLE Release 27.1 or IP7 Secure Gateway Release 3.0 when GTT entries were not linked to the route table and the deletion of the DPC was permitted. The GTT referenced a DPC/RTE that was deleted, and the enforce reference counts between the GTT and route tables were not updated.

- A serious problem occurred in which the reference count rules were not enforced and a DPC and/or RTE were deleted while being referenced by a GTT entry. This indicates a software error; notify the Customer Care Center.

Output

The following example specifies GTA translations when the FLOBR feature is on.
`dlt-gta:gttsn=setcdssn:cdssn=100`

```
    rlghncxa03w 10-03-10 09:04:21 EST  EAGLE 42.0.0
    DLT-GTA: MASP A - CMPLTD
;
```

Related Commands

chg-gta, *ent-gta*, *rtrv-gta*

dlt-gtcnv

Delete Global Title Conversion

Use this command to delete entries from the Default Global Title Conversion table. The particular entry to be deleted is identified by the direction in conjunction with the TTA or TTI, or with the TTI, NP, and NAI.

Parameters

dir (mandatory)

Direction of conversion.

Range:

atoi

ANSI to ITU conversion

itoa

ITU to ANSI conversion

both

Conversion in both directions

nai (optional)

Nature of Address Indicator. This parameter is mandatory when gtixlat=24 is specified, and cannot be specified when gtixlat=22 is specified.

Range:

*0 - 63, **

Default:

No change to current value

np (optional)

Numbering Plan. This parameter is mandatory when gtixlat=24 is specified, and cannot be specified when gtixlat=22 is specified.

Range:

*0 - 15, **

Default:

No change to current value

tta (optional)

ANSI translation type. This parameter is mandatory when dir=atoi or dir=both is specified.

Range:

*0 - 255, **

Default:

No change to current value

tti (optional)

ITU translation type. This parameter is reqired when dir=atoi is specified.

Range:

*0 - 255, **

Default:

No change to current value

Example

The following example deletes an ANSI-to-ITU entry using the TTA of 10 to identify the entry.

```
dlt-gtcnv:dir=atoi:tta=10
```

The following example deletes an ANSI-to-ITU entry using the TTA of 11 to identify the entry.

```
dlt-gtcnv:dir=atoi:tta=11
```

The following example deletes a ITU-to-ANSI entry using the TTI of 7, NAI of 8, and NP of 6 to identify the entry.

```
dlt-gtcnv:dir=itoa:tti=7:nai=8:np=6
```

The following example deletes a BOTH (ANSI <-> ITU) entry using the TTI of 9 and TTA of 12 to identify the entry.

```
dlt-gtcnv:dir=both:tta=12:tti=9
```

The following example deletes a BOTH (ANSI <-> ITU) entry using the TTI of 7, NAI of 6, NP of 4, and TTA of 12 to identify the entry.

```
dlt-gtcnv:dir=both:tta=12:tti=7:np=4:nai=6
```

The following example deletes an ANSI-to-ITU default entry using the TTA of * to identify the entry.

```
dlt-gtcnv:dir=atoi:tta=*
```

The following example deletes an ITU-to-ANSI default entry using the TTI and NAI of * and NP of * to identify the entry.

```
dlt-gtcnv:dir=itoa:tti=*:nai=*:np=*
```

Dependencies

The ANSI/ITU SCCP Conversion feature must be enabled before this command can be entered.

The specified dir, tta, tti, np, and nai parameter combination must already exist in the database.

If the dir=atoi parameter is specified, then the tta parameter must be specified.

If the dir=atoi parameter is specified, then the tti, nai, and np parameters cannot be specified.

If the dir=itoa parameter is specified, then the tti parameter must be specified.

If the dir=itoa parameter is specified, then a wildcard value (*) must be specified for the tti, np, and nai parameters.

If the dir=both parameter is specified, then the tta and tti parameters must be specified.

If the dir=both parameter is specified, then a wildcard value (*) cannot be specified for any of the other parameters.

If specified, the nai and np parameters must be specified together in the command.

If the dir=itoa and gtixlat=22 parameters are specified, then wildcard values (*) cannot be specified. The dir=itoa and gtixlat=24 parameters must be specified before wildcard values can be specified.

If the dir=itoa parameter is specified, then the tta parameter cannot be specified.

Notes

To delete an ANSI-to-ITU entry, specify the direction (dir) and TTA.

To delete an ITU-to-ANSI entry when gtixlat=22, specify the direction and TTI.

To delete an ITU-to-ANSI entry when gtixlat=24, specify the direction, TTI, NAI, and NP.

To delete a BOTH (ANSI <-> ITU) entry when gtixlat=22, specify the direction, TTA and TTI.

To delete a BOTH (ANSI <-> ITU) entry when gtixlat=24, specify the direction, TTA, TTI, NP and NAI.

Output

```
dlt-gtcnv:dir=both:tta=12:tti=9
```

```
    rlghncxa03w 03-03-18 08:50:12 EST  EAGLE 31.3.0
    DLT-GTCNV: MASP A - COMPLTD
;
```

Related Commands

chg-gtcnv, *ent-gtcnv*, *rtrv-gtcnv*

dlt-gtmod

Delete GT Modification Data

Use this command to delete an existing GT Modification (GTMOD) entry. The GTMOD entry consists of a GTMOD ID and GTMOD specific data.

Parameters

gtmodid (mandatory)

GT Modification Identifier.

Range:

ayyyyyyyy

1 alphabetic character followed by 8 alphanumeric characters

Example

```
dlt-gtmod:gtmodid=set1
```

Dependencies

If the GTMOD identifier is referenced in the GTT or GTT Action tables, then the identifier cannot be deleted.

The value specified for the gtmodid parameter must already exist in the GTMOD table.

The gtmodid=none parameter cannot be specified.

Output

```
dlt-gtmodid:gtmodid=set1
```

```
    tekelecstp 10-03-08 18:38:05 EST  EAGLE 42.0.0

    GTMOD table is (2 of 100000) 1% full

    DLT-GTMOD: MASP A - COMPLTD
;
```

Related Commands

chg-gtmod, *ent-gtmod*, *rtrv-gtmod*

dlt-gtt

Delete Global Title Translation

Use this command to remove the routing of messages for specified global title addresses from designated destinations and their subsystem numbers.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`)

commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

gta (mandatory)

Global title start address. The beginning of a range of global title digits.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

egta (optional)

Global title end addresss. The end of a range of global title digits.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F* .

Default:

value of the gta parameter

ttn (optional)

Translation type name.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

Default:

No translation name is given

type/typea/typei/typen/typen24/typeis/typens (optional)

Translation type. This parameter identifies the translation type and network type. This parameter is the decimal representation of the 1-byte field used in SS7.

The type and typea parameters specify an ANSI network.

The typei parameter specifies an ITU-international network.

The typen parameter specifies an ITU-national network.

The typen24 parameter specifies a 24-bit ITU-national network.

The typeis parameter specifies an ITU-international spare network.

The typens parameter specifies an ITU-national spare network.

A translation type numeric value may be entered as ANSI type (type or typea) and as an ITU type (typi/typen/typen24/typeis/typens). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE protocol processing as either ANSI or ITU; therefore, ITU applies to ITU-I, ITU-I spare, ITU-N, ITU-N spare, and ITU-N24.

Range:

0 - 255

Default:

No translation type is specified

Example

```
dlt-gtt:type=252:ttn=lidb9:gta=408908:egta=408988
dlt-gtt:gta=919833:typen24=4
dlt-gtt:ttn=set1:gta=abcd123456789a:egta=abcE123456789F
dlt-gtt:gta=123456:typeis=5
dlt-gtt:gta=123456:typens=5
```

Dependencies

If translation type is specified, it must exist in the database.

If the ttn parameter is specified, the name must correspond to a translation type entry.

If both ttn and type are specified, ttn must correspond to the given translation type.

The type or ttn parameter must specified.

The gta length must equal the number of digits specified by the translation type. If the VGTT (variable length GTT) feature is turned on, you can have up to 10 GTA lengths per translation type. When you enter the `ent-gtt` command to create entries, the software keeps track of the lengths and allows only ten different lengths.The global title address specified for the translation type must then have the same number of digits as an existing GTA.

The global title address range as expressed by the gta and egta parameters must already exist in the global title translation.

The range, as specified by the GTA and EGTA, must be exactly the same as a current entry or be contained within an existing range in the GTT data for the specified translation type. If the range overlaps, an error is generated that displays a list of overlapped global title addresses. An example follows that shows what happens when the user attempts to delete a global title address range (such as 8005550000 to 8005559999) that overlaps an existing range. The overlapping links must match. If they do not, the error message displays the list of overlapped global title addresses:

The following GTA ranges overlap the input GTA range START GTA END GTA 8005550000 8005551999 8005552000 8005553999 8005554000 8005555999 DLT-GTT: MASP A - Command Aborted

If the address range as specified by the start and end global title addresses does not exactly match the existing range, the range is split. All addresses in the existing range that are outside of the specified range are used to create new ranges. The specified range is deleted.

The Hex Digit Support for GTT feature must be enabled and on before hexadecimal digits can be specified for the gta or egta parameters.

If the egta parameter is specified, the value must be greater than the value specified for the gta parameter.

The tt parameter cannot be specified with a value that has been defined as an alias for another translation type.

The length of the specified GTA must match the number of digits provisioned for the specified Translation Type or the Translation Type referenced by the specified Translation Type Name, unless the PVGTT or VGTT feature is on. In the case the PVGTT feature is on the length of the specified GTA and EGTA can be less than or equal to the number of digits provisioned for the corresponding TT. In the case the VGTT feature is on, up to 10 different lengths can be provisioned per TT.

The gta length is not defined for the specified translation type entity.

The GTT table cannot be full.

The GTT set associated with the translation type specified by the ttn parameter must have a set type of *cdgta* (see the `ent-gttset` command).

The network domain of the translation type specified by the ttn parameter cannot be CROSS (see the `ent-gttset` command).

The ttn=none parameter cannot be specified.

The xlat=none parameter cannot be specified.

If the translation entry is referenced in GTT Action Path table, then the entry cannot be deleted.

Notes

If the OBSR or FLOBR feature is turned on, then this command can delete only translation entries that have been provisioned by GTA commands and that have a set type of CdGTA.

Output

```
dlt-gtt:type=252:ttn=lidb9:gta=408908:egta=408988
```

```
    rlghncxa03w 04-01-07 11:43:07 EST  EAGLE 31.3.0
    DLT-GTT:  MASP A - COMPLTD
;
```

Related Commands

chg-gtt, *ent-gtt*, *rtrv-gtt*

dlt-gttact

Delete a GTT Action entry

Use this command to delete an existing Global Title Translations (GTT) Action entry.

Parameters

actid (mandatory)

GTT Action ID. The Action ID associated with the GTT Action entry.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

Example

```
dlt-gttact:actid=disc1
```

Dependencies

The specified Action ID must already exist in the database.

The Action ID specified by the actid parameter cannot be referenced by an Action Set or an action entry that is associated an action of fwd.

The Action ID specified by the actid parameter cannot be associated with an action of *none* or *fallback*.

The GTT destination must exist in the DSTN table.

Output

```
dlt-gttact:actid=disc1
```

```
    tekelecstp 10-02-04 18:38:05 EST  EAGLE 42.0.0
    dlt-gttact:actid=disc1
    Command entered at terminal #4.

    GTT Action table is (1 of 2000) 1% full

    DLT-GTTACT: MASP A - COMPLTD
;
```

Related Commands

chg-gttact, *ent-gttact*, *rtrv-gttact*

dlt-gttapath

Delete a GTT Action Path Entry

Use this command to delete a GTT Action Path entry. A GTT Action Path entry consists of pairs of "setname + value" for Opcode/CgGTA/CdGTA. Each of these "setname + value" pairs should already be defined in the GTT translation table.

Parameters

gttpn (mandatory)

GTT Path name.

Range:

ayyyy

1 leading alphabetic character and up to 4 following alphanumeric characters.

Example

```
dlt-gttapath:gttpn=path1
```

Dependencies

The GTT Action - DISCARD, GTT Action - FORWARD, or GTT Action - DUPLICATE feature must be enabled before this command can be entered.

The GTT path name specified by the gttpn parameter must already exist in the database.

The value specified for the gttpn parameter cannot be a reserved word.

Output

```
dlt-gttapath:gttpn=path1
```

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0
    dlt-gttapath:gttpn=path1
    Command entered at terminal #4.

    GTT Action Path table is (2 of 10000) 1% full

    DLT-GTTAPATH: MASP A - COMPLTD
;
```

Related Commands

chg-gttapath, *ent-gttapath*, *rtrv-gttapath*

dlt-gttaset

Delete a GTT Action Set.

Use this command to delete an existing Global Title Translations (GTT) Action Set.

Parameters

actsn (mandatory)

GTT Action Set Name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

Example

```
dlt-gttaset:actsn=asetdisc1
```

Dependencies

The specified GTT Action Set must already exist in the database.

The GTT Action entry cannot be referred by any translation entry.

The actsn=none parameter cannot be specified.

The EGTT feature must be turned on before this command can be entered.

Output

```
dlt-gttaset:actsn=asetdisc1
```

```
    tekelecstp 10-02-04 18:38:05 EST  EAGLE 42.0.0
    dlt-gttaset:actsn=asetdisc1
    Command entered at terminal #4.

    GTT Action Set table is (1 of 20000) 1% full

    DLT-GTTASET: MASP A - COMPLTD
;
```

Related Commands

chg-gttaset, *ent-gttaset*, *rtrv-gttaset*

dlt-gttsel Delete GTT Selectors

Use this command to delete an applicable global title translation (GTT) selector.

Note: When the EGTT feature is turned on, the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is turned on.

Parameters

Note: The nature of address indicator parameters (naivornai) can be specified using a mnemonic or an explicit value. Either the mnemonic or the explicit value can be specified: however, both values

cannot be specified at the same time for the same parameter. *Table 60: NAIV/NAI Mapping* shows the mapping between the naiv and nai parameter values.

Note: The numbering plan parameters (npv or np) can be specified using a mnemonic or an explicit value. Either the mnemonic or explicit value can be specified: however, both values cannot be specified at the same time for the same parameter.*Table 61: NPV/NP Mapping*shows the mapping between thenpvandnpparameter values.

gti/gtia/gtii/gtin/gtin24/gtiis/gtins/gtin16 (mandatory)

Global title indicator.

For all EGTT selector commands, the domain is defined as **gti** and **gtia** (ANSI), **gtii**(ITU international), **gtin** (ITU national), **gtin24** (24-bit ITU national), **gtiis** (ITU international spare), **gtins** (ITU national spare) and **gtin16** (16-bit ITU national).

For the selector commands, gti and gtia are equivalent. GTT selectors can be provisioned for the same translation type (TT) with different ITU domains.

Range:

0, 2, 4

Supported value for ANSI: gti=0, 2 and gtia=0, 2

Supported values for ITU: gtii/gtin/gtin24/gtiis/gtins/gtin16=0, 2, 4

cgssn (optional)

CgPA subsystem number.

Range:

0 - 255

eaglegen (optional)

This parameter specifies whether the selector is used by EAGLE generated messages.

Range:

yes

used by EAGLE generated messages

lsn (optional)

Linkset name.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

nai (optional)

Nature of Address indicator.

Range:

sub

rsvd

natl

intl

dflt

naiv (optional)

Nature of Address indicator value.

Range:

0 - 127

np (optional)

Numbering Plan.

Range:

e164

generic

x121

f69

e210

e212

e214

private

dflt

npv (optional)

Numbering Plan value.

Range:

0 - 15

selid (optional)

Selector ID.

Range:

0 - 65534

tt (optional)

Translation type.

Range:

0 - 255

Example

```
dlt-gttsel:gti=2:tt=10
```

```
dlt-gttsel:gtin=4:tt=0:np=dflt:nai=dflt
dlt-gttsel:gtia=2:tt=21:cgssn=20:selid=1:lsn=ls10
dlt-gttsel:gtia=2:tt=2:eaglegen=yes
dlt-gttsel:gti=0:selid=2
dlt-gttsel:gtiis=0
dlt-gttsel:gtins=0
dlt-gttsel:gtin16=2:tt=10
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

The np and npv parameters cannot be specified together in the same command.

The nai and naiv parameters cannot be specified together in the same command.

The gti/gtia=4, gti(x)=1, and gti(x)=3 parameters cannot be specified.

If the gti/gtia/gtii/gtin/gtin24/gtiis/gtins/gtin16 =2 parameter is specified, then the np/npv and nai/naiv parameters cannot be specified.

If the gtii/gtin/gtin24/gtiis/gtins/gtin16 =4 parameter is specified, then an np(v) and nai(v) parameter combination must be specified. These parameters can be specified in any combination: np/naiv, npv/nai, np/nai, or npv/naiv.

The FLOBR feature must be turned on before the lsn or eaglegen parameters can be specified.

If the eaglegen=yes parameter is specified, then the lsn, selid, or cgssn parameters cannot be specified.

The GTT selector specified by the gti(x), tt, and np(v) and nai(v) parameters must already exist.

A value of dflt must be specified for the np and nai parameters, or neither parameter can have a value of dflt.

The OBSR feature must be enabled before the cgssn parameter can be specified.

If a value of dflt is specified for the np and nai parameters, then the cgssn, selid, lsn, or eaglegen parameters cannot be specified.

The linkset specified by the lsn parameter must already exist.

If the gti(x)=0 parameter is specified, then the eaglegen, tt, np/npv, and nai/naiv parameters cannot be specified.

If a value of 2 or 4 is specified for the gti(x) parameter, then the tt parameter must be specified.

Notes

There is no J7 FAK dependency on GTIA/GTIN16/GTIN24 parameters. The command can be entered successfully whether the J7 FAK is enabled or not enabled.

GTT Selector entries configured using GTIN24/GTIN16 parameters shall be treated as ITU-N24 entries if the J7 FAK is disabled and treated as ITU-N16 entries if the J7 FAK is enabled.

Output

`dlt-gttsel:gti=0`

```
    tekelecstp 10-02-05 16:35:13 EST  Eagle 42.0.0
    dlt-gttsel:gti=0
    Command entered at terminal #4.
    DLT-GTTSEL: MASP A - COMPLTD
;
```

Related Commands

chg-gttsel, *ent-gttsel*, *rtrv-gttsel*

dlt-gttset **Delete GTT Set**

Use this command to delete the specified global title translation set.

Note: When the EGTT feature is turned on, the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is turned on.

Parameters

gttsn (mandatory)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

Example

`dlt-gttset:gttsn=t800`

Dependencies

The EGTT feature must be turned on before this command can be entered.

The gttsn parameter must be specified, cannot have a value of *none*, and must match an existing GTT set.

The GTT set cannot be deleted if it is referenced in the GTTSEL or GTA tables or if the GTT set is used by the IS41SMSCGTTSN option (see the `ent/chg-gsmsmsopts` command) or BPARTYGTTSN option (see the `ent/chg-is41smsopts` command).

If a translation is provisioned in the specified GTT set, or if the GTT set is referred by any translation, then the GTT set cannot be deleted.

The value specified for the gttsn parameter must match the name of an existing GTT Set.

Notes

None

Output

`dlt-gttset:gttsn=t800`

```
    rlghncxa03w 09-08-09 08:20:26 EST  EAGLE 41.1.0
    DLT-GTTSET: MASP A - CMPLTD

    GTT-SET table is (3 of 2000) 1% full.
;
```

Related Commands

chg-gttset, *ent-gttset*, *rtrv-gttset*

dlt-gws-redirect

Delete Gateway Screening Redirect Command

Use this command to delete the provisioning of the redirect function and subsequently to disable the gateway screening redirect function. After the gateway screening redirect function is disabled, you must use `ent-gws-redirect` to enable the function again.

Parameters

This command has no parameters.

Example

`dlt-gws-redirect`

Dependencies

The redirect function data that will be deleted (removed) with this command must exist in the database.

Notes

None

Output

```
dlt-gws-redirect
```

```
    rlghncxa03w 04-02-10 11:43:04 EST  EAGLE 31.3.0
    DLT-GWS-REDIRECT: MASP A - COMPLTD
;
```

Related Commands

chg-gws-redirect , *ent-gws-redirect*, *rtrv-gws-redirect*

dlt-home-smsc

Delete HOME SMSC Address

Use this command to delete HOME SMSC specific addresses currently used to identify Short Message Service Centers in the database. This command updates the HOME SMSCADDR table.

Parameters

smsc (mandatory)

Short Message Service Center address.

Range:

1-21 digits

1-21 hexadecimal digits

Example

```
dlt-home-smsc:smsc=552611646
```

Dependencies

One of the following features must be enabled before this command can be entered.

- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- MT-Based GSM SMS NP
- MT-Based IS41 SMS NP
- Portability Check for Mobile Originated SMS

The specified HOME SMSC address must exist in the HOME SMSCADDR table.

The HOME SMSCADDR table must be accessible.

The GSM DBMM table must be accessible.

Notes

None

Output

```
dlt-home-smsc:smsc=552611646
```

```
    rlghncxa03w 04-02-28 08:50:12 EST  EAGLE 31.3.0
    DLT-HOME-SMSC: MASP A - COMPLTD
;
```

Related Commands

ent-home-smsc, *rtrv-home-smsc*

dlt-homern

Delete Home Routing Number Prefix

Use this command to delete a routing number prefix from the HOMERN table.

Parameters

rn (mandatory)

The home routing number prefix

Range:

1 - 15 digits

Example

```
dlt-homern:rn=C441234
```

Dependencies

The specified routing number must already exist in the HOMERN table.

A value of *none* cannot be specified for the rn parameter.

The A-Port, AINPQ, G-Port, INP, or V-Flex feature must be turned on before this command can be entered.

The HOMERN table must be accessible.

Notes

None

Output

```
dlt-homern:rn=C441234
```

```
    rlghncxa03w 04-02-28 08:50:12 EST  EAGLE 31.3.0
    HOMERN table is (1 of 100) 1% full
    DLT-HOMERN: MASP A - COMPLTD
;
```

Related Commands

ent-homern, *rtrv-homern*

dlt-ip-conn

Delete IP Connection

Use this command to delete existing SIP or ENUM connection information. The IPCONN table supports the provisioning information related to the SIP or ENUM connections.

Parameters

cname (mandatory)

Connection name. This parameter specifies the unique logical name assigned to each SIP or ENUM connection.

Range:

zzzzzzzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and upto 15 characters in length. Valid values are a..z, A..Z, 0..9.

Example

```
dlt-ip-conn:cname=conn1101a
```

Dependencies

SIPNP Feature must be enabled before deleting any existing SIP connection.

At least one ENUM card must be provisioned before entering any ENUM connection information.

IPCONN table should be accessible.

The value specified for the CNAME parameter must already exist in the IPCONN table.

Any Connection that is still OPEN to receive traffic cannot be deleted (the open parameter set to yes with the chg-ip-conn command).

Notes

None

Output

```
dlt-ip-conn:cname=conn1102a
```

```
tekelecstp 12-06-25 15:29:14 EST EAGLE 45.0.0
dlt-ip-conn:cname=conn1102a
Command entered at terminal #4.
DLT-IP-CONN: MASP A - COMPLTD


;
```

Related Commands

ent-ip-conn, *rtrv-ip-conn*, *chg-ip-conn*

dlt-ip-host — Delete Internet Protocol Hostname

Use this command to delete entries from the IP Host table. The IP Host table defines the local and remote host names and their associated IP addresses.

Parameters

host (mandatory)

Host name. This parameter specifies the logical name assigned to the host device.

Range: zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 60 characters in length

Valid values are *a..z, A..Z, 0..9, ., -*

Example

```
dlt-ip-host:host=gw100.nc.tekelec.com
```

Dependencies

A valid value must be specified for the host parameter. If the value contains a hyphen, then the host name must be enclosed within quotation marks.

The value specified for the host parameter must already exist in the IP Host table.

Before a local entry can be deleted from the IP Host table, all association references to the hostname must be deleted. This rule is also applied for remote host entries associated with diameter adapter.

Notes

It is possible to remove/delete a remote host while the association is an in-service state without tearing down the corresponding association. If that association goes down in the future and a new SCTP-init is received, this change (delete of the remote host) will prevent the association from connecting.

Output

```
dlt-ip-host:host=gw100.nc.tekelec.com
```

```
    rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
    DLT-IP-HOST: MASP A - COMPLTD
;
```

Related Commands

ent-ip-host, *rtrv-ip-host*

dlt-ip-node

Delete IP Node

Use this command to remove an IP node from the database that is directly connected to a TCP/IP data link used for the STP LAN feature. You can remove a particular connection, a particular application on a node, or an entire node.

Parameters

ipaddr (mandatory)

The node's IP address. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.126.100.5*, where *192.126.100* is the network number and *5* is the machine's host number.

Range:

1-223, 0-255

4 numbers separated by dots

1-223—first number

0–255—the other three numbers

force (optional)

Whether or not to remove all applications associated with the node, thus removing the entire node from the database.

Range:

yes

Delete all connections to node

no

Delete specified application or connection

Default:

no

ipappl (optional)

The IP application supported by the node.

Range:

stplan

Default:

none

ipport (optional)

The logical IP port that addresses the application on the node.

Range:

1024 - 5000

Default:

none

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 530, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

none

Example

To delete the connection for a TCP/IP link associated with an STPLAN on a specified location:

```
dlt-ip-node:ipaddr=193.4.201.50:ipappl=stplan:loc=1201
```

To delete the connection for a TCP/IP link associated with an IPPORT on a specified location:

```
dlt-ip-node:ipaddr=193.4.201.50:ipport=1024:loc=1201
```

To delete all connections for TCP/IP links associated with the STPLAN on all locations:

```
dlt-ip-node:ipaddr=193.4.201.50:ipappl=stplan
```

To delete the connection for TCP/IP links associated with an IPPORT:

```
dlt-ip-node:ipaddr=193.4.201.50:ipport=1024
```

To delete all connections for a TCP/IP link associated with any application on a specified location:

```
dlt-ip-node:ipaddr=193.4.201.50:loc=1201
```

To delete all connections for TCP/IP links associated with any application on any location:

```
dlt-ip-node:ipaddr=193.4.201.50:force=yes
```

Dependencies

The ipappl must be supported by the node.

The ipport must exist.

The ipaddr must exist.

The force parameter must be specified to remove an entire node.

The ipappl, ipport, loc, or force=yes parameter must be specified.

If the force=yes parameter is specified, the ipappl, ipport, and loc parameters cannot be specified.

The ipappl and ipport parameters cannot be specified together in the command.

If the loc parameter is specified, the shelf and card must be equipped.

If the loc parameter is specified, the specified card must have a TCP/IP data link assigned to it.

If the loc parameter is specified, the IP port on the node must be assigned to the application for the specified TCP/IP data link.

If the loc and ipaddr parameters are specified, the specified IP address must match the IP address of the card location's remote IP node.

If the loc and ipport parameters are specified, the specified IP port must match the card location's remote IP port.

If the loc and ipappl parameters are specified, the specified IP application must match the card location's remote IP application.

Notes

A particular application can be specified by giving either the application's name or its IP port on the node.

Only Class A, Class B, and Class C IP addresses are supported by the STP LAN feature.

Output

```
dlt-ip-node:ipaddr=193.4.201.50:loc=1201
```

```
    rlghncxa03w 04-02-10 11:43:04 EST  EAGLE 31.3.0
    Deleting multiple nodes on disk - please wait...
    DLT-IP-NODE: MASP A - COMPLTD
;
```

Related Commands

ent-ip-node, *rtrv-ip-node*

dlt-ip-rte

Delete IP Route

Use this command to delete a static IP route entry from the Static IP Route table (destination IP address, subnet mask, and gateway IP address) for the specified card.

Caution: The deletion of static IP routes can adversely affect IP connection oriented transports.

Parameters

dest (mandatory)

Destination IP Address. The remote destination host or network destination IP Address that is to be removed.

Range:

4 numbers separated by dots, with each number in the range of 0-255.

The IP address 0.0.0.0 is not valid.

loc (mandatory)

Card location. The unique identifier of a specific IP card in the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

force (optional)

A value of *yes* is required when the card is allowed and this command is to be completed.

Range:

yes

no

Default:

no

Example

```
dlt-ip-rte:loc=1301:dest=128.252.10.5
```

```
dlt-ip-rte:loc=1301:dest=128.252.10.5:force=yes
```

Dependencies

The specified destination IP address (dest parameter):

- Must not be the default route (0.0.0.0)
- Must not correspond to any loopback address (i.e. 127.X.X.X)
- Must not reside on this card's A or B network

The specified destination IP address must exist in the Static IP Route table.

The card in the location specified with the loc parameter should typically be inhibited for this command to complete successfully. The force=yes parameter is required when the card is allowed and the command is entered.

Notes

None

Output

```
dlt-ip-rte:loc=1301:dest=128.252.10.5
```

```
   rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
   DLT-IP-RTE:   MASP A - COMPLTD
;
```

Related Commands

rtrv-ip-lnk

dlt-j1 Delete J1 Interface

Use this command to delete J1 interface.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

j1port (mandatory)

The value must be a J1 port that has already been configured with a J1 interface on the specified T1 card with application as CCS7ITU.

Range:

1-8

Example

```
dlt-j1:loc=1101:j1port=2
```

Dependencies

The specified card location (loc parameter) must be equipped.

The card in the specified card location (loc parameter) must be a LIMT1 card type and application must be CCS7ITU.

The port specified by the j1port parameter must be already equipped with J1 interface.

The J1 table must be accessible.

The Card (IMT) table must be accessible.

All signaling links providing timeslots serviced by the specified J1 interface must be deleted before the J1 interface can be deleted. Use the dlt-slk command to delete the signaling links providing the timeslots.

Card locations 1113 - 1118 (OAM, TDM, MDAL cards) cannot be specified as values for the loc parameter.

J1port must be in range from 1 to 8.

Notes

None.

Output

```
dlt-j1:loc=1101:j1port=1
```

```
    tekelecstp 13-12-20 12:57:15 EST  46.0.0-65.3.0
    dlt-j1:j1port=1:loc=1101
    DLT-J1: MASP A - COMPLTD
;
```

Related Commands

chg-j1, *ent-j1*, *rtrv-j1*, *tst-j1*

dlt-lbp Delete Loopback Point

Use this command to delete one or all far-end loopback points maintained in the Link Fault Sectionalization table for testing data signaling link elements in a single CCS7 transmission path.

Parameters

link (mandatory)

SS7 signaling link. The SS7 signaling link that is to be tested.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling link ports.

loc (mandatory)

Card location. The unique identifier of the card containing the signaling link to be used for loopback point testing.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

all (optional)

Deletes all loopback points for the specified signaling link or deletes only the link specified on the lbp parameter.

Range:

yes

lbp (optional)

Loopback point ID. This parameter identifies a far-end loopback point that lies along an SS7 signaling link path between the STP and the target device (up to and including the target device).

Range:

1 - 32

Example

```
dlt-lbp:loc=1101:link=a:lbp=1
dlt-lbp:loc=1101:link=a:all=yes
```

Dependencies

At least one optional parameter must be specified.

The lbp parameter and the all parameter cannot be specified together in the command.

The Link Fault Sectionalization (LFS) feature must be on before this command can be entered.

The loopback point (LBP) must have been previously defined.

The card location indicated by the loc parameter must indicate an HC-MIM, E5-E1T1, or E5-E1T1-B card, provisioned with the LIMT1 card type, with either the SS7ANSI or CCS7ITU application.

The card location specified in the loc parameter must be equipped.

The card location specified in the loc parameter cannot be reserved by the system.

Notes

None

Output

`dlt-lbp:loc=1101:link=a:lbp=1`

```
    rlghncxa03w 05-02-17 15:35:05 EST  EAGLE5 33.0.0
    DLT-LBP: MASP A - COMPLTD
;
```

Related Commands

act-lbp, *chg-lbp*, *dact-lbp*, *ent-lbp*, *rtrv-lbp*

dlt-lnp-serv Delete LNP Service

Use this command to delete from the database an LNP service or an alias translation type associated with an LNP service.

Parameters

serv (mandatory)

Reserved service type name.

Range:

ain

in

pcs

wnp

class

lidb

cnam

isvm

lnpqs

wsmsc

udf1

udf2

udf3

udf4

lrnqt

alias (optional)

Alias translation type.

Range:

000 - 255

Example

```
dlt-lnp-serv:serv=lidb:alias=236
dlt-lnp-serv:serv=lrnqt
```

Dependencies

The LNP feature must be turned on before this command can be entered.

The value of the serv parameter must already exist in the LNP database.

The service must not be referenced in the LNP database.

The value of the alias parameter must be associated with the value of the specified serv parameter.

The value specified for the alias parameter cannot already exist in the LNP database as a true translation type.

All aliases associated with the LNP service must be deleted before the service can be deleted.

The value of the alias parameter must exist in the LNP database.

Notes

None

Output

```
dlt-lnp-serv:serv=cnam:alias=23
```

```
    rlghncxa03w 10-11-09 16:40:40 EST  EAGLE 43.0.0
    DLT-LNP-SERV: MASP A - COMPLTD
    Command Completed.
;
```

Related Commands

chg-lnp-serv, *ent-lnp-serv*, *rtrv-lnp-serv*

dlt-loopset

Delete Loop Set Command

Use this command to delete loopset and point code data from the database. This command updates the Loopset table.

Note: A total of 6 point codes can be deleted each time this command is issued. If the command is issued twice, all point codes in a loopset can be deleted, creating an empty loopset.

Parameters

name (mandatory)

Loopset name. This parameter specifies an entry in the Loopset table.

Range:

ayyyyyyy

1 alphabetic and up to 7 alphanumeric characters

force (optional)

The force=yes parameter must be specified to delete a single point code entry from a loopset that is being used by GTT.

Range:

yes

pcl (optional)

ANSI point code list with subfields *network indicator-network cluster-network cluster-member (ni-nc-ncm)*. The *prefix* subfield indicates a private point code*(prefix-ni-nc-ncm)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Synonym:

pcla

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pcli (optional)

ITU international point code list with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code *(prefix-zone-area-id)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcln (optional)

ITU national point code list in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the**chg-stpopts:npcfmti** flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

s-, p-, ps-, 0-16383, aa-zz, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

Enter *none* to delete the point code.

pcln24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pcln16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

Example

This example deletes the entire loopset table entry for the loopset RTP7 when that set is not being used by GTT.

```
dlt-loopset:name=rtp7
```

This example deletes a single point code in the entry for the loopset RTP2 when that set is being used by GTT.

```
dlt-loopset:name=rtp2:pcl=3-3-9:force=yes
```

This example deletes a point code for the loopset RTP1 when the loopset is not being used by GTT.

```
dlt-loopset:name=rtp1:pc1=3-3-9
```

This example deletes a point code for the loopset RTP1 when the loopset is not being used by GTT.

```
dlt-loopset:name=rtp1:pc1n16=3-3-9
```

Dependencies

The value of the name parameter must already exist in the database.

The SCCP Loop Detection feature must be enabled before this command can be entered.

The GTT feature must be turned on before this command can be entered.

A loopset entry cannot be deleted when it is being used by GTT.

If a point code in the Loopset table is being used by GTT, then the force=yes parameter must be specified before the pcl/pcli/pcln/pcln24/pcln16 parameter can be specified.

The values for the pcl parameter cannot consist of any invalid point codes. The valid point codes must be consecutively specified and separated by commas.

The name=none parameter cannot be specified.

At least one valid point code must be specified as a value for the pcl parameter.

The values for the pcl parameter must be unique.

The value of the pcl parameter must exist in the loopset entry in the database.

Notes

There is no J7 FAK dependency on the pcln16 parameter. The command can be entered successfully when the J7 FAK is not enabled.

There is no J7 FAK dependency on the pcl/pcla/pcln24 parameters. The command can be entered successfully when the J7 FAK is enabled.

Output

The following example deletes a single point code in the entry for the loopset RTP2 when the set is being used by GTT. `dlt-loopset:name=rtp2:pcl=3-3-9:force=yes`

```
    rlghncxa03w 07-02-10 08:48:25 EST  EAGLE Rel 35.6.0
    LOOPSET table is (11 of 1000) 1% full
    DLT-LOOPSET: MASP A – COMPLTD
;
```

Related Commands

chg-loopset, *ent-loopset*, *rtrv-loopset*

dlt-ls Delete Linkset

Use this command to remove a linkset from the system database. A linkset is a group of signaling links carrying traffic to the same signaling point.

Parameters

lsn (mandatory)

Linkset name. This parameter specifies the name of the linkset. Only one linkset name per command can be specified.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Example

```
dlt-ls:lsn=lsna
```

Dependencies

The linkset must be in the database.

The linkset can be removed only if all links associated with the linkset have been removed.

If the linkset is referenced by the historic routeset of any destination, then this command cannot be entered.

The specified linkset cannot be deleted if it has or is a mate linkset.

A gateway linkset can be deleted only from a SEAS terminal, and not from a system terminal.

The linkset cannot be deleted if an SAPC entry is present for the linkset.

If the linkset is referenced by the historic routeset of any exception route destination, then this command cannot be entered.

SAPC entry present for the linkset.

If multiple linksets are assigned to an adjacent point code, then the proxy linkset must be the final linkset that is deleted.

If the linkset that is specified by the lsn parameter is used as an incoming linkset for an exception route entry (see the `rtrv-rtx` command), then this command cannot be entered.

If the linkset is referenced by the GTT selector table, then this command cannot be entered.

The GTT destination must exist in the DSTN table.

Notes

When a linkset is removed from the system database, the related entries are removed automatically from the translation type mapping table.

Output

```
dlt-ls:lsn=lsna
```

```
rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
Link set table is (114 of 1024) 11% full
```

```
    DLT-LS: MASP A - COMPLTD
;
```

Related Commands

chg-l3t, *ent-ls*, *rept-stat-ls*, *rtrv-ls*

dlt-map

Delete Mate Applications

Use this command to remove mate application entries, groups, or an Alternate RI Mate associated with a MAP Set. This command removes one or more entries from the Remote Point Code Subsystem Number table.

Caution: If PC/SSNs within a weighted entity set are deleted such that the entity set's multiplicity mode becomes solitary or dominant, the weight values are reset to indicate a non-weighted entity set.

Note: See the "Notes" section for this command for additional information on multiplicity modes.

Note: The GTT LS ARI feature must be enabled before an Alternate RI Mate can be deleted from a MAP Set.

Parameters

Note: At least one of these parameters must be specified: all, ssn.

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

pc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (mandatory)

Post-GTT-translated point code.

pci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (mandatory)

16-bit ITU national point code with subfields unit number-sub number area-main number area (un-sna-mna).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

all (optional)

This parameter must be specified to remove all subsystem numbers associated with this point code. If this parameter is not specified, only the specified subsystem number is removed.

Range:

yes

Default:

no

mapset (optional)

The MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

Default:

dflt —If the Flexible GTT Load Sharing (FGTTLS) feature is not enabled,

mrnset (optional)

Alternate RI Mate MRN Set ID.

Range:

1 - 3000, dflt

ssn (optional)

Subsystem Number.

Range:

2 - 255

Default:

The specified subsystem number is removed for the given point code.

Example

This example deletes the single entry PC 1 with an SSN value of 123 from its mated group. If this is the last entry in the group then the PC is also deleted from the MAP tables:

```
dlt-map:pc=1-1-1: ssn=123
```

This example deletes each entry of PC 1-1-1 and all SSNs associated with the PC from each of the PC/SSN mated groups. The PC is also deleted from the MAP tables:

```
dlt-map:pc=1-1-1:all=yes
```

This example deletes subsystem 10 associated with spare PC 1 from the MAP table.

```
dlt-map:pci=s-1-1-0:ssn=10
```

This example deletes subsystem 10 associated with PC 1 in MAP set 362.

```
dlt-map:pc=1-1-1:ssn=10:mapset=362
```

This example deletes PC 1 along with all the subsystems associated with this PC in the default MAP set.

```
dlt-map:pc=1-1-2:all=yes:mapset=dflt
```

This example deletes the Alternate RI Mate associated with MAP Set 362.

```
dlt-map:mapset=362:mrnset=1
```

This example deletes the Alternate RI Mate for the default MAP Set and PC/SSN 1-1-1/10.

```
dlt-map:mapset=dflt:pc=1-1-1:ssn=10:mrnset=1
```

This example deletes the entry from MAP set.

```
dlt-map:mapset=1:pc=1-1-1:ssn=10
```

This example deletes the 16 bit PC entry from MAP set.

```
dlt-map:mapset=1:pcn16=1-1-1:ssn=10
```

Dependencies

The all and ssn parameters cannot be specified together in the command.

If the all=yes parameter is specified, all SSNs for the given PC are removed.

The DPC of the primary subsystem must be a full PC.

The specified remote PC must exist in the MAP table.

The specified SSN must exist in the MAP table entity set associated with the specified remote PC.

An STP true point code that is assigned to an AIQ, ATINPQ, EIR, INP, LNP, or V-Flex subsystem cannot be deleted.

If the pcn parameter is specified, the format of the PC must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

If the FGTTLS feature is not enabled, the mapset parameter cannot be specified. If the FGTTLS feature is enabled, the mapset parameter must be specified.

The specified MAP set must exist in the database.

The specified PC/SSN/MAP set must already be provisioned in the MAP table.

If the pc and mapset parameters are specified, and the all=yes parameter is specified, then at least one entry for that PC/MAP set must exist in the MAP table.

If the FGTTLS feature is enabled, then a MAP entry cannot be deleted if the entry is referenced in the MRN, GTT, GTA, GTT Action, GSM MAP Opcode, or GSM MAP Screening table using the MAPSET/PC/SSN combination, or if the entry is referenced in the MRN, GTT, GTA, GSM MAP Opcode, GSM MAP Screening, or PPSOPTS table using the MAPSET/PC combination, and the entry is the last entry in that MAP set with the specified point code.

If the FGTTLS feature is not enabled, then a MAP entry cannot be deleted if the entry is referenced in the GTT, GTA, GTT Action, GSM MAP Opcode, or GSM MAP Screening table using the PC/SSN combination or if the entry is referenced in the GTT, GTA, GSM MAP Opcode, GSM MAP Screening, or PPSOPTS table using the point code, and the entry is the last entry in the default MAP set with that point code.

If the pcn or mpcn parameter is specified, then the format of the parameter must match the format dictated by the `chg-stpopts:npcfmti` command.

The GTT LS ARI feature must be enabled before the mrnset parameter can be specified.

The value specified for the mrnset parameter must already be associated with a MAP Set.

If the mrnset parameter is specified, then the all parameter cannot be specified.

If a MAP set is referenced in the GTT table without an associated point code and subsystem number, then the MAP set cannot be deleted.

Notes

For the MAP commands, an entity set consists of a group of PC/SSNs that are used for traffic distribution, and an RC group consists of PC/SSNs within an entity set that have the same RC. In loadsharing mode, an entity set contains 1 RC group. In combined/dominant loadsharing mode, an entity set can contain multiple loadsharing groups.

The EAGLE supports the following modes for nodes/subsystems:

- When a PC/SSN pair is not replicated, the pair is in *solitary* mode. The subsystem acts as the only application, with no backup. If this subsystem fails, messages routed to it are discarded and SCCP management returns “Subsystem Unavailable” messages to the originator.
- A group of replicated PC/SSN pairs are in *dominant* mode if each PC/SSN pair in the group has a unique RC. The specified subsystem with the lowest RC acts as the primary subsystem, while the mate subsystem acts as a backup. In the event of congestion, messages route to the mate subsystem. When the congestion subsides, messages are again routed to the primary (dominant) subsystem.
- A group of replicated PC/SSN pairs are in *load sharing* mode if each PC/SSN pair in the group has the same RC. All messages are evenly distributed at the SCCP level to all nodes/subsystems in the group. In the event of congestion or failure, the non-affected subsystem assumes the load of its failed or congested mate.
- The *combined load sharing/dominant* mode supports a combination of load sharing and dominant mode. A group of PC/SSN pairs are in combined load sharing/dominant mode when at least two of the PC/SSN pairs have the same RC and another node subsystem in the group has a different RC. A combination of node accessibility and RC determines the preferred PC/SSN.

In this command, only ITU-international and ITU national PCs support the spare point code subtype prefix (s-).

When the FGTTLS feature is on, MAP load sharing sets are supported. Each MAP set is identified by a new mapset parameter.

When the Weighted GTT Loadsharing feature is turned on, weighted entity sets and RC groups are supported, and threshold values can be assigned to each PC/SSN.

Output

```
dlt-map:pc=1-1-0:ssn=10:mapset=362
```

```
    tekelecstp 08-12-22 12:20:10 EST  EAGLE 40.1.0
    DLT-MAP: MASP A - COMPLTD
;
```

```
dlt-map:mapset=362:mrnset=1
```

```
    tekelecstp 08-12-22 12:20:10 EST  EAGLE 40.1.0
    DLT-MAP: MASP A - COMPLTD
;
```

Related Commands

chg-map, *ent-map*, *rtrv-map*

dlt-mrn

Delete Mated Relay Node

Use this command to delete entries or an Alternate RI Mate from the MRN table. A single command can delete one point code from the group, or delete the entire group.

Caution: If PCs within a weighted entity set are deleted such that the entity set's multiplicity mode becomes dominant, the weight values are reset to indicate a non-weighted entity set.

Note: See the "Notes" section for this command for additional information on multiplicity modes.

Note: The GTT LS ARI feature must be enabled before an Alternate RI Mate can be deleted from an MRN Set.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

pc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (mandatory)

Post-GTT-translated point code.

pci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (mandatory)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

all (optional)

This parameter is used to delete the entire group of point codes that contains the specified point code in the MRN table.

Range:

yes

mapset (optional)

Alternate RI Mate MAP Set ID.

Range:

1 - 36000, dflt

mrnset (optional)

The MRN set ID.

Range:

1 - 3000, dflt

dflt —Default MRN set

pc1 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca1

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc1/pca1/pci1/pcn1/pcn241/pcn161 (optional)

Alternate post-GTT-translated point code.

pc2 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca2

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc2/pca2/pci2/pcn2/pcn242/pcn162 (optional)

Alternate post-GTT-translated point code.

pc3 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca3

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc3/pca3/pci3/pcn3/pcn243/pcn163 (optional)

Post-GTT-translated point code.

pc4 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca4

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc4/pca4/pci4/pcn4/pcn244/pcn164 (optional)

Alternate post-GTT-translated point code.

pci1 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci2 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci3 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci4 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn1 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn2 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn241 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn242 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn243 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn244 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn3 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix*

subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn4 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn161 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn162 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn163 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn164 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Example

This example deletes the entire entry for the specified point code (the point code plus all of its associated point codes):

```
dlt-mrn:pc=1-1-0
```

This example finds point codes 1-1-0 and 1-1-1, and deletes them from the group that contains them in the MRN table:

```
dlt-mrn:pc=1-1-0:pc1=1-1-1
```

This example deletes the entire group of point codes that contains the specified point code from the MRN table:

```
dlt-mrn:pc=1-1-0:all=yes
```

This examples includes a spare point codes:

```
dlt-mrn:pci=s-2-2-1
```

```
dlt-mrn:pc=1-1-9:mrnset=dflt
```

```
dlt-mrn:pc=1-1-1:pc1=1-1-9:mrnset=111
```

```
dlt-mrn:pc=1-1-9:all=yes:mrnset=111
```

This example deletes the Alternate RI Mate for MRN Set 111:

```
dlt-mrn:mrnset=111:mapset=123
```

This example deletes the Alternate RI Mate for the default MRN Set and PC 1-1-1:

```
dlt-mrn:mrnset=dflt:pc=1-1-1:mapset=123
```

This example deletes the entry from the MRN set:

```
dlt-mrn:mrnset=1:pc=1-1-1
```

Example for 16 bit PC entry:

```
dlt-mrn:pcn16=1-1-0:mrnset=dflt
```

Dependencies

ITU-N point codes must be the format set by the npcfmti parameter of the `chg-stpopts` command. (Use the `rtrv-stpopts` command to display the STP option settings.)

A point code that is specified in the command must already exist in the MRN table.

The PCs in an entity set cannot be deleted if the deletion leaves only one PC in the entity set. If this occurs, the entire entity set must be deleted by specifying the all=yes parameter.

The mrnset parameter can be specified only when the Flexible GTT Load Sharing (FGTTLS) feature is enabled.

If the FGTTLS feature is enabled, then the specified PC must already exist in the specified MRN set.

The specified MRN set must already exist in the MRN table.

If the FGTTLS feature is enabled, then an MRN entry cannot be deleted if the entry is referenced in the MAP, GTT, GTA, GTT Action, or PPSOPTS table, using the MRNSET/PC combination. If the FGTTLS feature is not enabled, then the entry cannot be deleted if the entry is referenced in the GTT, GTA, GTT Action, or PPSOPTS table, using the point code.

If the all=yes parameter is specified, the pc parameter must be specified, and the pc1/pc2/pc3/pc4 parameters cannot be specified.

The same point code value cannot be entered more than once for deletion.

The pc/pc1/pc2/pc3/pc4 parameter values must be full point codes.

The GTT LS ARI feature must be enabled before the mapset parameter can be specified.

The value specified for the mrnset parameter must already be associated with a MAP Set.

If the mapset parameter is specified, then the pc1, pc2, pc3, pc4, and all parameters cannot be specified.

An MRN set cannot be deleted if the MRN set is referenced in the GTT table without an associated point code.

Notes

For the MRN commands, an entity set consists of a group of PCs that are used for traffic distribution, and an RC group consists of PCs within an entity set that have the same RC. In loadsharing mode, an entity set contains 1 RC group. In combined/dominant loadsharing mode, an entity set can contain multiple loadsharing groups.

The EAGLE supports the following modes for nodes/subsystems:

- A group of replicated PCs are in *dominant* mode if each PC in the group has a unique RC. The specified subsystem with the lowest RC acts as the primary subsystem, while the mate subsystem acts as a backup. In the event of congestion, messages route to the mate subsystem. When the congestion subsides, messages are again routed to the primary (dominant) subsystem.
- A group of replicated PCs are in *load sharing* mode if each PC in the group has the same RC. All messages are evenly distributed at the SCCP level to all nodes/subsystems in the group. In the event of congestion or failure, the non-affected subsystem assumes the load of its failed or congested mate.
- The *combined load sharing/dominant* mode supports a combination of load sharing and dominant mode. A group of PC are in combined load sharing/dominant mode when at least two of the PC have the same RC and another node subsystem in the group has a different RC. A combination of node accessibility and RC determines the preferred PC.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

The Flexible Intermediate GTT Loadsharing feature adds support for loadsharing sets, which are identified by the mrnset parameter.

The Flexible GTT Loadsharing feature and the Intermediate GTT Loadsharing feature used together support MRN sets for flexible intermediate GTT loadsharing.

When the Weighted GTT Loadsharing feature is turned on, weighted entity sets and RC groups are supported, and threshold values can be assigned to each PC/SSN.

Output

```
dlt-mrn:pc=1-1-1:mrnset=111
```

```
    tekelecstp 08-12-22 12:20:10 EST  EAGLE 40.1.0
    DLT-MRN : MASP A – COMPLTD
;
```

```
dlt-mrn:mrnset=111:mapset=123
```

```
    tekelecstp 08-12-22 12:20:10 EST  EAGLE 40.1.0
    DLT-MRN : MASP A – COMPLTD
;
```

Related Commands

chg-mrn, *ent-mrn*, *rtrv-mrn*

dlt-na — Delete Network Appearance

Use this command to delete a previously defined network appearance.

Parameters

na (mandatory)

Network appearance.

Range:

0 - 4294967295

type (mandatory)

Type of the network appearance to be deleted.

Range:

ansi

itui

ituis

itun

ituns

itun24

itun16

gc (optional)

Group Code of the network appearance.

Range:

yy

2 alphabetic characters; valid values are *aa-zz*

Example

```
dlt-na:type=ansi:na=10
dlt-na:type=itui:na=11
dlt-na:type=itun:na=10
dlt-na:type=itun:na=11:gc=fr
```

Dependencies

If a value of *ansi*, *itui*, *ituis*, *itun16*, or *itun24* is specified for the type parameter, then the gc parameter cannot be specified.

The specified network appearance must exist in the Network Appearance table

Notes

The ITUDUPPC feature must be turned on before a group code can be deleted for an ITU-N network type

Output

```
dlt-na:pstncat=5000:pstnid=1:force=yes
```

```
   rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
   DLT-NA: MASP A - COMPLTD
;
```

Related Commands

ent-na, *rtrv-na*

dlt-npp-as

Delete a NPP Action Set

Use this command to delete an NPP Action Set (AS) entry.

Parameters

asn (mandatory)

Action set name. This parameter specfiies the name of the AS.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Example

```
dlt-npp-as:asn=asn1
```

Dependencies

The value specified for the asn parameter must exist in the NPP AS table.

If the AS is referenced by a NPP Service Rule Set, then this command cannot be entered.

Output

`dlt-npp-as:asn=asn1`

```
    tekelecstp 09-02-19 13:57:06 EST  EAGLE 40.1.0
    NPP-AS   table is (4 of 1024) 1% full.

    DLT-NPP-AS: MASP A - COMPLTD
;
```

Related Commands

chg-npp-as, *dlt-npp-srs*, *ent-npp-as*, *rtrv-npp-as*

dlt-npp-srs

Delete an NPP Service Rule Set

Use this command to delete an NPP Service Rule Set (SRS).

Parameters

fdl (mandatory)

Filter digit length. The number of digits on the incoming digit string that is filtered by the NPP.

Range:

*1 - 32, **

*—multiple lengths of messages can be filtered

fnai (mandatory)

Filter Nature of Address Indicator (NAI).

Range:

intl

filter messages with NAI=INTL

natl

filter messages with NAI=NATL

nai1

filter messages with NAI=NAI1

nai2

filter messages with NAI=NAI2

nai3

filter messages with NAI=NAI3

unkn

filter messages when the NAI is unknown

fpfx (mandatory)

Filter prefix. The prefix used to filter incoming digit strings.

Range:

1-16 digits, *?*, *

1 - 16 hexadecimal digits inclusive of single digit wildcard (?); or wildcard (*) matching the entire digit string;

Valid values are *0-9*, *a-f*, *A-F*, *?*, *

srvn (mandatory)

Service name. The name of the NPP Service.

Range:

nppt

NPP Test Service

idprcdpn

IDPRCDPN Service

idprcgpn

IDPRCGPN Service

tif

TIF Service

tif2

TIF2 Service

tif3

TIF3 Service

mosmsicgpn

MOSMSICGPN Service

mosmsicdpn

MOSMSICDPN Service

mosmsgcgpn

MOSMSGCGPN Service

mosmsgcdpn

MOSMSGCDPN Service

iarcdpn

IARCDPN Service

iarcgpn

IARCGPN Service

idprcdpn2

IDPRCDPN2 Service

idprcdpn3
IDPRCDPN3 Service

idprcdpn4
IDPRCDPN4 Service

tifcgpn
TIFCGPN Service

tifcgpn2
TIFCGPN2 Service

tifcgpn3
TIFCGPN3 Service

Example

```
dlt-npp-srs:srvn=nppt:fpfx=a:fdl=10:fnai=intl
```

```
dlt-npp-srs:srvn=idprcdpn4:fnai=intl:fdl=12:fpfx=91
```

Dependencies

The NPP Rule must exist in the NPP Rule table.

Notes

None

Output

```
dlt-npp-srs:srvn=nppt:fpfx=abc:fdl=16:fnai=intl
```

```
    tekelecstp 09-02-19 13:57:01 EST  EAGLE 40.1.0
    NPP-SRS  table is (0 of 8192) 0% full.

    DLT-NPP-SRS: MASP A - COMPLTD
;
```

Related Commands

chg-npp-as, *chg-npp-srs*, *dlt-npp-srs*, *ent-npp-as*, *rtrv-npp-as*, *rtrv-npp-srs*

dlt-pct

Delete a Point Code and CIC Translation entry

Use this command to delete a Point Code and CIC Translation.

Parameters

epc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

epca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

epci (mandatory)

ITU international destination point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

epcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

realpc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

realpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

realpci (mandatory)

ITU international destination point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

realpcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

ecice (optional)

The end of the Emulated Circuit Identification Code range.

Range:

*0 - 16383, 0 - 4095, 0 - 4294967295, **

0-4095—ITU TUP/ISUP

0-16383—ANSI ISUP

0-4294967295—ANSI Q.BICC

Default:

*

ecics (optional)

The start of the Emulated Circuit Identification Code range.

Range: *0 - 16383, 0 - 4095, 0 - 4294967295, **

0-4095 —ITU TUP/ISUP

0-16383 —ANSI ISUP

0-4294967295 —ANSI Q.BICC

Default:

*

filtpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

filtpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

filtpci (optional)

ITU international destination point code with subfields *zone-area-id*.

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

filtpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

16363, *aa-zz*, *

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

rcice (optional)

The end of the Real Circuit Identification Code range.

Range:

0 - 4294967295, *

0-4095—ITU TUP/ISUP

0-16383 —ANSI ISUP

0-4294967295 —ANSI Q.BICC

Default:

*

rcics (optional)

The start of the Real Circuit Identification Code range.

Range:

0 - 4294967295, *

0-4095 —ITU TUP/ISUP

0-16383 —ANSI ISUP

0-4294967295 —ANSI Q.BICC

Default:

*

si (optional)

Service Indicator

Range:

0

NM

3

SCCP

5

ISUP

4

TUP

13

ANSI Q. BICC

Default:

*

ssn (optional)

SCCP Subsystem number

Range:

*0 - 255, **

Default:

*

Example

```
dlt-pct:epc=1-1-1:si=3:ssn=10
dlt-pct:realpc=2-2-2:si=5:ecics=20
```

Dependencies

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters must be within the range specified by the parameter definition.

The value specified for the ecice or rcice parameter must be equal to or greater than the value specified for the ecics or rcics parameter, respectively.

A full point code must be specified as the value for the realpc/realpca/realpci/realpcn and epc/epca/epci/epcn parameters.

A PCT quantity feature must be enabled before this command can be entered.

If the ITUDUPPC feature is on, and ITU-N Point codes are specified, then the values specified for the epcn, realpcn, and filtpcn parameters must have the same group code.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters must have the same domain.

If the ssn or ecics parameter is specified, then the si parameter must be specified.

A spare point code cannot be specified as a value for the epci/epcn, filtpci/filtpcn, and realpci/realpcn parameters.

A PCT translation entry with the specified parameters must exist.

The si=3 parameter must be specified before the ssn parameter can be specified.

If the ecice or rcice parameter is specified, then the ecics or rcics parameter must be specified, respectively.

If the rcics parameter is specified, then the ecics parameter must be specified.

If the ecics, ecice, and rcics parameters are specified, then the rcice parameter must be specified.

A value of 4, 5, or 13 must be specified for the si parameter before the ecice/ecics and rcice/rcics parameters can be specified.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters cannot be the same as the STP point code.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters cannot be the same as the STP capability point code.

The values specified for the realpc/realpca/realpci/realpcn and filtpc/filtpca/filtpci/filtpcn parameters must already exist in the Route table.

The values specified for the realpc/realpca/realpci/realpcn and filtpc/filtpca/filtpci/filtpcn parameters must have at least one route for each value defined in the Route table.

The value specified for the ecics/ecice and rcics/rcice parameters must be within the range specified by the parameter definition.

The difference between the values specified for the ecice and ecics parameters must be equal to the difference between the values specified for the rcice and rcics parameters.

The ssn and cic parameters cannot be specified together in the command.

If the ecics, rcics and rcice parameters are specified, then the ecice parameter must be specified.

If the same value is specified for the epc and realpc parameters, then the values specified for the ecics/ecice and rcics/rcice parameters cannot indicate the same range.

Only one of the filtpca, filtpci, and filtpcn parameters can be specified in the command.

The value specified for the epc/epci/epcn parameter cannot be the same as a secondary point code.

Output

```
dlt-pct:epc=1-1-1:realpc=5-5-5:si=3:ssn=10
```

```
    tekelecstp 10-08-10 18:29:41 EST  EAGLE 43.0.0
    dlt-pct:epc=1-1-1:realpc=5-5-5:si=3:ssn=10
    Command entered at terminal #4.
    DLT-PCT: MASP A - COMPLTD
;
```

Related Commands

ent-pct, *rtrv-pct*

dlt-prefix Delete Prefix

Use this command to delete a prefix based on the name of the feature, its prefix, and its prefix number.

Parameters

Note: See "Point Code Formats and Conversion" for a detailed description of point code formats, rules for specification, and examples.

feature (mandatory)

Feature Name. This parameter specifies the name of an enabled controlled feature that is supported by this command. The parameter value must match the feature name as it is displayed in the `rtrv-ctrl-feat` command output.

Range:

*a*zzzzzzzzzzzzzzzzzzzzzzzz

1 alphabetic character and up to 24 optional alphanumeric characters and spaces, enclosed in double quotation marks.

The parameter value is not case-sensitive; upper case or lower case or both can be entered.

Part or all of the feature name can be entered. If part of the feature name is specified, the entry must start with the first letter of the name, and must contain enough of the name to uniquely identify the feature. For example, there are two feature names that begin with “GSM MAP.” Enter enough additional characters to identify which GSM MAP feature is being entered (at least “GSM MAP SR” to identify the “GSM MAP SRI Redirect” feature). This command supports the following controlled features:

- GSM MAP SRI Redirect
- ISUP NP for EPAP

prefix (mandatory)

Prefix Value.

Range:

1-15 hexadecimal digits; valid digits are *0-9, a-f, A-F*

Default:

Current value

prefixnum (mandatory)

Prefix Number. The prefix number identifies the prefix value to use for the specified feature name.

Range:

1 - 7

1-3 for GSM MAP SRI Redirect feature prefix values

1-5 for ISUP NP with EPAP feature prefix values

6 for the ISUP NP with EPAP feature Insertion Country Code

7 for the ISUP NP with EPAP feature Deletion Condition value

Default:

Current value

Example

Delete a prefix with prefix number 1 for the ISUP NP with EPAP feature.

```
dlt-prefix:feature="isup np with epap":prefix=1004:prefixnum=1
```

Delete a prefix with prefix number 2 and specify part of the GSM MAP SRI Redirect feature name.

```
dlt–prefix:feature="GSM MAP SRI":prefix=104:prefixnum=2
```

Dependencies

The specified feature name must be the name of an enabled controlled feature as it is displayed in the `rtrv-ctrl-feat` command output. The specified feature must be one of the following features that are supported by this command:

- GSM MAP SRI Redirect
- ISUP NP for EPAP

The specified feature prefix value must already exist in the database.

The specified feature prefix value must not be used by the specified feature in the database.

Notes

None

Output

```
dlt-prefix:feature="isup np with epap":prefix=1004:prefixnum=1
```

```
    rlghncxa03w 04-09-20 09:04:14 EST  EAGLE 31.11.0
    DLT-PREFIX: MASP A - COMPLTD
;
```

Related Commands

chg-prefix, *rtrv-ctrl-feat*, *rtrv-prefix*

dlt-rmt-appl Delete Remote Application

Use this command to remove remote application assignments from the database.

Parameters

ipc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

ipca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

ipc/ipca/ipci/ipcn/ipcn24/ipcn16 (mandatory)

End node's internal point code.

ipci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

ipcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*,*prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

ipcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

ipcn16 (mandatory)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p-, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

si (mandatory)

Service indicator value that designates which user part is assigned to IPC.

Range:

3 - 15

ssn (optional)

SCCP subsystem number. Valid only if si=3. This paramteter is the starting value of the range if the ssne parameter is specified.

Range:

0 - 255

ssne (optional)

Specifies the end range of subsystem number.

Range:

1 - 255

Example

```
dlt-rmt-appl:ipc=0-0-1:si=3:ssn=5
dlt-rmt-appl:ipc=0-0-1:si=5
dlt-rmt-appl:ipcn24=1-100-1:si=5
dlt-rmt-appl:ipci=ps-2-2-2:si=5
dlt-rmt-appl:ipcn16=1-2-1:si=5
```

Dependencies

Partial point codes are not allowed.

The ssn parameter is required if si=3.

The ssn and ssne parameters are not allowed unless si=3.

The ssne parameter value must be greater than the ssn parameter value.

The specified ipc must be previously defined in the Destination table.

The new entry cannot conflict with an existing entry.

The ipc, si, ssn, and ssne parameter values must all match a value in the Destination table.

Notes

To specify a range of subsystem numbers, specify the ssn parameter value as the start of the range and the ssne parameter value as the end of the range.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Output

```
dlt-rmt-appl:ipc=0-0-1:si=3:ssn=5
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-RMT-APPL:  MASP A - COMPLTD
;
```

Related Commands

ent-rmt-appl, *rtrv-rmt-appl*

dlt-rte

Delete Route

Use this command to remove either a single route or all routes from the system database.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

The dpc/dpca/dpci/dpcn/dpcn24/dpcn16 or cic parameter must be specified. If the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter is specified, then action is taken upon the historic routes of the destination entity only.

all (optional)

This parameter removes all destinations from the system database.

Range:

yes

Default:

no

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international destination point code with subfields zone-area-id. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna).* The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

lsn (optional)

The name of the linkset associated with the route.

Note: This parameter must be specified when the all parameter is not specified, and cannot be specified when the all=yes parameter is specified.

Range:

ayyyyyyyyy

1 alphabetic character followed by 9 alphanumeric characters

Default:

No linkset name is specified

Example

Delete route to DPC 1-1-1 using linkset HQ435326:

```
dlt-rte:dpc=1-1-1:lsn=hq435326
```

Delete all routes to DPC 2-2-2:

```
dlt-rte:dpc=2-2-2:all=yes
```

Delete route to DPCN 3-15-15-15-sp using link E1M2ITUN:

```
dlt-rte:dpcn=3-15-15-15-sp:lsn=e1m2itun
```

Delete route for DPCN24 10-100-14 using linkset WE123624:

```
dlt-rte:dpcn24=10-100-14:lsn=we123624:rc=10
```

Delete route to private point code DPC p-1-1-1 using linkset HQ 325426:

```
dlt-rte:dpc=p-1-1-1:lsn=hq325426
```

Delete all routes to private point code DPC p-21-*-*:

```
dlt-rte:dpc=p-21-*-*:all=yes
```

Delete route to spare point code DPCI s-1-100-1 using linkset WE123624:

```
dlt-rte:dpci=s-1-100-1:lsn=we123624
```

Delete route to spare point code DPCN16 121-10-15 using linkset WE123624:

```
dlt-rte:dpcn16=121-10-15:lsn=we123624
```

Dependencies

The dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must exist in the Destination Point Code table.

The value of the lsn parameter must exist in the Linkset table.

If the all=yes parameter is specified, then the lsn parameter cannot be specified.

At least one optional parameter must be specified.

The destination point code of a route must be a full point code (*ni-nc-ncm*) or a cluster point code (*ni-nc-**).

If the specified destination address is a full point code address (*ni-nc-ncm*) and is a member of a provisioned cluster (*ni-nc-**), then whether the ordered routes can be deleted is determined by the destination address's nested cluster allowed indicator. This value is set with the ncai parameter of the `ent/chg-dstn` commands:

- If the ncai=no parameter is specified, then the ordered route cannot be deleted.
- If the ncai=yes parameter is specified, then the destination address is a member of a provisioned nested cluster where the ordered routes of the provisioned members can be deleted. Deletion of the ordered routes of a provisioned member results in the provisioned member assuming the attributes of its cluster

If the specified destination address is a network cluster address (*ni-nc-**), then the method used to delete the specified ordered route attributes is determined by the setting of the destination address's nested cluster allowed indicator. This value is set with the ncai parameter of the `ent/chg-dstn` commands.

- If the ncai=no parameter is specified, then the specified ordered route is deleted for each signaling point code having the same network identifier (*ni*) and network cluster (*nc*) codes.
- If the ncai=yes parameter is specified, then the specified destination is a nested cluster where deletion of the cluster route will not delete the ordered route of the provisioned member.

If the dpcn parameter is specified, the format of the point code(s) must match the format you assigned with the `chg-stpopts:npcfmti` parameter.

The last route for the specified destination point code being removed cannot be referenced by a mated application, or a concerned signaling point code. If any of the destinations referencing the specified routset exist in the MAP table, then the last route of the routeset cannot be deleted.

If any of the destinations referencing the routset is used by the redirect function, then the last route of the routeset cannot be deleted.

The last route to a destination point code that exists in the MRN table cannot be deleted until the point code is deleted from the MRN table. If any of the destinations referencing the specified routset exists in the MRN table, then the last route of the routeset cannot be deleted.

The last route to a destination point code that still exists in the Concerned Secondary Point Code (CSPC) table cannot be deleted until the point code is deleted from the CSPC table. If any of the destinations referencing the routset exist in the CSPC table, then the last route of the routeset cannot be deleted.

If the destination point codes associated with the routeset are referenced by GTT, then the last route cannot be deleted. If the last route to a destination point code is referenced by a GTT, then then the route cannot be deleted until one of the following actions is performed:

- Delete the GTT using the route's destination.
- Change the route used by the GTT to a route using a different destination.
- Add another route using the same destination.

The NRT feature must be turned on before the dpc/dpca parameter can be specified.

When using network routing, if the destination point code has a value of * in the *nc* field, the *ncm* field must also be * (for example, dpc=21-*-*).

If the routeset does not contain routes, then the all=yes parameter cannot be specified.

If the destination point code is specified, then the linkset must exist in the historic routeset.

The last route to a destination that contains exception routes cannot be deleted. If any of the destinations referencing the specified routset contains exception routes, then the last route of the routeset cannot be deleted.

If a cluster point code is provisioned with ncai=no, and any cluster member has an associated exception route, then the routeset cannot be deleted using the all=yes parameter.

The value of the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot exist in the Application Filter table.

The last route to a destination point code that still exists in the Prepaid SMS Options (PPSOPTS) table cannot be deleted until the point code is deleted from the PPSOPTS table. If any of the destinations referencing the routset exist in the PPSOPTS table, then the last route of the routeset cannot be deleted.

If multiple routes are assigned to a point code, then the route that uses the proxy linkset must be the final route that is deleted.

The network type of the linkset and routeset must match.

The last route to a destination point code that exists in the PCT table cannot be deleted until the Filter Point Code or the Real Point Code is deleted from the table.

The Prepaid SMS Options Table must be available.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Output

`dlt-rte:dpc=1-1-1:lsn=ls01`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-RTE: MASP A - COMPLTD
;
```

This example shows the output when the GTT feature is turned on:

`dlt-rte:dpc=2-2-2:all=yes`

```
    rlghncxa03w 10-03-06 11:43:04 EST  EAGLE 42.0.0
    WARNING - ROUTE MAY BE REFERENCED BY MAP OR CSPC.
    DLT-RTE: MASP A - COMPLTD
;
```

Related Commands

chg-dstn, *chg-rte*, *dlt-dstn*, *ent-dstn*, *ent-rte*, *rept-stat-dstn*, *rept-stat-rte*, *rtrv-dstn*, *rtrv-rte*

dlt-rtx — Delete Exception Route

Use this command to delete an exception route entry. If only the dpc and criteria (opc/ilsn/cic/si) parameters are specified, then all exception route entries associated with those parameters are deleted.

Parameters

dpc (mandatory)

ANSI destination point code with subfields *network indicator-network-cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (mandatory)

Destination point code.

dpci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (mandatory)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

cic (optional)

Starting Circuit Identification Code. This parameter is used alone or together with the ecic parameter as exception routing criteria for the specified exception route.

Range:

0 - 16383

ecic (optional)

Ending Circuit Identification Code. This parameter and the cic parameter define the CIC range that is used as exception routing criteria for the specified exception route.

Range:

16383

ilsn (optional)

Incoming Link Set Name. The name of the originating linkset. This value is used as part of the exception routing criteria for the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

lsn (optional)

Linkset Name. The name of the linkset associated with the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

opc (optional)

ANSI origination point code with subfields *network indicator-network-cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Originating Point Code

opci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

si (optional)

Service Indicator. This parameter is used as part of the exception routing criteria for the specified exception route.

Range:

3 - 15

Example

```
dlt-rtx:dpca=1-1-1:opc:2-3-3:lsn=lset1
```

```
dlt-rtx:dpca=1-2-1:si=3:lsn=lset2
dlt-rtx:dpca=1-3-1:ilsn=lset2:lsn=lset3
dlt-rtx:dpci=2-100-1:si=5:lsn=lset5
dlt-rtx:dpci=2-100-1:si=6
dlt-rtx:dpci=2-100-1:opc=8-*-*
dlt-rtx:dpcn16=121-10-15:opcn:121-3-30:lsn=lset1
```

Dependencies

Only one of the opc, ilns, cic, or si parameters can be specified for an exception route entry.

If the ecic parameter is specified, the cic parameter must also be specified.

The ecic parameter value cannot be less than the cic parameter value.

The Origin-Based MTP Routing feature must be enabled and turned on before this command can be entered.

The linkset name, as defined by the ilsn or lsn parameter, must exist.

The specified combination of exception route parameter conditions must exist.

The value specified for the destination point code must be a full point code and not a cluster or network point code.

The point code specified by the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must exist in the destination table.

The route to be deleted cannot be the last route or route set in the RTX table.

Output

This example deletes a specific exception route:

```
dlt-rtx:dpca=1-3-1:ilsn=lset2:lsn=lset3
```

```
    stdcfg2b 06-05-19 18:20:11 EST  EAGLE 35.0.0
    DLT-RTX: MASP A - COMPLTD
```

This example deletes all exception routes for a specific exception criteria:

```
dlt-rtx:dpci=2-100-2:opc=8-*-*
```

```
    tekelecstp 08-02-25 10:54:07 EST  EAGLE 38.0.0
    Command entered at terminal #4.
    DLT-RTX: MASP A - COMPLTD
;
```

Related Commands

chg-rtx, *ent-rtx*, *rept-stat-rtx*, *rtrv-rtx*

dlt-sccp-serv

Delete SCCP Service

Use this command to remove entries from the SCCP Service table. The command may either remove a PC from a group or remove the entire group.

Parameters

serv (mandatory)

The name of the service being deleted.

Range:

gflex

gport

all (optional)

Deletes all point codes from a service.

Range:

yes

pc1 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc1/pca1/pci1/pcn1/pcn241 (optional)

Post GTT-translated point code 1.

pc2 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca2

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc2/pca2/pci2/pcn2/pcn242 (optional)

Post GTT-translated point code 2.

pc3 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca3

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc3/pca3/pci3/pcn3/pcn243 (optional)

Post GTT-translated point code 3.

pc4 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc4/pca4/pci4/pcn4/pcn244 (optional)

Post GTT-translated point code 4.

pci1 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id)*.

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci2 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id)*.

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci3 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id)*.

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci4 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id)*.

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn1 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn2 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn241 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn242 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn243 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn244 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn3 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn4 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

Example

To delete a specified PC from the G-Port service:

```
dlt-sccp-serv:serv=gport:pca2=3-3-3
```

To delete all PCs from the G-Port service and to specify a network PC to delete:

```
dlt-sccp-serv:serv=gport:all=yes:pca1=1-1-1
```

Dependencies

At least one PC must be specified.

The specified PC must already exist in the SCCP Service table.

The same point code cannot be specified more than once.

The specified point code must already exist in the specified MRN set in the SCCP-SERV table.

At least one point code must be specified.

The specified MRN set must already exist in the SCCP-SERV table portion of the MRN table.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

```
dlt-sccp-serv:serv=gport:pca2=3-3-3
```

```
    tekelecstp 05-12-20 08:54:59 EST  EAGLE 35.0.0
    DLT-SCCP-SRV: MASP A - COMPLTD
;
```

Related Commands

chg-sccp-serv, *rtrv-sccp-serv*

dlt-scr-aftpc Delete Allowed Affected Point Code

Use this command to remove a specific screening reference in the allowed affected point code category.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number.

Range:

*0 - 255, **

*—the full range of values from 0–255

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–

7

mna (optional)

16-bit ITU national *main number area*. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31,**

*—the full range of values from 0–31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code *msa-ssa-sp*.

Range:

*0 - 255, **

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national *sub number area*. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0--15,**

*—the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

un (optional)

16-bit ITU-national *unit number*. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127,**

*—the full range of values from 0–127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
dlt-scr-aftpc:sr=iec:ni=240:nc=010:ncm=010:ssn=012
dlt-scr-aftpc:sr=aft1:zone=1:area=2:id=3:ssn=1:pcst=s
dlt-scr-aftpc:sr=aft2:un=1:sna=2:mna=3:ssn=1
```

Dependencies

A complete point code must be specified, and must be one, and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or npc.

The affected point code or point code range (given by ni-nc-ncm/ssn, zone-area-id, msa-ssa-sp, un-sna-mna or npc) to be removed from the table must already exist in the screening reference.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If asterisk values are specified, the range cannot overlap or contain any of the point code ranges that already exist in the allowed affected point code screening category.

If zone=* is specified, area=* and id=* must be specified.

If area=* is specified, id=* must be specified.

If ssa=* is specified, sp=* must be specified.

If msa=* is specified, ssa=* and sp=* must be specified.

If sna=* is specified, mna=* must be specified.

If un=* is specified, sna=* and mna=* must be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range 0-255, the ni and the nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The character *c* is not a valid value for the ni, nc, ncm, zone, area, id, msa, ssa, sp, un, sna, mna, and npc parameters.

The specified screening reference (sr) must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N24 or ITU-N16 point codes.

No AFTPC screening reference (sr) can be deleted that is referenced by an entity in another screening set.

The sr, ni, nc, ncm, and ssn parameters, or the zone, area, id, and npc parameters cannot be deleted if they are the last entry in the screening reference and the screening reference is part of a screen set.

If only one entry exists, the sr cannot be referenced by another screening table. If the sr is not referenced by another screening table, the entire screening table is deleted.

The GWSOA parameter combination should be known and valid.

Notes

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-aftpc:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=*. For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-aftpc` output with asterisks as the same parameter values specified in the `dlt-scr-aftpc` command.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`dlt-scr-aftpc:sr=iec:ni=240:nc=010:ncm=010:ssn=012`

```
    rlghncxa03w 04-01-07  11:43:04 EST  EAGLE 31.3.0
    DLT-SCR-AFTPC:  SCREEN SET AFFECTED - IEC  25% FULL
    DLT-SCR-AFTPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-aftpc, *ent-scr-aftpc*, *rtrv-scr-aftpc*

dlt-scr-blkdpc Delete Blocked DPC

Use this command to remove a specific screening reference from the blocked DPC category. Deleting the last point code (*c*) also deletes the screening reference.

Parameters

sr (mandatory)

Screening reference. This parameter specifies the point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–7

C—continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31, *, C*

*—the full range of values from 0–31

C—continue

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, *, C*

*—the full range of values from 0–16383

C—continue

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0--15, *, C*

*—the full range of values from 0–15

C—continue

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127, *, C*

*—the full range of values from 0–127

C—continue

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–255

C—continue

Example

```
dlt-scr-blkdpc:sr=iec:ni=240:nc=010:ncm=010
dlt-scr-blkdpc:sr=bdp1:npc=128:pcst=s
dlt-scr-blkdpc:sr=bdp1:un=125:sna=12:mna=17
```

Dependencies

At least one optional parameter must be specified.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc combination unless a value of *c* is specified.

The blocked DPC or blocked DPC range specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must already exist in the specified screening reference.

The point code to delete cannot have the value *c-c-c* if there is another point code in the blocked screening reference. The last screening reference to be deleted must have ni, zone, msa, un, or npc equal to *c*.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If msa=* is specified, ssa=* and sp=* must be specified.

If un=* is specified, sna=* and mna=* must be specified.

If the msa=c parameter is specified, then the ssa and sp parameters must have a value of *c* or must not be specified. If the msa=c parameter is specified, and the ssa and the sp parameters are not specified, then the ssa and sp parameters default to a value of *c*.

If the un=c parameter is specified, then the sna and mna parameters must have a value of *c* or must not be specified. If the un=c parameter is specified, and the sna and the mna parameters are not specified, then the sna and mna parameters default to a value of *c*.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the n and the nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the ni=c parameter is specified, then the nc and the ncm parameters must have a value of *c* or must not be specified. If the ni=c parameter is specified, and the nc and the ncm parameters are not specified, then the nc and ncm parameters default to a value of *c*.

The last screening reference (sr) entry cannot be deleted if it is referenced by another screen.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the zone=c parameter is specified, then the area and id parameters must have a value of *c* or must not be specified. If the zone=c parameter is specified, and the area and the id parameters are not specified, then the area and id parameters default to a value of *c*.

The GWSOA parameter combination should be known and valid.

Notes

If the screening reference is not referenced by any other screen, and if all entries are removed, the entire screening reference can be removed using ni-nc-ncm, zone-area-id, un-sna-mna, or msa-ssa-sp equal to *c* or npc=c. If more than one entry exists, ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc cannot equal *c*.

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-blkdpc:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=*. For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-blkdpc` output with asterisks as the same parameter values specified in the `dlt-scr-blkdpc` command.

The asterisk (*) value cannot be specified with the character *c*. For example, a point code *c-c-c* is not allowed.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The character *c* is used in the blocked DPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the blocked DPC screens. When screening for a blocked DPC and the point code being screened does not match any of the point codes in the blocked DPC screens, the message is not rejected and the screening process continues.

There must be an entry in each unique blocked DPC screening reference to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr. The point code is in the form of subfields *ni-nc-ncm*, *zone-area-id*, *un-sna-mna* or *msa-ssa-sp* equal to *c-c-c* or npc=c. When the character *c* is specified, the nsfi and nsr parameters must be specified.

When the point code does not match any entries in the blocked DPC screens, the screening process is directed to the screening reference with the point code *c*. The *nsfi* and *nsr* in this entry are examined to determine the next step in the screening process.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`dlt-scr-blkdpc:sr=iec:ni=240:nc=010:ncm=010`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-SCR-BLKDPC:  SCREEN SET AFFECTED - IEC  25% FULL
    DLT-SCR-BLKDPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-blkdpc, *ent-scr-blkdpc*, *rtrv-scr-blkdpc*

dlt-scr-blkopc Delete Blocked OPC

Use this command to remove a specific screening reference from the blocked OPC category.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–7

C—continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31, *, C*

*—the full range of values from 0–31

C -- Continue

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–7

C—continue

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, *, C*

*—the full range of values from 0–16383

C—continue

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0--15, *, C*

*—the full range of values from 0–15

C -- Continue

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127, *, C*

*—the full range of values from 0–127

C -- Continue

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–255

C—continue

Example

```
dlt-scr-blkopc:sr=iec:ni=240:nc=010:ncm=010
dlt-scr-blkopc:sr=bop1:npc=128:pcst=s
dlt-scr-blkopc:sr=bop1:un=125:sna=12:mna=17
```

Dependencies

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc combination unless a value of *c* is specified.

The blocked OPC specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must already exist in the screening reference or within an existing range of OPCs.

The point code to delete cannot have the value *c-c-c* if there is another point code in the blocked screening reference. The last screening reference to be deleted must have ni, zone, msa, un, or npc equal to *c*.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the msa=c parameter is specified, then the ssa and sp parameters must have a value of *c* or must not be specified. If the msa=c parameter is specified, and the ssa and the sp parameters are not specified, then the ssa and sp parameters default to a value of *c*.

If the un=c parameter is specified, then the sna and mna parameters must have a value of c or must not be specified. If the un=c parameter is specified, and the sna and the sp parameters are not specified, then the sna and mna parameters default to a value of c.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and the nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the ni=c parameter is specified, then the nc and the ncm parameters must have a value of *c* or must not be specified. If the ni=c parameter is specified, and the nc and ncm parameters are not specified, then the nc and ncm parameters default to a value of *c*.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point

codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

The Spare Point Code Support feature must be enabled before the pcst and npcst parameters can be specified.

The last screening reference (sr) entry cannot be deleted if it is referenced by another screen.

If the zone=c parameter is specified, then the area and id parameters must have a value of *c* or must not be specified. If the zone=c parameter is specified, and the area and the id parameters are not specified, then the area and id parameters default to a value of *c*.

The GWSOA parameter combination should be known and valid.

Notes

If the screening reference is not referenced by any other screen, and if all entries are removed, the entire screening reference can be removed using ni-nc-ncm, zone-area-id, un-sna-mna, or msa-ssa-sp equal to *c-c-c* or npc=c. If more than one entry exists, ni-nc-ncm, zone-area-id, un-sna-mna, msa-ssa-sp, or npc must not equal *c*.

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-blkopc:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=*. For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-blkopc` output with asterisks as the same parameter values specified in the `dlt-scr-blkopc` command.

The asterisk (*) value cannot be specified with the character *c*. For example, a point code *c-c-** is not allowed.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The character *c* is used in the blocked OPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the blocked OPC screens. When screening for a blocked OPC and the point code being screened does not match any of the point codes in the blocked DPC screens, the message is not rejected and the screening process continues.

There must be an entry in each unique blocked OPC screening reference to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr. The point code is npc=c or in the form of subfields *ni-nc-ncm*, *zone-area-id*, *or msa-ssa-sp*, *un-sna-mna* equal to *c-c-c*. When the character *c* is specified, the nsfi and nsr must be specified.

When the point code does not match any entries in the blocked OPC screens, the screening process is directed to the screening reference with the point code *c-c-c*. The nsfi and nsr in this entry are examined to determine the next step in the screening process.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

```
dlt-scr-blkopc:sr=iec:ni=240:nc=010:ncm=010
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-SCR-BLKOPC:  SCREEN SET AFFECTED - IEC  25% FULL
    DLT-SCR-BLKOPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-blkopc, *ent-scr-blkopc*, *rtrv-scr-blkopc*

dlt-scr-cdpa

Delete Allowed Called Party Address

Use this command to remove a specific screening reference from the allowed called party address category.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number.

Range:

*0 - 255, **

*—the full range of values from 0–255

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–7

C—continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31, **

*—the full range of values from 0–31

msa (optional)

24-bit ITU national signaling point. The *msa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

nc (optional)

Network cluster value. This parameter specifies one or more nc values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ni (optional)

Network indicator value. This parameter specifies one or more ni values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, *, C*

*—the full range of values from 0–16383

C—continue

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (*s-*).

Range:

none

s

Default:

none

scmgfid (optional)

SCCP management format ID. This parameter consists of a one-octet field and uniquely defines the function and format of each SCMG message. A single value or a range of values can be specified.

Range:

*1 - 255, **

*—the full range of values from 0–255

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0--15, **

*—the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127, **

*—the full range of values from 0–127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–255

C—continue

Example

```
dlt-scr-cdpa:sr=iec:ni=240:nc=010:ncm=010:ssn=012
dlt-scr-cdpa:sr=cdpa:zone=1:area=2:id=3:ssn=1:sccpmt=9:ri=*:pcst=s
dlt-scr-cdpa:sr=cdp2:un=1:sna=2:mna=3:ssn=1
```

Dependencies

A complete point code must be specified, and must be one and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc, except for entering *c*.

The CDPA point code, ssn, and scmgfid to be removed must exist in the CDPA entity set.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The specified screening reference (sr) must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point code (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N24 or ITU-N16 point codes.

A CDPA screening reference (sr) cannot be deleted if it referenced by an entity in another screening set.

If the ssn parameter is a value other than 1, the scmgfid parameter cannot be specified.

If the ssn=1 parameter is specified, the scmgfid parameter must be specified.

The GWSOA parameter combination should be known and valid.

Notes

If only one entry exists and is not referenced by another screening table, the entire screening table is removed.

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-cdpa:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=*. For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-cdpa` output with asterisks as the same parameter values specified in the `dlt-scr-cdpa` command.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100 .

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

```
dlt-scr-cdpa:sr=iec:ni=240:nc=010:ncm=010:ssn=012
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-SCR-CDPA:  SCREEN SET AFFECTED - IEC  25% FULL
    DLT-SCR-CDPA:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-cdpa, *ent-scr-cdpa*, *rtrv-scr-cdpa*

dlt-scr-cgpa

Delete Allowed Calling Party Address

Use this command to remove a specific screening reference from the allowed calling party address category.

Parameters

ri (mandatory)

Routing indicator. Routing instructions to the receiving signaling point. In gateway screening, messages may be screened based on the value of the routing indicator.

Range:

dpc

Allow a called party address with a routing indicator value of "DPC/SSN."

gt

Screening stops and gateway screening is bypassed as a forced pass.

***

Allow both routing indicator values.

sccpmt (mandatory)

SCCP message type.

Range:

9

UDT

10

UDTS

17

XUDT

18

XUDTS

*

the full range of values

sr (mandatory)

Screening reference. This parameter specifies the point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number.

Range:

*1 - 255, **

*—the full range of values from 1–255

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national *main number area*. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31, **

* -- the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national *sub number area*. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0--15, **

* -- the full range of values from 0--15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU national *unit number*. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127, **

* -- the full range of values from 0--127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
dlt-scr-cgpa:sr=iec:ni=240:nc=010:ncm=010:ssn=012
dlt-scr-cgpa:sr=cdp1:ni=5:nc=5:ncm=5:ssn=1:ri=dpc:sccpmt=009
dlt-scr-cgpa:sr=cgpa:zone=1:area=2:id=3:ssn=1:sccpmt=9:ri=*:pcst=s
dlt-scr-cgpa:sr=cgp1:un=1:sna=2:mna=1:ssn=1:sccpmt=9:ri=*
```

Dependencies

A complete point code must be specified, and must be one, and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

The CGPA point code, ri, ssn, and sccpmt to be removed must exist in the CGPA entity set.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and the nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The specified screening reference (sr) must already exist in the database.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N24 or ITU-N16 point codes.

A CGPA screening reference (sr) cannot be deleted if it is referenced by an entity in another screening set.

The GWSOA parameter combination should be known and valid.

Notes

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-cgpa:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=*. For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-cgpa` output with asterisks as the same parameter values specified in the `dlt-scr-cgpa` command.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The routing indicator in the calling party address provides routing instructions for the receiving signaling point. When the routing indicator specifies global title, the message is routed based on the

global title digits. If the routing indicator specifies DPC, the message is routed based on the DPC/subsystem number in the calling party address.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

```
dlt-scr-cgpa:sr=iec:ni=240:nc=010:ncm=010:ssn=012
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-SCR-CGPA:  SCREEN SET AFFECTED - IEC  25% FULL
    DLT-SCR-CGPA:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-cgpa, *ent-scr-cgpa*, *rtrv-scr-cgpa*

dlt-scr-destfld

Delete an Allowed DESTFLD

Use this command to remove a specific screening reference from the allowed affected destination field (DESTFLD) category.

Parameters

sr (mandatory)

Screening reference. This parameter specifies the point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31, **

*—the full range of values from 0–31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm* .

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point

codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–255

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0--15, **

*—the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127, **

*—the full range of values from 0–127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
dlt-scr-destfld:sr=iec:ni=240:nc=010:ncm=010
dlt-scr-destfld:sr=dst1:zone=1:area=2:id=3:pcst=s
dlt-scr-destfld:sr=dst1:un=125:sna=12:mna=17
```

Dependencies

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc combination unless a value of *c* is specified.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the zone=* parameter is specified, then the area=* and the id=* parameters must be specified.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The DESTFLD specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must already exist in the screening reference.

If only one entry exists, the sr cannot be referenced by another screening table. If the sr is not referenced by another screening table, the entire screening table is deleted.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 and ITU-N24 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

The GWSOA parameter combination should be known and valid.

Notes

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-destfld:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=* . For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-destfld` output with asterisks as the same parameter values specified in the `dlt-scr-destfld` command.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`dlt-scr-destfld:sr=iec:ni=240:nc=010:ncm=010`

```
    rlghncxa03w 04-02-13 11:49:47 EST  EAGLE 31.3.0
    DLT-SCR-DESTFLD: SCREEN SET AFFECTED - SS01  25% FULL
    DLT-SCR-DESTFLD: MASP A - COMPLTD
;
```

Related Commands

chg-scr-destfld, *ent-scr-destfld*, *rtrv-scr-destfld*

dlt-scr-dpc Delete Allowed DPC

Use this command to remove a specific screening reference from the allowed DPC category.

Parameters

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31, **

*—the full range of values from 0–31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0--15, **

*—the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127, **

*—the full range of values from 0–127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
dlt-scr-dpc:sr=iec:ni=240:nc=010:ncm=010
dlt-scr-dpc:sr=dpc1:npc=128:pcst=s
dlt-scr-dpc:sr=dpc2:un=1:sna=2:mna=1
```

Dependencies

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc combination unless a value of *c* is specified.

The DPC specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must already exist in the screening reference or within an existing range of DPCs.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If only one entry exists, the sr must not be referenced by another screening table. If the sr is not referenced by another screening table, the entire screening table is deleted.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N24, or ITU-N16 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

The GWSOA parameter combination should be known and valid.

Notes

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-dpc:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=*. For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-dpc` output with asterisks as the same parameter values specified in the `dlt-scr-dpc` command.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`dlt-scr-dpc:sr=iec:ni=240:nc=010:ncm=010`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-SCR-DPC:  SCREEN SET AFFECTED - IEC  25% FULL
    DLT-SCR-DPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-dpc, *ent-scr-dpc*, *rtrv-scr-dpc*

dlt-scr-isup — Delete Allowed ISUP Screening Reference

Use this command to delete an allowed ISUP screening reference from the Allowed ISUP entity set.

Parameters

isupmt/tupmt (mandatory)

ISUP or TUP message type.

Range:

*0 - 255, **

*—the full range of values from 0–255

sr (mandatory)

Screening reference. This parameter specifies the point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Example

```
dlt-scr-isup:sr=iec:isupmt=9
dlt-scr-isup:sr=iec:isupmt=1&&2
dlt-scr-isup:tupmt=1:sr=tu01
```

Dependencies

The specified sr must exist in the Allowed ISUP entity set.

The specified isupmt or tupmt parameter value must already exist in the specified sr.

The last entry in the specified sr cannot be deleted if the entry is referenced by another screen.

The GWSOA parameter combination should be known and valid.

The ISUPMT (ISUP Message Type) parameter must be specified for a SEAS command.

Notes

An asterisk can be specified for a parameter value in the `chg/dlt-scr-isup` commands *only* if that parameter value was specified as an asterisk in the `ent-scr-isup` command to define the parameter value.

A range of values can be specified for the isupmt or tupmt parameter, by separating the values that define the range by two ampersands (&&); for example, isupmt=025&&100 specifies all ISUP message types from 25 - 100. The value to the left of the && must be less than the value to the right of the && in the range.

Output

No screen sets are listed in the following example, because the specified screening reference is not associated with any screen sets.

`dlt-scr-isup:sr=iec:isupmt=9`

```
    tekelecstp 02-09-02 11:59:41 EST  EAGLE 30.0.0
    DLT-SCR-ISUP: MASP A - COMPLTD
;
```

No screen sets are listed in the following example, because the specified screening reference is not associated with any screen sets. `dlt-scr-isup:sr=iec:isupmt=1&&2`

```
    tekelecstp 02-09-02 12:00:30 EST  EAGLE 30.0.0
    DLT-SCR-ISUP: MASP A - COMPLTD
;
```

The following example lists the screen sets that are associated with the specified screening reference.
`dlt-scr-isup:tupmt=1:sr=tu01`

```
    tekelecstp 03-11-02 12:00:30 EST  EAGLE 31.3.0
    Extended Processing Time Required -- Please Wait
    Notice: The number of screensets affected is   2.
    DLT-SCR-ISUP: SCREEN SET AFFECTED - ist1    1% FULL
    DLT-SCR-ISUP: SCREEN SET AFFECTED - ist2    1% FULL
    DLT-SCR-ISUP: MASP A - COMPLTD
;
```

Related Commands

chg-scr-isup, *ent-scr-isup*, *rtrv-scr-isup*

dlt-scr-opc **Delete Allowed OPC**

Use this command to remove a specific screening reference from the allowed OPC category.

Parameters

sr (mandatory)

Screening reference. This parameter specifies the point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0--31, **

*—the full range of values from 0–31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in theniandncmparameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or morenivalues for the network cluster and network cluster member values identified in the nc andncmparameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0-16383

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna.*

Range:

*0--15, **

*—the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The *sp*in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0--127, **

*—the full range of values from 0–127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
dlt-scr-opc:sr=iec:ni=240:nc=010:ncm=010
dlt-scr-opc:sr=opc1:npc=128:pcst=s
dlt-scr-opc:sr=opc2:un=1:sna=2:mna=1
```

Dependencies

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc combination unless a value of *c* for “continue” is specified.

The OPC specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must already exist in the screening reference or within an existing range of OPCs.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If only one entry exists, the sr must not be referenced by another screening table. If the sr is not referenced by another screening table, the entire screening table is deleted.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N24, or ITU-N16 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, un, sna, mna, and npc parameters cannot have a value of *c*.

The GWSOA parameter combination should be known and valid.

Notes

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-dpc:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=*. For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-dpc` output with asterisks as the same parameter values specified in the `dlt-scr-dpc` command.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`dlt-scr-opc:sr=iec:ni=240:nc=010:ncm=010`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-SCR-OPC:  SCREEN SET AFFECTED - IEC  25% FULL
    DLT-SCR-OPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-opc, *ent-scr-opc*, *rtrv-scr-opc*

dlt-scr-sio Delete Allowed SIO

Use this command to remove a specific screening reference from the allowed service indicator octet (SIO) category.

Parameters

nic (mandatory)

Network indicator code. This parameter specifies whether the message originated from an international (0) or national (2) network.

Range:

*0 - 3, **

*—the full range of values from 0–255

pri (mandatory)

New message priority. The new message priority in the SIO.

Range: *0 - 3, **

*—the full range of values from 0–255

Default:

Current value

si (mandatory)

Service indicator. The service indicator identifies the type of message. The values are defined in Telcordia TR-NWT-000246.

Range:

00

01-15

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

h0 (optional)

This parameter is mandatory if the si parameter has a value of *00, 01, 02*, or *03*. Otherwise, the h0 parameter is undefined.

Range:

0 - 15

Default:

Current value or undefined

h1 (optional)

This parameter is mandatory if the si parameter has a value of *00, 01, 02*, or *03*. Otherwise, the h1 parameter is undefined.

Range:

0 - 15

Default:

Current value or undefined

Example

```
dlt-scr-sio:sr=iec:nic=1:si=1:h0=4:h1=2:pri=*
dlt-scr-sio:sr=iec:nic=1:si=3:pri=2
```

Dependencies

The h0 and h1 parameters cannot be specified if the si parameter is specified and is not equal to *00*, *01*, or *02*.

The parameter to be removed must be in the screening reference.

Valid combinations for the h0/h1 parameters:

- h0 is a single value— h1 can be a single value, range, or an asterisk
- h0 is a range— h1 can be an asterisk
- h0 is an asterisk— h1 can be an asterisk

The sr, nic, si, pri, and h0/h1 parameters cannot be removed if they are the last entry in the screening reference and the screening reference is part of a screen set.

If the si parameter has value of *00*, *01*, or *02*, the h0 and h1 parameters must be specified. Otherwise, the h0 parameter cannot be specified.

If the value of the si parameter value is greater than 2, then the h0 and h1 parameters cannot be specified.

If asterisks or ranges are specified for the heading codes, nothing that matches the +combination of nic, si, and the specified heading codes can already exist in the allowed SIO entity set for the screening reference.

The specified screening reference (sr) must already exist in the database.

The GWSOA parameter combination should be known and valid.

For SEAS commands, the pri parameter specified must be in the range 0-3, *.

For SEAS commands, the h0 parameter specified must be in the range 0-15, *.

For SEAS commands, the h1 parameter specified must be in the range 0-15, *.

Notes

The network identifier specifies whether the message originated from an international (0) or a national (2) network.

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-sio:sr=ied:ni=240:nc=010:nccm=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains the values ni=240, nc=010, ncm=*, and ssn=*. For an entry to be specified in this command with asterisks as parameter values, that entry must be shown in the `rtrv-scr-sio` output with asterisks as the same parameter values specified in the `dlt-scr-sio` command.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

Output

`dlt-scr-sio:sr=iec:nic=1:si=3:pri=2`

```
    rlghncxa03w 04-02-14 16:45:50 EST  EAGLE 31.3.0
    DLT-SCR-SIO: SCREEN SET AFFECTED - SS01  25% FULL
    DLT-SCR-SIO: SCREEN SET AFFECTED - SS04  35% FULL
    DLT-SCR-SIO: MASP A - COMPLTD
;
```

Related Commands

chg-scr-sio, *ent-scr-sio*, *rtrv-scr-sio*

dlt-scr-tt

Delete Allowed Translation Type

Use this command to remove a specific screening reference from the allowed translation type category.

Parameters

sr (mandatory)

Screening reference. This parameter specifies the point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

type (mandatory)

Translation type. The GTT type value in the CdPA.

Range:

*0 - 255, **

*—the full range of values from 0–255

Example

```
dlt-scr-tt:sr=iec:type=012
```

Dependencies

The screening reference must exist.

The sr and type parameters cannot be removed if they are the last entry in the screening reference and the screening reference is part of a screen set.

The allowed type to be removed must already exist in the screening reference.

The single value or range specified for the allowed type to be deleted from the TT screen for the allowed TT screening reference must already exist in that TT screen.

The value specified for the type parameter must be within the allowed range.

The GWSOA parameter combination should be known and valid.

Notes

The asterisk is a parameter value indicating that the gateway screening process is screening all values for that parameter in the MSU. The asterisk parameter value does not mean that multiple entries whose values may be in the range implied by the asterisk will be removed. The only entry that will be removed by this command when the asterisk is specified as a parameter value is the entry that contains an asterisk as that parameter value.

For example, if the `dlt-scr-tt:sr=ied:type=":ssn=*` command is entered, the only entry that will be removed from the database is the entry in screening reference *iec* that contains an asterisk as the value for the type parameter. For an entry to be specified in this command with an asterisk as the value for the type parameter, that entry must be shown in the `rtrv-scr-tt` output with an asterisk as the value for the type parameter.

Output

`dlt-scr-tt:sr=iec:type=012`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-SCR-TT:  SCREEN SET AFFECTED - IEC  25% FULL
    DLT-SCR-TT:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-tt, *ent-scr-tt*, *rtrv-scr-tt*

dlt-scrset — Delete Screen Set

Use this command to remove a screen set definition from the database. A screen set is a group of screening references that belong to various categories. This command does not remove any gateway screening tables.

Parameters

scrn (mandatory)

Screen set name. Each screening reference must have a unique name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Example

```
dlt-scrset:scrn=nc27
```

Dependencies

The screen set name must exist.

Before the screen set can be removed, it must be removed from all linksets.

The GWSOA parameter combination should be known and valid.

Notes

The system validates the command to ensure that the specified screen set name is in use.

Output

```
dlt-scrset:scrn=nc27
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    DLT-SCRSET:  MASP A - COMPLTD
;
```

Related Commands

chg-scrset, *ent-scrset*, *rtrv-scrset*

dlt-shlf Delete Shelf

Use this command to remove a shelf from the system database.

Parameters

loc (mandatory)

Location of the shelf to be deleted.

Range:

1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300, 5100, 5200, 5300, 6100, 6200, 6300

Example

```
dlt-shlf:loc=2300
```

```
dlt-shlf:loc=6200
```

Dependencies

The frame and shelf values of the shelf location parameter (loc) must be within the valid range (*xyzz*, where *x*=frame and *y*=shelf; *zz* is always 00 for this command).

The equipment shelf must have been configured previously.

The specified shelf cannot have any configured cards.

If the equipment shelf is the only provisioned shelf in the frame and a frame power threshold entry is configured in the Frame Power Threshold table for the frame, the shelf cannot be deleted until the frame power threshold entry is deleted from the Frame Power Threshold table.

Notes

All shelves in the system can be removed, except the control shelf (1100).

Before a shelf can be removed from the database, all SS7 signaling links and TCP/IP data links must be deactivated and removed from the database and all cards in the shelf must be removed from the database. See *Database Administration - System Management User's Guide* for more information on shelf removal.

Refer to *Installation User's Guide* for an illustration of shelf locations.

Output

```
dlt-shlf:loc=2300
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    DLT-SHLF: MASP A - COMPLTD
;
```

```
dlt-shlf:loc=6200
```

```
tekelecstp 03-09-12 11:11:28 EST EAGLE 45.0.0
DLT-SHLF: MASP A - COMPLTD
;
```

Related Commands

ent-shlf, *rtrv-shlf*

dlt-sip-npp

Delete SIP NPP

Use this command to delete existing number normalization rules (SIPPHCXT and SIPNNPFX). SIPPHCXT table will be used to provision the phone-context. SIPNNPFX table will be used to configure the prefixes against each phone context and it will also contain number of digits to be deleted (NPDD) and new prefix to be added (NPDS).

Parameters

phctxt (mandatory)

Phone Context

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of 1 to 64 characters. Valid values are (0-9, A-Z), +, *, #, .(period), @ or DFLT (default).

pfx (optional)

Prefix

Range:

zzzzzzzzzzzzzzz

A string of 1 to 15 characters. Valid values are hex digits (0-9, A-F), +, *, -, #.

Example

```
dlt-sip-npp:phctxt=abc.com:pfx=111111
```

```
dlt-sip-npp:phctxt=xyz.com
```

```
dlt-sip-npp:phctxt=a+bc.com
```

Dependencies

SIPNP Feature must be enabled before entering any number normalization rules.

SIP Phone Context table (SIPPHCXT) should be accessible.

SIP Prefix table (SIPNNPFX) should be accessible.

SIP DBMM 2 table should be accessible.

Phone Context cannot be deleted if it still has some Prefix assigned to it.

Requested SIP Prefix entry must exist in the SIPNNPFX table.

Requested SIP Phone Context entry must exist in the SIPPHCXT table.

Default Phone Context cannot be deleted from the SIPPHCXT table.

Notes

None.

Output

This example displays the output when all the parameters are specified:

`dlt-sip-npp:phctxt=x+yz.com:pfx=12`

```
tekelecstp 12-07-09 19:08:39 EST EAGLE 45.0.0
dlt-sip-npp:phctxt=x+yz.com:pfx=12
Command entered at terminal #4.
PHCTXTID table is (3 of 101) 3% full.
DLT-SIP-NPP: MASP A - COMPLTD

;
```

Related Commands

ent-sip-npp, *rtrv-sip-npp*, *chg-sip-npp*

dlt-slk Delete Signaling Link

Use this command to remove a signaling link from the system database.

Parameters

link (mandatory)

Signaling link on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

force (optional)

This parameter must be used to remove the last link in a linkset without having to remove all of the routes that referenced the linkset.

Range:

yes

no

Default:

no

Example

```
dlt-slk:loc=1211:link=a
```

```
dlt-slk:loc=1201:link=b:force=yes
```

Dependencies

Card locations 1113 - 1118 cannot be specified.

The frame and shelf portions of the specified card location (loc) can be 11 - 13, 21 - 23, 31 - 33, 41 - 43, 51 - 53, and 61 . (The card location is*xyss*, where*x* is the frame,*y* is the shelf, and*ss* is the slot.)

Links A16 - A31 and B16 - B31 cannot be specified for even-numbered card locations. HC MIM cards are dual-slot cards. The links are assigned only to the cards in odd-numbered locations.

The specified link must exist in the database.

The signaling link must be in the unavailable (UAV) state before it can be removed. Enter the `rept-stat-slk` command to verify the state of the signaling link.

The signaling link cannot have an active LFS test in progress when this command is entered to delete the link.

The force=yes parameter must be specified to remove the last signaling link in a linkset that is assigned to a route.

To remove the last signaling link on a card, the state of the card must be OOS-MT-DSBLD.

The card must be inhibited before the last link on the card can be deleted.

An IPLIMx or IPGWx signaling link assigned to a local host cannot be deleted if it has a socket or association with connection status open=yes.

The slot portion of the specified card location (loc) can be 1 - 8 and 11 - 18 . Slots 09 and 10 cannot be specified. (The card location is *xyss*, where *x* is the frame, *y* is the shelf, and *ss* is the slot.)

If deleting the link causes the provisioned link count to fall below the numslk thresholds configured for the corresponding IPSG-M3UA linkset (see the `chg-lsopts` command), then the command cannot be entered.

If values of 0 or 1 are specified for all of the numslk threshold parameters, then the last link can be deleted.

SLK can only be deleted if no LG Engine is associated with it.

If the lsrestrict=on parameter is specified (see the `chg-ss7opts` command), and if deleting the link would send the number of links assigned to the linkset below the value specified for the tfatcabmlq parameter (see the `chg-ls` command), then the link cannot be deleted.

The GTT destination must exist in the DSTN table.

Notes

This command disassociates the equipment of a link from a logical signaling link. The link must first be placed in the unavailable (UAV) state by entering the `chg-slk` (or `canc-slk`) command before this command can be used to disconnect it. Entering this command results in the link entity being deleted from the STP's link entity set. The link is then considered to be "disconnected." The link on the STP becomes unassigned (spare) but retains the existing equipment type and options; the link remains in the "equipped" provisioning state unless that state is changed by subsequent local craft activity. The link is also no longer associated with its assigned linkset.

Not every card location represents a signaling link. Be sure to address a signaling link in this command.

Installation Guide provides an illustration of card locations.

Signaling links and scheduled UI measurement reports

If the Integrated Measurements feature is turned on, the measurements subsystem is provisioned (see the `chg-measopts` command), and the latest deletion causes the provisioned link count to fall to 700, then the measurements subsystem automatically enables the scheduled UI measurements report.

Output

`dlt-slk:loc=1211:link=a`

```
    rlghncxa03w 05-02-07 11:11:28 EST  EAGLE5 33.0.0
```

```
    DLT-SLK: MASP A - COMPLTD
;
```

Related Commands

act-slk, *blk-slk*, *chg-lsopts*, *dact-slk*, *ent-slk*, *inh-slk*, *rept-stat-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

dlt-snmp-host

Delete SNMP Host

Use this comand to delete an existing entry in the SNMP Host table.

Parameters

host (optional)

Host name. This parameter is used as the search key to locate a specific table entry. Either HOST or IPADDR must be specified, but both cannot be used in the same command.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 32 characters in length. Valid values are a..z, A..Z, 0..9, or .

ipaddr (optional)

IP Address. This parameter is used as the search key to locate a specific table entry. Either HOST or IPADDR must be specified, but both cannot be used in the same command.

Range:

4 numbers separated by dots, with each number in the range of 0-255.

Example

```
dlt-snmp-host:host=snmpmgr
```

```
dlt-snmp-host:ipaddr=10.25.60.99
```

Dependencies

The specified HOST or IPADDR must exist in the SNMP Host table.

The SNMP feature must be enabled before an SNMP Host can be configured.

To locate a table entry, either the HOST or IPADDR parameters must be specified, but both cannot be used in the same command.

Notes

None.

Output

`dlt-snmp-host:ipaddr=10.25.55.25`

```
tekelecstp 12-06-13 11:08:11 EST 45.0.0-64.66.0
dlt-snmp-host:ipaddr=10.25.55.25
Command entered at terminal #4.
SNMP HOST table is (1 of 2) 50% full
DLT-SNMP-HOST: MASP A - COMPLTD
;
```

Related Commands

ent-snmp-host, *chg-snmp-host*, *rtrv-snmp-host*

dlt-spc

Delete Secondary Point Code

Use this command to delete an SPC (secondary point code) from the database. Also use this command to change an SPC by first removing the SPC from the database and then using the `ent-spc` command to enter the new SPC value.

Parameters

Note: See *Point Code Formats and Conversion* in Appendix A for a detailed description of point code formats, rules for specification, and examples.

spc (mandatory)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

spca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

spc/spca/spci/spcn/spcn24/spcn16 (mandatory)

Secondary point code.

spci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

spcn (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (prefix-zone-area-id).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

spcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

spcn16 (mandatory)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*.

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Example

```
dlt-spc:spc=10-20-30
dlt-spc:spcn24=98-98-98
dlt-spc:spcn=s-12345
dlt-spc:spcn16=121-10-30
```

Dependencies

A secondary point code that is referenced in the Destination table cannot be deleted.

If the value specified for the spc parameter is referenced in the Linkset table, then the parameter cannot be deleted.

The MPC feature must be turned on before this command can be entered.

The value specified for the spc parameter must exist in the Secondary Point Code table.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

```
dlt-spc:spc=10-20-30
```

```
    rlghncxa03w 04-02-18 08:50:12 EST  EAGLE 31.3.0
    Secondary Point Code table is (7 of 40) 17% full
    DLT-SPC: MASP A - COMPLTD
;
```

```
dlt-spc:spcn16=126-10-30
```

```
    rlghncxa03w 14-06-22 08:50:12 EST  EAGLE 46.0.0
    Secondary Point Code table is (7 of 40) 17% full
```

```
    DLT-SPC: MASP A - COMPLTD
;
```

Related Commands

ent-spc, *rtrv-spc*

dlt-srvsel

Delete Service Selector

Use this command to delete a service selector.

Parameters

gti/gtia/gtii/gtin/gtin24 (mandatory)

Global title indicator. For all service selector commands, the domain is defined as GTI and GTIA (ANSI), GTII (ITU international), and GTIN (ITU national). For the service selector commands, GTI and GTIA are equivalent.

Range:

2, 4

Supported value for ANSI: gti=2, gtia=2

Supported values for ITU: gtii=2, gtii=4, gtin=2, gtin=4, gtin24=2, gtin24=4

ssn (mandatory)

Subsystem number.

Range:

0 - 255

tt (mandatory)

Translation type.

Range:

0 - 255

nai (optional)

Nature of Address indicator.

Range:

sub

rsvd

natl

intl

naiv (optional)

Nature of Address indicator value.

Range:

0 - 127

np (optional)

Numbering Plan.

Range:

e164

generic

x121

f69

e210

e212

e214

private

npv (optional)

Numbering Plan value.

Range:

0 - 15

Example

```
dlt-srvsel:gti=2:ssn=250:tt=10
dlt-srvsel:gtin=4:tt=0:ssn=100:np=e164:nai=sub
dlt-srvsel:gtin24=4:tt=4:ssn=20:np=e164:nai=intl
dlt-srvsel:gtii=4:tt=4:np=e164:nai=intl:ssn=9
dlt-srvsel:gtii=4:tt=5:np=e164:nai=intl:ssn=*
```

Dependencies

The np and npv parameters cannot be specified together in the command.

The nai and naiv parameters cannot be specified together in the command.

The value 4 is not valid for the gti and gtia parameters.

The values 1 and 3 are not valid for the gti/gtia/gtii/gtin/gtin24 parameters.

If the gtii/gtin/gtin24=4 parameter is specified, then an np(v) and nai(v) parameter combination must be specified. These parameters can be specified in the following combinations: np/naiv, npv/nai, np/nai, or npv/naiv.

If the gti/gtia/gtii/gtin/gtin24=2 parameter is specified, no np(v) and nai(v) parameter combinations can be specified.

An entry must already exist that matches the gti/gtia/gtii/gtin/gtin24, tt, ssn, and np(v) and nai(v) combination of parameters.

The requested service selector entry must exist in the database.

The GSM DBMM table must be accessible.

Notes

None

Output

```
dlt-srvsel:gti=2:ssn=250:tt=10
```

```
    rlghncxa03w 07-10-05 16:40:40 EST  EAGLE 37.5.0
    Service Selector table is (114 of 1024) 11% full
    DLT-SRVSEL: MASP A - COMPLTD
;
```

Related Commands

chg-srvsel, *ent-srvsel* , *rtrv-srvsel*

dlt-ss-appl

Delete Subsystem Application

Use this command to remove the application from the database.

Parameters

appl (mandatory)

Application type.

Range:

lnp

inp

eir

vflex

atinpq

aiq

Example

`dlt-ss-appl:appl=inp`

Dependencies

The LNP feature must be turned on before the appl=lnp parameter can be specified.

The INP feature must be turned on before the `dlt-ss-appl:appl=inp` command can be entered.

The Equipment Identity Register (EIR) feature must be turned on before the `dlt-ss-appl:appl=eir` command can be entered.

The value specified for the appl parameter must already exist in the SS-APPL table.

The subsystem must be inhibited before status=offline can be specified.

Application type must exist in the LNP database (non DBS 1.0 only)

Failed reading SSAPPL table. (non-DBS 1.0 systems only)

The V-Flex feature must be turned on before the appl=vflex parameter can be specified.

The ATINP feature must be enabled before the appl=atinpq parameter can be entered.

The ANSI41 AIQ feature must be enabled before the appl=aiq parameter can be specified.

Notes

When a subsystem application is deleted, the following message is displayed:

CAUTION: DELETED APPL SSN MAY BE REFERENCED BY GTT ENTRY

Output

`dlt-ss-appl:appl=aiq`

```
    tekelecstp 09-12-03 17:34:20 EST  EAGLE 42.0.0
    DLT-SS-APPL: MASP A - CAUTION: DELETED APPL SSN MAY BE REFERENCED BY GTT
ENTRY
    DLT-SS-APPL: MASP A - COMPLTD
;
```

Related Commands

chg-ss-appl, *ent-ss-appl*, *rtrv-ss-appl*

dlt-subnetid Delete Subnet ID

Use this command to delete a Subnet ID entry from the Subnet ID list, for the ISUP NP with EPAP feature.

Parameters

subnetid (mandatory)

Subnet ID

Range:

1 - 15 digits

Example

```
dlt-subnetid:subnetid=886933
```

Dependencies

The subnetid=none parameter cannot be specified.

The specified Vendor ID entry must already exist in the SUBNETID table.

Notes

None.

Output

```
dlt-subnetid:subnetid=886933
```

```
    rlghncxa03w 04-10-07 11:11:28 EST  EAGLE 31.11.0
    SUBNETID table is (6 of 50) 3% full
    DLT-SUBNETID: MASP A - COMPLTD
;
```

Related Commands

ent-subnetid, *rtrv-subnetid*

dlt-t1 Delete T1 Interface

Use this command to delete an interface for HC-MIM or E5-E1T1/E5-E1T1-B cards used as T1 or ST-HSL-A cards.

T1 ports 1, 3, 5, and 7 (master ports) can be independently channel bridged with their adjacent even numbered (slave) ports 2, 4, 6, and 8 to allow non-signaling data pass-through. The slave port interface is automatically deleted with the command that deletes its master port interface.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

t1port (mandatory)

T1 card port number. The value must be a T1 port for which an interface has already been configured on the specified T1 card.

Range:

1 - 8

Example

```
dlt-t1:loc=1205:t1port=2
```

Dependencies

The specified card location (loc parameter) must be equipped.

The card in the specified card location (loc parameter) must be a LIMT1 card type.

The port specified by the t1port parameter must be already equipped with a T1 interface.

All signaling links providing timeslots serviced by the specified T1 interface must be deleted before the T1 interface can be deleted. Use the `dlt-slk` command to delete the signaling links providing the timeslots.

A channel bridged slave (even-numbered) port cannot be specified in the t1port parameter. To delete channel bridged port interfaces, specify the master (odd-numberd) port in the t1port parameter. The slave port interface is automatically deleted when its master port interface is deleted.

Card locations 1113 - 1118 (E5-MASP and E5-MDAL cards) cannot be specified as values for the loc parameter.

Notes

None.

Output

```
dlt-t1:loc=1205:t1port=1
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
    DLT-T1: MASP A - COMPLTD
;
```

Related Commands

chg-t1, *ent-t1*, *rtrv-e1*, *tst-t1*

dlt-tt

Delete Translation Type

Use this command to remove a translation type from the system database.

Note: When the EGTT feature is turned on, the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is turned on.

Parameters

alias (optional)

The global title translation type

Range:

000 - 255

Default:

No translation type given

ttn (optional)

Translation type name.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

Default:

No translation name is given

type/typea/typei/typen/typen24/typeis/typens (optional)

Translation type. This parameter identifies the translation type and network type. This parameter is the decimal representation of the 1-byte field used in SS7.

The type and typea parameters specify an ANSI network.

The typei parameter specifies an ITU-international network.

The typen parameter specifies an ITU-national network.

The typen24 parameter specifies a 24-bit ITU-national network.

The typeis parameter specifies an ITU-international spare network.

The typens parameter specifies an ITU-national spare network.

A translation type numeric value may be entered as ANSI type and as an ITU type. However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE protocol processing as either ANSI or ITU; therefore, ITU applies to ITU-I, ITU-I spare, ITU-N, ITU-N spare, and ITU-N24.

Range:

0 - 255

Default:

No translation type is specified

Example

```
dlt-tt:type=230
dlt-tt:ttn=lidb
dlt-tt:type=230:ttn=lidb
dlt-tt:type=230:ttn=lidb:alias=030
dlt-tt:typeis=3
dlt-tt:typens=4
dlt-tt:typeis=1:ttn=setitu001
```

Dependencies

Asterisk (*) parameter values are not allowed in this command.

To delete a translation type, the translation type, the translation name, or both, must be specified.

If the translation type is specified, it must already exist in the database for the network type.

If the translation name is specified, it must already exist in the database.

If the translation type is specified, it cannot be an alias value.

If both the translation type and translation name are specified, they must correspond.

The translation type cannot be deleted if there are current GTT entries that reference it.

To delete an alias, both the alias and the translation type must be specified, and both must already exist in the database for the network type.

If an alias is specified, it must be associated with the specified translation type and cannot be the value of an existing translation type.

The type or ttn parameter must be specified.

If aliases exist, they must be removed from the database before the translation types can be can removed.

The GTT set associated with the translation type specified by the ttn parameter must have a set type of CDGTA (see the `ent-gttset` command).

The network domain of the translation type specified by the ttn parameter cannot be CROSS (see the `ent-gttset` command).

The ttn=none parameter cannot be specified.

Notes

If the specified translation type entry is not referenced by a current global title translation entry and does not have any aliases, the translation type entry is removed.

This command can delete only selector entries that have been provisioned by GTT Selector commands, have a GTI value of 2, and a set type of CdGTA.

If the EGTT feature is turned on:

- For ANSI, if the GTT selector of a true entry is deleted using the `dlt-gttsel` command, then the aliases for the entry or the entry itself cannot be deleted.
- For ITU, if a true GTT selector entry (GTI=2 or GTI=4) is deleted using the `dlt-gttsel` command, or if the GTTSN of an entry is changed using the `chg-gttsel` command, then the aliases for that entry or the entry itself cannot be deleted.

Output

`dlt-tt:typens=4`

```
    tekelecstp 10-03-28 16:51:25 EST  Eagle 42.0.0
    DLT-TT: MASP A - COMPLTD
;
```

Related Commands

ent-tt, *rtrv-tt*

dlt-ttmap — Delete Translation Type Mapping

Use this command to delete from the database a mapped SS7 message translation type (TT) for a given gateway linkset name. For example, suppose you are mapping the translation type 001 (before TT mapping) to 238 (after TT mapping). You can use this command to delete that mapping from the database.

Parameters

lsn (mandatory)

Linkset name. The unique network identifier for the gateway linkset.

Range:

ayyyyyyyyy

1 alphabetic character followed by 9 alphanumeric characters

ett (optional)

Translation type before mapping. The identification of the type of global title translation in the SS7 message*before* translation type mapping. This attribute is the decimal

representation of the 1-octet binary field used by the SS7 protocol to identify the translation type.

Range:

0 - 255

io (optional)

Incoming or outgoing. The system uses this parameter to indicate whether the translation type mapping data provisioned for the gateway linkset is for SS7 messages *received* or *sent* on the linkset.

Range:

i

incoming

o

outgoing

Default:

Both incoming and outgoing

Example

```
dlt-ttmap:lsn=n c001:io=i:ett=128:mtt=55
```

Dependencies

None

Notes

None

Output

```
dlt-ttmap:lsn=nc001:io=i:ett=128:mtt=55
```

```
    rlghncxa03w 04-02-22 11:18:50 EST  EAGLE 31.3.0
    TTMAP table for nc001 is (2 of 64) 3% full
    DLT-TTMAP: MASP A - COMPLTD
;
```

Related Commands

chg-ttmap, *ent-ttmap*, *rtrv-ttmap*

Use this command to clear the level of activity threshold that is used to report UIM messages.

Parameters

uimn (mandatory)

The UIM number.

Range:

1000 - 1499

Example

Clears UIM number 1333 message threshold:

```
dlt-uim-acthresh:uimn=1333
```

Dependencies

The uimn parameter value must be a numeric value in the range of 1000–1499 .

The specified uimn value must exist in the UIM Threshold database table.

Notes

None

Output

```
dlt-uim-acthresh:uimn=1333
```

```
    rlghncxa03w 04-02-01 08:50:12 EST  EAGLE 31.3.0
    DLT-UIM-ACTHRESH: MASP A - COMPLTD
;
```

Related Commands

rtrv-uim-acthresh, *set-uim-acthresh*

dlt-user Delete User

Use this command to remove a user from the system database.

Parameters

uid (mandatory)

User ID

Range:

azzzzzzzzzzzzzzz

1 alphabetic character followed by up to 15 alphanumeric characters

Example

```
dlt-user:uid=terryjohnson
```

Dependencies

The first character must be a letter.

Notes

If the user being removed is logged onto the system, this command logs the user off immediately.

Output

```
dlt-user:uid=terryjohnson
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    DLT-USER: MASP A - COMPLTD
;
```

Related Commands

act-user, *chg-pid*, *chg-user*, *dact-user*, *ent-user*, *login*, *logout*, *rept-stat-user*, *rtrv-secu-user*, *rtrv-user*

dlt-vendid Delete Vendor ID

Use this command to delete a Vendor ID entry from the Vendor ID list, for the GSM MAP SRI Redirect to Serving HLR feature.

Parameters

vendid (mandatory)

Vendor ID

Range:

1 - 15 digits

Example

```
dlt-vendid:vendid=886933
```

Dependencies

The vendid=none parameter cannot be specified.

The specified Vendor ID entry must already exist in the VendID table.

Notes

None.

Output

```
dlt-vendid:vendid=886933
```

```
    rlghncxa03w 04-10-07 11:11:28 EST  EAGLE 31.11.0
    VENDID table is (6 of 200) 3% full
    DLT-VENDID: MASP A - COMPLTD
;
```

Related Commands

ent-vendid, *rtrv-vendid*

dlt-vflx-cd

Delete VFLEX Call Decision Entry

Use this command to delete call decision criteria from the Call Decision table. The V-Flex feature must be enabled before this command can be entered.

Parameters

cdn (mandatory)

Call decision name. This parameter specifies the entry in the Call Decision table to be deleted.

Range:

ayyy

1 alphabetic character followed by 3 alphanumeric characters

Example

```
dlt-vflx-cd:cdn=cdn1
```

Dependencies

The value specified for the cdn parameter cannot be a reserved word, such as *none*.

The value specified for the cdn parameter must already exist in the Call Decision table.

The V-Flex feature must be enabled before this command can be entered.

Output

```
dlt-vflx-cd:cdn=cdn1
```

```
    rlghncxa03w 08-05-07 11:11:28 EST  EAGLE 39.0.0
    DLT-VFLX-CD: MASP A - COMPLTD
;
```

Related Commands

chg-vflx-cd, *ent-vflx-cd*, *rtrv-vflx-cd*

dlt-vflx-rn

Delete VFLEX Routing Number

Use this command to delete a voice mail routing number from the Routing Number table. The V-Flex feature must be enabled before this command can be entered.

Parameters

rnname (mandatory)

Routing number name. This parameter specifies the voice mail routing number to be deleted.

Range:

ayyyyyyy

1 alphabetic character followed by 7 alphanumeric characters.

Example

```
dlt-vflx-rn:rnname=rn01
```

Dependencies

The V-Flex feature must be enabled before this command can be entered.

The value specified for the rnname parameter must already exist in the Routing Number table.

The value specified for the rnname parameter cannot be referenced by an entry in the VMSID table.

The value specified for the rnname parameter cannot be a reserved word such as *none*.

Output

```
dlt-vflx-rn:rnname=rn02
```

```
    rlghncxa03w 08-05-29 08:51:12 EST  EAGLE 39.0.0
    DLT-VFLX-RN: MASP A - COMPLTD
;
```

Related Commands

chg-vflx-rn, *ent-vflx-rn*, *rtrv-vflx-rn*

dlt-vflx-vmsid

Delete VFLEX VMSID Entry

Use this command to delete a voice mail server ID from the VMSID table.

Parameters

id (mandatory)

The voice mail server to be deleted.

Range:

1 - 15 dgts, *dflt*

Valid digits are *0-9, A-F, a-f*

dflt —the default VMS ID

Example

```
dlt-vflx-vmsid:id=1234ae4
```

Dependencies

The V-Flex feature must be enabled before this command can be entered.

The value specified for the vmsid parameter must already exist in the VMSID table.

Output

```
dlt-vflx-vmsid:id=1234ae5
```

```
    rlghncxa03w 08-05-29 08:51:12 EST  EAGLE 39.0.0
    DLT-VFLX-VMSID: MASP A - COMPLTD
;
```

Related Commands

chg-vflx-vmsid, *ent-vflx-vmsid*, *rtrv-vflx-vmsid*

enable-ctrl-feat

Enable Controlled Feature

Use this command to enable a controlled feature that the customer is entitled to use.

Note: The "LNP (Local Number Portability) feature" is turned on when the LNP ported TNs quantity is greater than 0 in the `rtrv-ctrl-feat` command output (an LNP ported TNs quantity feature access key has been enabled and turned on).

Parameters

fak (mandatory)

Feature Access Key. The Feature Access Key for the feature.

Range:

ayyyyyyyyyyyy

13 alphanumeric characters; the first character must be a letter

The feature access key cannot contain any special characters, including spaces and dashes. Upper-case characters are mapped to lower case.

partnum (mandatory)

Part number. The part number for the feature.

Range:

893000000 - 893999999

Do not include dashes in the 9-digit number.

Example

```
enable-ctrl-feat:partnum=893xxxxxx:fak=xxxxxxxxxxxxx
```

Dependencies

The phrase "Service Module cards" refers to E5-SM4G or E5-SM8G-B cards when any of these cards can be used. If a specific card is required, then the appropriate requirement is listed.

The Dual ExAP Config feature cannot be enabled before the E5-SM4G Throughput Cap feature is enabled.

The system serial number must be locked in the database before this command can be entered for the feature (see the `ent-serial-num` command).

The feature access key must be valid for the specified feature part number and for the system serial number.

A feature cannot be enabled with this command when the feature has already been enabled with a temporary feature access key, a permanently ON feature access key, or a feature access key for a quantity that is greater than the quantity specified in the command.

A temporary feature access key can be used only one time to enable a feature. After the temporary feature access key expires, you must purchase the feature before you can use a permanent feature access key to enable the feature.

A temporary feature access key cannot be used to enable features that do not allow a temporary feature access key. The following features allow a temporary feature access key:

- 15 Minute Measurements
- Command Class Management
- EAGLE OA&M IP Security
- IDP Screening for Prepaid
- Intermediate GTT Load Sharing (IGTTLS)
- LNP ELAP Configuration
- LNP Short Message Service (LNP SMS)
- MNP Circular Route Prevention
- Network Security Enhancements
- Portability Check for MO SMS
- Prepaid IDP Query Relay
- SCCP Conversion
- Telnet

The GTT feature must be on before the IDP Screening for Prepaid feature can be enabled.

The value specified for the partnum parameter must be the correct part number for the feature.

A valid system serial number must be entered in the database before this command can be entered for the feature (see the `ent-serial-num` command).

The LNP ELAP Configuration feature and the WNP feature must be turned on before the LNP SMS feature can be enabled.

The GTT feature must be turned on before the XGTT Table Expansion feature can be enabled.

Both cards that run the OAM application in the system must be GPSM-II cards before the XGTT Table Expansion feature can be enabled.

The DSTN5000 feature bit for the 5000 Routesets feature must be turned on before the 6000 Routesets, 7000 Routesets, 8000 Routesets, or 10,000 Routesets feature can be enabled.

The 7000 Routesets or 8000 Routesets feature cannot be enabled if more than 8000 alias point codes are already assigned in the system.

The 10,000 Routesets feature cannot be enabled if more than 10000 alias point codes are already assigned in the system.

If the LNP (an LNP ported TNs quantity), LNP 150,000 LRNs, or LNP 300,000 NPANXX feature is enabled, then none of the following features can be enabled unless the Dual ExAP Config feature is enabled:

- AINPQ
- A-Port
- ATINP
- Equipment Identity Register (EIR)

- G-Flex
- G-Port
- Info Analyzed Relay Base (IAR Base)
- INP
- IS41 GSM Migration (IGM)
- MO SMS ASD
- MO SMS GRN
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- MTP Msgs for SCCP Apps
- Portability Check for MO SMS
- Prepaid IDP Query Relay (IDP Relay)
- Prepaid SMS Intercept Phase 1 (PPSMS)
- TIF Number Portability
- TIF Number Substitution
- TIF Subscriber CgPN Blacklist
- V-Flex

The LNP feature (an LNP ported TNs quantity) must be enabled before the LNP 150,000 LRNs feature or the LNP 300.000 NPANXXs feature can be enabled.

The LNP ELAP Configuration feature must be enabled and turned on before any LNP quantity features can be enabled.

The LNP feature for 24 million TNs requires all Service Module cards with a minimum of 2GB of memory.

The LNP feature for 36 million TNs requires all Service Module cards with a minimum of 3GB of memory.

The LNP feature for LNP ported TNs quantities of 48 million TNs to 192 million TNs requires all Service Module cards with a minimum of 4GB of memory.

The LNP feature for LNP ported TNs quantities of 204 million TNs to 228 million TNs requires all Service Module cards with a minimum of 4GB of memory.

The 150,000 LNP LRNs feature requires all Service Module cards with a minimum of 2GB of memory.

The 300,000 LNP NPANXXs feature requires all Service Module cards with a minimum of 2GB of memory.

The GTT feature bit must be turned on (see the `chg-feat` command) before the following features can be enabled:

- Advanced GT Modification (AMGTT)
- ANSI41 AIQ
- ATI Number Portability Query (ATINP)
- Dual ExAP Config
- E5-SM4G Throughput Capacity
- Equipment Identity Register (EIR)
- G-Flex
- GSM Map Screening (GSM)
- Hex Digit Support for GTT

- Info Analyzed Relay Base (IAR Base)
- Intermediate GTT Loadsharing (IGTTLS)
- LNP ELAP Configuration
- LNP ported LRNs
- LNP ported NPANXXs
- LNP ported TNs
- MO SMS ASD
- MO SMS GRN
- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- MTP Msgs for SCCP Apps
- MTP Routed Gateway Screening Stop Action
- Portability Check for MO SMS (MNPSMS)
- Prepaid SMS Intercept Ph1 (PPSMS)
- SCCP Loop Detection
- TIF Additional Subscriber Data
- TIF Generic Routing Number
- TIF Number Portability
- TIF Number Substitution
- TIF Range CgPN Blacklist
- TIF SCS Forwarding
- TIF Simple Number Substitution
- TIF Subscriber CgPN Blacklist
- Transaction-based GTT Loadsharing (TBGTTLS)
- Voice Mail Router (V-Flex)

If the SCCP Conversion or TCAP Conversion feature is turned on, then the ANSI/ITU SCCP Conversion feature cannot be enabled.

The ANSI/ITU SCCP Conversion feature requires Service Module cards in the system.

The GSM Map Screening (GSM) feature must be turned on before the Enhanced GSM Map Screening (EGSM) feature can be enabled.

The Enhanced GSM Map Screening (EGSM) feature must be turned on before the MTP MAP Screening feature can be enabled.

The Measurements Platform feature must be turned on and the Measurements Platform collection function must be enabled (see the `chg-measopts:platformenable=on` parameter) before the MTP MAP Screening feature can be enabled (at least one MCPM card must be active).

The G-Port feature must be turned on before the following features can be enabled:

- GSM MAP SRI Redirect for Serving HLR
- ISUP NP with EPAP
- MNP Circular Route Prevention
- Prepaid SMS Intercept Phase 1 (PPSMS)

The GWS (Gateway Screening) feature must be turned on before the following features can be enabled:

- Integrated GLS

- ISUP NP with EPAP
- TIF Additional Subscriber Data
- TIF Generic Routing Number
- TIF Number Portability
- TIF Number Substitution
- TIF Range CgPN Blacklist
- TIF SCS Forwarding
- TIF Simple Number Substitution
- TIF Subscriber CgPN Blacklist

The following features cannot be enabled if the ANSIGFLEX system option is enabled (see the `chg-stpopts` command) AND E5-SM4G Throughput Cap quantity key for 6800 or above has not been enabled:

- 1100 TPS/DSM for ITU NP
- ANSI-41 INP Query (AINPQ)
- A-Port
- ATINP
- Equipment Identity Register (EIR)
- G-Flex MAP Layer Routing
- G-Port
- Info Analyzed Relay Base
- INP
- IS41 GSM Migration (IGM)
- MO SMS ASD
- MO SMS GRN
- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- Portability Check for MO SMS
- TIF Number Portability
- TIF Number Substitution
- TIF Selective Screening
- TIF Subscriber CgPN Blacklist
- V-Flex

The following features cannot be enabled if the ANSIGFLEX system option is enabled (see the `chg-stpopts` command) AND DSM is equipped in the system

- 1100 TPS/DSM for ITU NP
- ANSI-41 INP Query (AINPQ)
- A-Port
- ATINP
- Equipment Identity Register (EIR)
- G-Flex MAP Layer Routing
- G-Port
- Info Analyzed Relay Base
- INP
- IS41 GSM Migration (IGM)

- MO SMS ASD
- MO SMS GRN
- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- Portability Check for MO SMS
- TIF Number Portability
- TIF Number Substitution
- TIF Selective Screening
- TIF Subscriber CgPN Blacklist
- V-Flex

Before an LNP ported TNs quantity greater than 96 million numbers can be enabled, an ELAP system that supports a quantity greater than 96 million numbers must be available to the EAGLE.

- The ELAP software must be at version 4.0 to support LNP ported TNs quantities greater than 96 million numbers and up to 120 million numbers.
- The ELAP software must be at version 5.0 or greater to support LNP ported TNs quantities greater than 120 million numbers. A quantity greater than 120 million numbers cannot be enabled until the ELAP is upgraded to the required software level, and the appropriate ELAP commands are issued to convert the 120 Million LNP Numbers database structure to the data compaction structure for more than 120 million numbers.

The `rept-stat-mps` command can be entered at the EAGLE to determine the ELAP software version.

Service Module cards running the VSCCP application must be present in the system before the following features can be enabled:

- AINPQ
- ANSI41 AIQ
- A-Port
- ATI Number Portability Query (ATINP)
- EIR
- Enhanced GSM MAP Screening (EGMS)
- Flexible GTT Load Sharing
- G-Flex
- G-Port
- INP
- IS41 GSM Migration (IGM)
- LNP ELAP Configuration
- MO SMS ASD
- MO SMS B-Party Routing
- MO SMS GRN
- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- Origin-based SCCP Routing (OBSR)
- PPSMS
- SCCP Loop Detection

- TIF Additional Subscriber Data
- TIF Generic Routing Number
- TIF Number Portability
- TIF Number Substitution
- TIF Range CgPN Blacklist
- TIF SCS Forwarding
- TIF Simple Number Substitution
- TIF Subscriber CgPN Blacklist
- Transaction-based GTT Loadsharing (TBGTTLS)
- Weighted GTT Loadsharing (WGTTLS)
- V-Flex

Before LNP ported TNs quantities greater than 96 million numbers can be enabled, an ELAP system must be available to validate its software version to the EAGLE.

The Enhanced GTT (EGTT) feature must be turned on before the following features can be enabled

- Flexible Linkset Optional Based Routing (FLOBR)
- GTT Action - DISCARD
- GTT Action - DUPLICATE
- GTT Action - FORWARD
- MO SMS B-Party Routing
- Origin-based SCCP Routing

At least one of the EPAP-based ITU NP features (G-Port, A-Port, INP, IGM, EIR, IDP Relay, ANSI-41 INP Query, V-Flex, or PPSMS) must be turned on before the 1100 TPS/DSM for ITU NP feature can be enabled.

The GTT feature must be turned on before the A-Port feature can be enabled.

The GTT feature must be turned on before the G-Port feature can be enabled.

The GTT feature must be turned on before the IS41 GSM Migration (IGM) feature can be enabled.

If a DSM card with less than 4 gigabytes of memory is present in the system, the following features cannot be enabled

- A-Port
- MO SMS ASD
- MO SMS B-Party Routing
- MO SMS GRN
- MO SMS IS41-to-GSM Migration
- MO SMS Prepaid Intercept on B-Party
- Portability Check for MO SMS
- PPSMS

The PPSMS feature cannot be enabled if the LNP ELAP Configuration feature is turned on.

Service Module cards must be provisioned in the system before the Prepaid IDP Query Relay feature can be enabled.

The GTT feature must be turned on before the Prepaid IDP Query Relay feature can be enabled.

The IP User Interface feature must be enabled before the SEAS Over IP feature can be enabled.

If the TIF (Number Portability/ Additional Subscriber Data / Generic Routing Number) is enabled, then the LNP feature cannot be enabled. If the LNP feature is enabled, then the TIF (Number Portability/ Additional Subscriber Data / Generic Routing Number) feature cannot be enabled.

The Multiple Point Code (MPC) feature must be turned on before the Multiple Linksets to Single Adjacent PC (MLS) feature can be enabled.

The G-Flex feature must be turned on before the G-Flex MAP Layer Routing feature can be enabled.

The G-Port feature must be enabled before the following features can be enabled:

- G-Port SRI Query for Prepaid
- MT-Based GSM SMS NP

The A-Port feature must be enabled before the MT-Based IS41 SMS NP feature can be enabled.

The AMGTT CdPA Only feature cannot be enabled using the `enable-ctrl-feat` command. This feature is automatically enabled and turned on if the MGTT feature was on before upgrade to EAGLE Release 38.0 occurred.

The AMGTT CdPA Only feature must be turned on before the AMGTT CgPA Upgrade feature can be enabled.

If the AMGTT CdPA Only feature or the AMGTT CgPA Upgrade feature is turned on, then the AMGTT feature cannot be enabled.

The LNP (an LNP ported TNs quantity), LNP 150,000 LRNs, or LNP 300,000 NPANXX feature cannot be enabled if the INP or AINPQ feature is turned on or if any of the features listed below is enabled. If the LNP (an LNP ported TNs quantity), LNP 150,000 LRNs, or LNP 300,000 NPANXX feature is enabled, then none of the features listed below can be enabled.

- A-Port
- ATINP
- Equipment Identity Register (EIR)
- G-Flex
- G-Port
- Info Analyzed Relay Base (IAR Base)
- IDP Screening for Prepaid
- IS41 GSM Migration (IGM)
- MO SMS ASD
- MO SMS GRN
- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- MTP Msgs for SCCP Apps
- Portability Check for MO SMS (MNPSMS)
- Prepaid IDP Query Relay (IDP Relay)
- Prepaid SMS Intercept Phase 1 (PPSMS)
- TIF Number Portability
- TIF Number Substitution
- TIF Subscriber CgPN Blacklist
- V-Flex

The MT-Based GSM SMS NP feature must be enabled before the MT-Based GSM MMS NP feature can be enabled.

The LNP ported TNs 24 Million Quantity feature or greater must be turned on before the LRNQT feature can be enabled.

The Intermediate GTT Load Sharing feature must be turned on before the GTT LS ARI feature can be enabled.

The Flexible GTT Load Sharing feature must be enabled before the GTT LS ARI feature can be enabled.

The Flexible Linkset Optional Based Routing (FLOBR) feature must be turned on before the TCAP Opcode Based Routing (TOBR) feature can be enabled.

The Variable Length GTT (VGTT) feature must be turned on before the Support for 16 GTT Lengths in VGTT feature can be enabled.

The TOBR feature must be turned on before any of the TOBR Quantity features can be enabled.

A TOBR quantity feature cannot be enabled if a TOBR feature with a higher quantity is enabled.

If the TOBR quantity feature of maximum quantity level is enabled, then no other TOBR Quantity feature can be enabled.

The Prepaid IDP Query Relay feature must be turned on before the following features can be enabled:

- IDP A-Party Blacklist
- IDP A-Party Routing
- IDP Service Key Routing

The INP feature must be turned on before the INP CRP feature can be enabled.

The Default Country Code must be provisioned (see the defcc parameter in the `chg-stpopts` command) before the ATINP, IAR Base, MT-Based GSM SMS NP, or MT-Based IS41 SMS NP feature can be enabled.

If the system contains any cards other than those listed below, then the 2800 links quantity of the Large System # Links feature cannot be enabled:

- E5-ATM
- E5-ATM-B
- E5-E1T1
- E5-E1T1-B
- E5-ENET
- E5-ENET-B
- E5-IPSM
- E5-MCPM-B
- E5-OAM
- E5-SM4G
- E5-SM8G-B
- E5-TSM
- HC-MIM
- HIPR2

The Info Analyzed Relay Base (IAR Base) feature must be enabled before the IAR NP, IAR GRN, or IAR ASD feature can be enabled.

The S-Port feature and the IDP A-Party Blacklist feature cannot both be enabled in the system.

The value specified for the partnum parameter must consist of 9 digits, without any dashes. The first three digits are 893. The next six values are numeric (0...9).

The Service Portability (S-Port) feature must be enabled before the S-Port Subscriber Differentiation feature can be enabled.

If the system is not in mixed mode and is equipped with GPSM-II/TDM card(s), then the Integrated GLS and Integrated Measurements features cannot be enabled.

The A-Port or IGM feature must be turned on before the LOCREQ Query Response feature can be enabled.

If a PCT feature of maximum quantity level is enabled, then a PCT feature of a lower quantity cannot be enabled.

A PCT feature cannot be enabled if the quantity is higher than the quantity of the associated FAK.

If a DSM card is provisioned in the system, then the FLOBR, GTT Action – DUPLICATE, and VGTT-16 features cannot be enabled.

If an EOAM card is in the active or standby MASP location, then the 10,000 Routesets feature cannot be enabled.

The VCI value for any ATM link (see the `ent-slk` command) must be less than or equal to 16383 before a 3 Links per E5-ATM Card feature quantity can be enabled.

The mtplprst option must be configured (see the `chg-stpopts` command) before the Origin-based MTP Routing feature can be enabled.

The matchseq=dn parameter must be specified (see the `chg-tifopts` command) before the TIF Number Substitution feature can be enabled.

Each provisioned Service Module card must have at least 4G memory before the AINPQ feature can be enabled.

The MFC option must be configured to ON (see the `chg-stpopts` command) before the EPAP Data Split feature or Dual ExAP Config feature can be enabled.

At least one EPAP related feature must be turned on before the EPAP Data Split feature can be enabled.

The EPAP Data Split feature requires E5-SM4G or E5-SM8G-B cards.

ISUP NP with EPAP feature cannot be enabled once Dual ExAP Config feature has been enabled.

TIF Selective Screening feature is mutually exclusive with TIF Number Substitution feature. TIF Selective Screening feature uses Number Substitution digit field to store Call Types associated with DN.

The Default Country Code must be provisioned (see the defcc parameter in the chg-stpopts command) before the SIP NP feature can be enabled.

Quantities of 240-384 million TNs require E5-SM4G or E5-SM8G-B cards.

The J7 support feature cannot be enabled if ANSI or ITUN-24 SID is already provisioned.

Notes

XGTT or XMAP (GTT or MAP Table Increase) Feature

After the XGTT feature is enabled, the feature cannot be disabled or turned off.

After the XMAP feature is enabled, the feature cannot be disabled or turned off.

1500 Links and 2000 Links Support

After the 1500 Links feature or the 2000 Links Support feature is enabled, the feature cannot be disabled or turned off.

SE-HSL SLK Capacity

The SE-HSL feature allows unchannelized E1 links to be provisioned. The maximum number of unchannelized signaling links that can be assigned to HC-MIM, E5-E1T1, and E5-E1T1-B cards in the system with each SE-HSL SLK Capacity quantity feature access key are:

- 893-0130-01—4
- 893-0130-02—8
- 893-0130-03—16
- 893-0130-04—24
- 893-0130-05—32
- 893-0130-06—40
- 893-0130-07—48
- 893-0130-08—56
- 893-0130-09—64
- 893-0130-10—72
- 893-0130-11—80
- 893-0130-12—88
- 893-0130-13—96
- 893-0130-14—104
- 893-0130-15—112
- 893-0130-16—120

LNP 384 Million TNs, LNP 300,000 NPANXXs, LNP 150,000 LRNs, and LNP ELAP Configuration Features

Table 25: Minimum Hardware Required for LNP Quantity Features lists the minimum Service Module hardware type required by each LNP quantity feature.

Table 25: Minimum Hardware Required for LNP Quantity Features

Object / Capacity	Minimum Hardware	Part Number
24 Million TNs	E5-SM4G	893-0110-06
36 Million TNs	E5-SM4G	893-0110-07
48 Million TNs	E5-SM4G	893-0110-08
60 Million TNs	E5-SM4G	893-0110-09
72 Million TNs	E5-SM4G	893-0110-10
84 Million TNs	E5-SM4G	893-0110-11
96 Million TNs	E5-SM4G	893-0110-12

Object / Capacity	Minimum Hardware	Part Number
108 Million TNs	E5-SM4G	893-0110-13
120 Million TNs	E5-SM4G	893-0110-14
132 Million TNs	E5-SM4G	893-0110-15
144 Million TNs	E5-SM4G	893-0110-16
156 Million TNs	E5-SM4G	893-0110-17
168 Million TNs	E5-SM4G	893-0110-18
180 Million TNs	E5-SM4G	893-0110-19
192 Million TNs	E5-SM4G	893-0110-20
204 Million TNs	E5-SM4G	893-0110-21
216 Million TNs	E5-SM4G	893-0110-22
228 Million TNs	E5-SM4G	893-0110-23
240 Million TNs	E5-SM4G	893-0110-24
252 Million TNs	E5-SM4G	893-0110-25
264 Million TNs	E5-SM4G	893-0110-26
276 Million TNs	E5-SM4G	893-0110-27
288 Million TNs	E5-SM4G	893-0110-28
300 Million TNs	E5-SM4G	893-0110-29
312 Million TNs	E5-SM4G	893-0110-30
324 Million TNs	E5-SM4G	893-0110-31
336 Million TNs	E5-SM4G	893-0110-32
348 Million TNs	E5-SM4G	893-0110-33
360 Million TNs	E5-SM4G	893-0110-34
372 Million TNs	E5-SM4G	893-0110-35
384 Million TNs	E5-SM4G	893-0110-36
150,000 NPANXXs	E5-SM4G	893-0094-01
300,000 NPANXXs	E5-SM4G	893-0094-02
100,000 LRNs	E5-SM4G	893-0105-05

Object / Capacity	Minimum Hardware	Part Number
150,000 LRNs	E5-SM4G	893-0105-01

Flexible GTT Load Sharing

The Flexible GTT Load Sharing feature allows a PC or PC/SSN combination to be provisioned in multiple load-sharing relationships for post-GTT load sharing of intermediate and final GTT traffic.

Load sharing for intermediate GTT traffic requires the Intermediate GTT Load Sharing feature, which can be run in conjunction with the Flexible GTT Load Sharing feature. Intermediate GTT load sharing is performed through the MRN table, and the GTT destination is a PC. If both the Intermediate and Flexible GTT Load Sharing features are on, different load-sharing relationships can be defined between the same set of PCs, and different sets of destinations can contain the same PCs.

Load sharing for final GTT traffic is performed through the MAP table, and the GTT destination is a PC/SSN combination. If the Flexible GTT Load Sharing feature is on, different load-sharing relationships can be defined between the same set of PC/SSNs, and different sets of destinations can contain the same PC/SSN combinations.

Weighted GTT Loadsharing

The Weighted GTT Loadsharing feature allows a PC or PC/SSN combination to be provisioned with weights and threshold values to change the loadsharing method. This weight is relative to the weights of the PCs or PC/SSNs that have the same relative cost (RC group) and determines the relative percentage of traffic sent to the PC or PC/SSN. If the total available weight of the PCs or PC/SSNs in the RC group falls below the threshold, that RC group is not used and the next lowest RC group is used for traffic loadsharing.

SEAS Over IP

All database commands associated with the SEAS Over IP feature can be entered after the SEAS Over IP feature is enabled.

SCCP Loop Detection

The SCCP Loop Detection feature allows sets of point codes that form a routing loop in the network to be specified. These sets are linked with GTT sets and are checked during intermediate and final GTT traffic routing. If a loop exists, either the system can simply be notified or the traffic can be discarded. The SCCP Loop Detection feature requires the GTT feature and is supported on Service Module cards.

Multiple Linksets to a Single Adjacent PC (MLS)

The MLS feature allows multiple linksets to be established to a single adjacent destination point code.

Voice Mail Router (V-Flex)

The V-Flex feature allows calls to be routed to a specific voice mail server based on subscriber and call context data.

Proxy Point Code Capacity

The Proxy Point Code feature allows the EAGLE to assume the point codes of other nodes. The total numbers of proxy point codes that can be provisioned in the system for each quantity are:

- 893-0187-01—10
- 893-0187-02—20
- 893-0187-03—30

- 893-0187-04—40
- 893-0187-05—50
- 893-0187-06—60
- 893-0187-07—70
- 893-0187-08—80
- 893-0187-09—90
- 893-0187-10—100

E5-SM4G and E5-SM8G-B Throughput Capacity

The E5-SM4G and E5-SM8G-B Throughput Capacity feature is a quantity feature that is used to increase the SCCP traffic processing capacity of an E5-SM4G or E5-SM8G-B card.

- 893-0191-01—5000 TPS
- 893-0191-02—6800 TPS
- 893-0191-03—10,000 TPS
- 893-0191-04—13,600 TPS

Table 26: TPS Capacities displays the TPS capacities for each E5-SM4G Throughput Capacity Quantity

Table 26: TPS Capacities

Feature Quantity Part Number	Maximum TPS Capacity per Card	Maximum System TPS Capacity*
893-0191-01	3125 (if one or more EPAP-based features are enabled)	75,000 TPS with one or more EPAP-based features and 24+1cards 96,875 TPS with one or more EPAP-based features and 31+1 cards
	5000 (if no EPAP-based features are enabled)	155,000 TPS (if one or more GTT-based features is turned on) and 31+1 cards 40,000 TPS (if one or more ELAP-based features is enabled) with 8+1 cards 85,000 TPS (if one or more ELAP-based features is enabled) with 17+1 cards
893-0191-02	6800	210,800 TPS with or without EPAP-based features and 31+1 cards 163,200 TPS with one or more EPAP-based features and 24+1 cards 54,400 TPS with ELAP and 8+1 cards

Feature Quantity Part Number	Maximum TPS Capacity per Card	Maximum System TPS Capacity*
		115,600 TPS with ELAP and 17+1 cards
893-0191-03**	10,000	310,000 TPS with or without EPAP-based features and 31+1 cards 240,000 TPS with one or more EPAP-related features and 24+1 cards 80,000 TPS with ELAP and 8+1 cards 170,000 TPS with ELAP and 17+1 cards
893-0191-04** ***	13,600	421,600 TPS with or without EPAP-based features and 31+1 cards 326,400 TPS with one or more EPAP-related features and 24+1 cards 108,800 TPS with ELAP and 8+1 cards 231,200 TPS with ELAP and 17+1 cards

*32 cards implies an N+1 configuration, so 31 cards are used for calculating actual TPS capacity.

** Requires E5-SM8G-B

*** Requires that the EAGLE node contains only E5 B series cards.

HIPR2

The HIPR2 High Rate Mode feature (Part Number 893-0201-01) must be enabled before the EAGLE can use the entire channel for data and provide a throughput rate of 2.5Gbps. If this feature is not enabled, then the EAGLE provides an effective inter-shelf throughput rate of 1Gbps.

Advanced GT Modification (AMGTT)

There are three AMGTT features:

- Part number 893-0218-01: Advanced Global Title Modification (AMGTT). Allows non-MGTT customers to enable CdPA and CgPA functions after upgrade.
- Part number 893-0218-02: Advanced Global Title Modification, Called Party Only (AMGTT CdPA Only). Allows existing MGTT customers to continue using CdPA modification functions after upgrade. Does not allow any CgPA modification capabilities. The AMGTT CdPA Only feature cannot be enabled by this command. It is automatically enabled upon upgrading from the source release to EAGLE release 38.0 if the MGTT feature was turned on prior to the upgrade.

- Part number 893-0218-03: Advanced Global Title Modification, Calling Party Upgrade (AMGTT CgPA Upgrade). Allows existing MGTT customers to upgrade to AMGTT after upgrade to EAGLE release 38.0. Requires the AMGTT CdPA Only feature to be enabled, and allows full AMGTT CdPA and CgPA modification.

Prepaid IDP Query Relay

The IDPRCDPN(X) NPP Service must be turned on before the Prepaid IDP Query Relay feature can be turned on. The IDPRCGPN NPP service must be turned on to process Calling Party Numbers. The IDPRCGPN Service is reached from the IDPRCDPN Service. The following warning message appears while enabling the Prepaid IDP Query Relay feature:

Caution: Any of the IDPRCDPN(X) NPP services must be ON before turning ON the IDPR feature.

MO SMS IS41-to-GSM Migration

The MO SMS IS41-to-GSM Migration feature addresses modifications to the MO-based IS41 SMS NP feature (893-0194-01) required to meet certain IS41-to-GSM Migration call flows. This feature also allows the IS412GSM Migration Prefix to be used as a prefix instead of the RTDB RN/SP when an SMS is destined for a GSM-migrated subscriber.

SLS Bit Rotation by Incoming Linkset (ISLSBR)

The ISLSBR feature allows SLS Bit rotation to occur on an incoming linkset. This feature provides the ability to configure distribution in an ANSI or ITU network.

Eagle Additional Subscriber Data

Prepaid IDP Query Relay and TIF framework features support ASD data, which can be associated with individual subscribers and ranges. IDPR and TIF ASD/GRN features address the addition of ASD fields into the EAGLE. The ASD feature allows generic data to be associated with DN and DN Block subscriber records.

Prepaid SMS Intercept Ph1

The MOSMSGCDPN and MOSMSGCGPN services must be provisioned before the MO SMS Prepaid Check feature is turned on for "Prepaid SMS Intercept Ph1" to be functional. The following warning message appears while enabling the MO SMS Prepaid Check feature:

Caution: MOSMSGCDPN or/and MOSMSGCGPN NPP Services must be turned on for the feature to be functional.

MO-based IS41 SMS NP and MO SMS IS41-to-GSM Migration

The MOSMSICDPN NPP service must be provisioned before the MO-based IS41 SMS NP or the MO SMS IS41-to-GSM Migration feature is turned on for the feature to be functional. The following warning message appears while enabling these features:

Caution: MOSMSICDPN NPP Services must be turned on for the feature to be functional.

Portability Check for MO SMS

The MOSMSGCGPN NPP service must be enabled before the Portability Check for MO SMS feature is turned on for the feature to be functional. The following warning message appears while enabling the feature:

Caution: MOSMSGCGPN NPP Services must be turned on for the feature to be functional.

MO-based GSM SMS NP

The MOSMSGCDPN NPP service must be provisioned before the MO-based GSM SMS NP feature is turned on for the feature to be functional. The following warning message appears while enabling the feature:

Caution: MOSMSGCDPN NPP Services must be turned on for the feature to be functional.

GTT Load Sharing With Alternate Routing Indicator

The GTT Load Sharing with Alternate Routing Indicator (GTT LS ARI) feature allows loadsharing relationships to be established between the MAP and MRN table in that the MAP and MRN sets allow provisioning of MRN and MAP sets, respectively, as the Alternate Mate RI if the point codes in the MAP or MRN table are unavailable.

ST-HSL-A SLK Capacity

The ST-HSL-A feature allows unchannelized T1 links to be provisioned. The total number of unchannelized signaling links that can be assigned to HC-MIM, E5-E1T1 and E5-E1T1-B cards in the system with each ST-HSL-A SLK Capacity quantity feature access key is enabled are:

- 893-0273-01—4
- 893-0273-02—8
- 893-0273-03—16
- 893-0273-04—24
- 893-0273-05—32
- 893-0273-06—40
- 893-0273-07—48
- 893-0273-08—56
- 893-0273-09—64
- 893-0273-10—72
- 893-0273-11—80
- 893-0273-12—88
- 893-0273-13—96
- 893-0273-14—104
- 893-0273-15—112
- 893-0273-16—120
- 893-0273-07—128
- 893-0273-18—136
- 893-0273-19—144
- 893-0273-20—152
- 893-0273-21—160

- 893-0273-22—168
- 893-0273-23—176
- 893-0273-24—180

MO SMS ASD, MO SMS GRN

The MOSMSGCGPN, MOSMSGCDPN, MOSMSICGPN, or MOSMSICDPN NPP service must be provisioned before the MO SMS ASD or MO SMS GRN feature is turned on for the feature to be functional. The following warning message appears while enabling the feature:

Caution: MOSMSGCDPN, MOSMSICDPN, MOSMSGCGPN or/and MOSMSICGPN NPP Services must be turned on for the feature to be functional.

Large MSU Support for IP Signaling

The Large MSU Support for IP Signaling feature supports MSUs having a Service Information Field (SIF) up to 4095 bytes over M2PA and M3UA Protocols with Service Indicator (SI) values ranging from 6 to 15. The values for the Service Indicators are:

- 6, 7—Data
- 9—Broadband ISDN
- 10—Satellite ISDN
- 13—BICC
- 14—H.248
- 8, 11, 12, 15—Spare

EPAP based features

If Global Title Translation (GTT) is on and more than 25 SCCP cards are provisioned, then when the first EPAP based feature is enabled, a warning is issued to state that the EAGLE must be connected to an EPAP T1200 or higher. Subsequent commands for enabling EPAP based features are accepted without any warning.

XUDT UDT Conversion feature

The XUDT UDT Conversion feature allows the following SCCP message conversions:

- UDT(S) messages to XUDT(S) messages
- Non-segmented XUDT(S) messages to UDT(S) messages
- Segmented XUDT(S) messages to UDT(S) messages

3 Links per E5-ATM Card feature

The 3 Links per E5-ATM Card feature is a quantity feature that supports a third link (A1) on an E5-ATM or E5-ATM-B card. Each quantity FAK supports the 3 Links per E5-ATM card feature in an increment of 5 cards, up to a maximum of 385 cards. Part numbers range from 893-0391-01 (supports the feature on 5 cards) to 893-0391-77 (supports the feature on 385 cards).

Point Code and CIC Translation (PCT)

The PCT feature is a quantity feature that allows the EAGLE to change the destination point code (DPC) and originating point code (OPC) of an MTP-routed MSU to previously configured values. The quantity is used to define the maximum number of allowed translations:

- 893-0372-01—25 translations
- 893-0372-02—50 translations

- 893-0372-03—75 translations
- 893-0372-04—100 translations
- 893-0372-05—150 translations
- 893-0372-06—200 translations
- 893-0372-07—250 translations
- 893-0372-08—1000 translations

Integrated GLS

The E5-OAM Integrated GLS (Integrated GLS) feature allows the E5-MASP cards to support the function of GLS cards for Gateway Screening. If the Integrated GLS feature is turned on, then the E5-MASP accepts the bind requests for the GWS screenset from network cards, binds the requested screenset, and downloads the screenset to the requested network cards.

If the Integrated GLS feature is turned OFF, then the E5-MASP cards do not service the requests for binding screensets and the network cards continue to send binding requests for screen sets to the active GLS cards.

E5-ENET-B IPSG High Throughput

The E5-ENET-B IPSG High Throughput feature allows the E5-ENET-B card running the IPSG application to have a maximum capacity of 9500 TPS. If the feature is not turned on, then the E5-ENET-B card running the IPSG application has a maximum capacity of 6500 TPS.

EPAP Data Split

The EPAP Data Split feature allows EPAP data to be split into DN and IMSI subsets. Each subset is loaded on a specific set of E5-SM4G or E5-SM8G-B cards. The maximum capacity for each data subset (120 million) can be loaded on the associated set of cards. Therefore, splitting the data allows a system-wide EPAP data capacity of 240 million.

Dual ExAP Config

Warning: Enabling the Dual ExAP Config feature will disable functions of ISUP NP with EPAP and TINP.

Prior to enabling the Dual ExAP Config feature, upgrade the ISUP NP with EPAP and TINP features to TIF if one or both of those features are present in the system.

The Dual ExAP Config feature is allowed to be turned on regardless of whether the ISUP NP with EPAP or TINP features are already turned on.

If the Dual ExAP Config is turned on while ISUP NP with EPAP and TINP are not upgraded to TIF, these two features will stop working.

SIP Number Portability

The SIP-based Number Portability feature allows the E5-SM8G-B card running the SIPHC application to support SIP interfaces on EAGLE and also provide SIP based Number Portability using EAGLE's RTDB/RIDB.

1M System TPS

The 1M System TPS feature allows provisioning 1,000,000 TPS on SIGTRAN and ATM cards collectively. If the feature is not turned on, then the system will support 750,000 TPS or 500,000 TPS only based on the state of HIPR2 High Rate Mode feature. If the HIPR2 High Rate Mode feature is ON and the 1M System TPS is OFF, the system will support 750,000 TPS. If the HIPR2 High Rate Mode feature is OFF and the 1M System TPS is OFF, the system will support 500,000 TPS. HIPR2 High Rate Mode feature and MFC are mandatory features for turning ON the 1M System TPS feature.

S13/S13' Interface for EIR

The Diameter S13/S13' Interface for EIR feature allows the E5-SM8G-B card running the DEIRHC application to support Diameter S13/S13' interface on EAGLE and also provide EIR functionality on 3G and LTE networks.

Output

`enable-ctrl-feat:partnum=893xxxxxx:fak=xxxxxxxxxxxxx`

```
    tekelecstp 08-12-04 13:55:19 EST  EAGLE 40.1.0
    enable-ctrl-feat:partnum=893xxxxxx:fak=xxxxxxxxxxxxx
    Command entered at terminal #4.
    ENABLE-CTRL-FEAT: MASP A - COMPLTD
;
```

This example shows the output when more than 25 SCCP cards are provisioned and first EPAP-based feature is enabled:

This warning is issued when the first and only the first EPAP based feature is enabled.

`enable-ctrl-feat:partnum=89xxxxxxx:fak=xxxxxxxxxxxxx`

```
    tekelecstp 10-02-26 15:40:56 EST  EAGLE 42.0.0
    enable-ctrl-feat:partnum=893xxxxxx:fak=xxxxxxxxxxxxx
    Command entered at terminal #4.

    Warning: The Eagle must be connected to an EPAP T1200 or higher
    ENABLE-CTRL-FEAT: MASP A - COMPLTD
;
```

Related Commands

chg-ctrl-feat, *rtrv-ctrl-feat*

ent-acg-mic

Enter ACG Manually Initiated Control

Use this command to assign Automatic Call Gapping (ACG) controls to certain queries. The control can apply to all queries or to specific query services and called party digits. If the EAGLE LNP query service receives a query to which a control applies, then the EAGLE sends an ACG component, encoded as configured, with the response.

Parameters

drtn (mandatory)

Duration index. The amount of time that the ACG is in effect. This number is mapped to a time value at the LNP node.

Range:

1 - 13

Default:

The current value

aintvl (optional)

AIN interval index

Range:

1 - 15

Default:

The current value

dgts (optional)

Digits

Range:

000 - 999, 000000 - 9999999999

Specify 3 digits or 6-10 digits.

intvl (optional)

IN Interval index. The amount of time between ACGs. This number is mapped to a time value for the LNP node.

Range:

0 - 15

Default:

Current value

nd (optional)

Number of digits

Range:

3, 6 - 10

Default:

The current value

serv (optional)

Query service

Range:

ain

in

type (optional)

Type of control

Range:

all

sd

Default:

sd

Example

```
ent-acg-mic:type=all:nd=6:drtn=6:intvl=2:aintvl=7
ent-acg-mic:serv=ain:dgts=9194602132:drtn=13:aintvl=1
ent-acg-mic:type=sd:serv=in:dgts=919:drtn=8:intvl=3
```

Dependencies

If the type=all parameter is specified, then the nd, intvl, and aintvl parameters must be specified.

If the type=all parameter is specified, the optional parameters serv and dgts cannot be specified.

If the type=sd parameter is specified, the optional parameters serv and dgts must be specified.

If the type=sd parameter is specified, then the nd parameter cannot be specified.

If the serv=in parameter is specified, the aintvl parameter cannot be specified.

If the serv=ain parameter is specified, the optional parameter intvl cannot be specified.

If the serv=in parameter is specified, the optional parameter intvl must be specified.

If the serv=ain parameter is specified, the optional parameter aintvl must be specified.

The dgts parameter value must be specified as 3 or 6–10 digits.

A valid value must be specified for the nd parameter.

The LNP feature must be turned on before this command can be entered.

If the type=all parameter is specified, then an MIC with the type=all parameter cannot already exist.

If the type=sd parameter is specified, a MIC with the same service and digits must not already exist.

A maximum of 256 type=sd MICs are allowed.

Notes

None

Output

```
ent-acg-mic:type=all:nd=6:drtn=6:intvl=2:aintvl=7
```

```
    rlghncxa03w 04-02-28 08:50:12 EST  EAGLE 31.3.0
    ACG MIC table is (11 of 256) 4% full of type SD
    ENT-ACG-MIC: MASP A - COMPLTD
;
```

Related Commands

chg-acg-mic, *dlt-acg-mic*, *rept-stat-lnp*, *rtrv-acg-mic*

ent-acg-noc

Enter ACG Node Overload Control

Use this command to enter the values for the automatic call gapping (ACG) controls that you want to send when you reach the specified node overload level. The definition is comprised of the threshold LNP query rates for node overload levels and the values for the ACG to be sent when at the level. If a level is not defined, it is not used. Level 10 is predefined.

Parameters

drtn (mandatory)

Duration index. The amount of time that the ACG is in effect. This number is mapped to a time value at the LNP node.

Range:

1 - 13

Default:

The current value

intvl (mandatory)

Interval index. The amount of time between ACGs. This number is mapped to a time value for the LNP node.

Range:

0 - 15

Default:

Current value

lvl (mandatory)

Overload level.

Range:

1 - 9

qr (mandatory)

Query rate. The number of LNP queries, which define a particular overload level, in a 30-second period.

Range:

1 - 2147483647

and (optional)

AIN number of digits. The number of digits in the global title address of an AIN query.

Range:

6

10

Default:

6

ind (optional)

IN number of digits. The number of digits in the global title address of an IN query.

Range:

6

10

Default:

6

Example

```
ent-acg-noc:lvl=3:qr=300000:and=10:ind=6:drtn=6:intvl=3
```

Dependencies

The LNP feature must be turned on before this command can be entered.

Either 6 or 10 must be specified for the and parameter.

The specified overload level must not already be defined.

Either 6 or 10 must be specified for theind parameter.

Notes

None

Output

```
ent-acg-noc:lvl=3:qr=300000:and=10:ind=6:drtn=6:intvl=3
```

```
    rlghncxa03w 04-02-28 08:50:12 EST  EAGLE 31.3.0
    ENT-ACG-NOC: MASP A - COMPLTD
;
```

Related Commands

chg-acg-noc, *dlt-acg-noc*, *rept-stat-lnp*, *rtrv-acg-noc*

ent-appl-rtkey Enter Application Route Key Table

Use this command to configure static entries in the Routing Key table, which associates a routing key with a socket name.

There are three types of routing keys, as follows:

- DPC, SI, SSN routing keys, which are used to route SCCP messages
- DPC, SI routing keys, which are used to route non-SCCP and non-ISUP messages
- DPC, SI, CIC routing keys, which are used to route ISUP messages

Parameters

Note: See *Point Code Formats and Conversion* in Appendix A for a detailed description of point code formats, rules for specification, and examples.

asname (mandatory)

Application Server (AS) name assigned to this routing key.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

cice (optional)

The end range of circuit identification codes assigned to the routing key.

Range:

0 - 4294967295

See *Table 57: Valid CIC Ranges for SI and MSU Types* for valid CIC values for specified SI and MSU types.

cics (optional)

The start range of circuit identification codes assigned to the routing key.

Range:

0 - 4294967295

See *Table 57: Valid CIC Ranges for SI and MSU Types* for valid CIC values for specified SI and MSU types.

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Originating point code. This parameter is valid and required if a value of 4, 5, or 13 is specified for the si parameter and the type=full parameter is specified.

opci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

New ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

rcontext (optional)

Routing context. The new routing context for a routing key. The routing context uniquely identifies the routing key.

Routing context is mandatory for routing keys associated with SUA Application Servers. Routing context is optional for routing keys associated with M3UA Application Servers.

Range:

0 - 4294967295

si (optional)

Service indicator.

Range:

0-15 or equivalent text values

Number =Text—Description

0=snm—Signaling network management messages

1=regtest—Signaling network testing and maintenance regular

2=spltes—Signaling network testing and maintenance special

3=sccp—SCCP

4=tup—Telephone user part

5=isup—ISDN user part

13=qbicc

ssn (optional)

Subsystem number.

Range:

0 - 255

type (optional)

The type of routing key.

Range:

full

partial

default

Default:

full

Example

```
ent-appl-rtkey:asname=suaas1:dpc=8-8-8:si=3:ssn=5:rcontext=100
ent-appl-rtkey:asname=suaas2:dpc=8-8-8:si=3:type=partial:rcontext=101
ent-appl-rtkey:asname=suaas3:dpc=8-8-8:type=partial:rcontext=102
ent-appl-rtkey:asname=suaas4:si= 3:type=partial:rcontext=103
ent-appl-rtkey:asname=suaas5:type=default:rcontext=104
ent-appl-rtkey:asname=m3uaas1:dpc=8-8-9:si=5:opc=3-3-3:cics=1:cice=100:rcontext=200
ent-appl-rtkey:asname=m3uaas2:dpc=8-8-9:si=5:opc=3-3-3:type=partial:rcontext=201
ent-appl-rtkey:asname=m3uaas3:dpc=8-8-9:si=5:type=partial:rcontext=202
ent-appl-rtkey:asname=m3uaas4:dpc=8-8-9:type=partial:rcontext=203
ent-appl-rtkey:asname=m3uaas5:si= 5:type=partial:rcontext=204
ent-appl-rtkey:asname=m3uaas6:type=default:rcontext=205
ent-appl-rtkey:dpci=s-3-11-1:si=5:opci=s-4-11-1:cics=1:cice=1000:asname=asitu
ent-appl-rtkey:dpc=1-1-1:si=3:asname=as1:ssn=255
ent-appl-rtkey:dpci=3-11-1:si=3:opci=4-11-1:cics=1:cice=1000:asname=asitu:rcontext=7
ent-appl-rtkey:dpcn16=121-10-15:si=3:opcn16=121-10-16:asname=asitu
```

Dependencies

The srkq parameter (see the `chg-sg-opts` command) limits the maximum number of static routing keys that can be provisioned using this command. For SS7IPGW and IPGWI applications running on E5-ENET and E5-ENET-B cards, there is a limit of 2500 routing keys in the system.

The ssn parameter is valid only when the si=3 (or *sccp*) parameter is specified.

The value specified for the cics parameter must be less than or equal to the value specified for the cice parameter.

The ISUP routing-over-IP feature must be turned on before a DPC/SI/CIC routing key to route ISUP messages can be specified.

A circuit identification code range (cics - cice) cannot be specified that overlaps an existing routing key.

When a value of 4, 5, or 13 (*tup, isup*, or *qbicc*) is specified for the si parameter, the opc, cics, and cice parameters are required. The opc, cics, and cice parameters can be specified only if a value of 4, 5, or 13 is specified for the si parameter. See *Table 57: Valid CIC Ranges for SI and MSU Types* for valid cic and si values for MSU types.

Partial point codes are not allowed; no asterisks can be specified in the routing key in the command.

Mixed point code types are not allowed; the types for the opc and dpc parameters must match.

A DPC/SI routing key must be specified when the DPC is ANSI and the si=4 parameter is specified (TUP is used only in an ITU network).

When the type=full parameter is specified, the dpc and si parameters must also be specified.

The group codes for the dpc and opc parameter values must match when both parameters are entered in the command.

The rcontext parameter must be specified for routing keys that are associated with SUA Application Servers.

The specified rcontext parameter value must not already exist in the database.

If specified, the service indicator parameter must be si=3 for routing keys that are associated with SUA Application Servers.

An AS cannot be simultaneously assigned to a routing key with routing contexts and routing keys without routing context.

To assign an M3UA or SUA association to multiple routing keys with routing context, the M3UA/SUA association must be assigned to more than one AS and each AS must be assigned to a routing key with routing context.

The AS name and parameters specified for a routing key must use an address format that is valid for the adapter type used by the ASP associations assigned to the AS.

If the type=default parameter is specified, then the rcontext and asname parameters are the only optional parameters that can be specified.

The following four types of partial routing keys are supported:

- DPC/SI/OPC (ignore CIC) can be used as a partial match key for CIC- based traffic.
- DPC/SI (ignore all other fields) can be used as a partial match key for CIC- based traffic or SCCP traffic.
- DPC only (ignore all other fields) can be used as a partial match for any type of traffic.
- SI only (ignore all other fields) can be used as a partial match for any type of traffic.

The DPC entered cannot be an APC or SAPC for an IPGWx linkset. Routing keys cannot be provisioned for the fake adjacent node.

AS can be associated to only one routing key that contains a routing context value.

The J7 support feature must be enabled before the dpcn16/opcn16 parameters can be specified.

Mixed point code types are not allowed, the types for the opc and dpc must match.

The routing context value should be unique.

Notes

The Routing Key table associates a routing key with a socket name or an Application Server (AS).

The routing key can be associated with up to 16 socket names or with 1 AS.

The OPC and DPC cannot specify a cluster route.

Group codes are required for ITU-N point codes and spare point codes (DPCN/OPCN) when the ITU Duplicate Point Code feature (ITUDUPPC) is turned on, and not allowed when the feature is off.

Routing context is a routing key parameter that uniquely identifies routing keys. Routing context is mandatory for routing keys associated with SUA Application Servers and optional for routing keys associated with M3UA Application Servers. An AS cannot be simultaneously assigned to routing keys with routing contexts and routing keys without routing contexts.

An AS cannot be simultaneously assigned to a routing key with routing contexts and routing keys without routing contexts.

An AS can be associated with multiple routing keys that do not contain routing context. An AS can be associated with only 1 routing key with routing context.To assign an M3UA or SUA association to multiple routing keys with routing context, the M3UA/SUA association must be assigned to more than one AS and each AS must be assigned to a routing key with routing context.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

```
ent-appl-rtkey:dpc=2-2-2:asname=assoc1:type=partial
```

```
    rlghncxa03w 08-04-17 15:35:05 EST  EAGLE 38.0.0
    ENT-APPL-RTKEY: MASP A - COMPLTD
;
```

Related Commands

dlt-appl-rtkey, *rtrv-appl-rtkey*

ent-as

Enter Application Server

Use this command to create an Application Server (AS) as a logical entity to serve a specific routing key. This command enters a new AS into the AS table and assigns an M3UA or SUA SCTP association to it, or assigns an M3UA or SUA SCTP association to an existing AS.

Parameters

aname (mandatory)

Name of the M3UA or SUA SCTP association.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

asname (mandatory)

Name of the Application Server (AS).

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

Example

```
ent-as:asname=asx:aname=asxp1
```

Dependencies

The specified aname must exist in the IPAPSOCK table.

The adapter layer for each association assigned to the AS must be defined.

SUA Application Servers must have routing keys with assigned routing contexts.

The service indicator must be si=3 for routing keys that are associated with SUA Application Servers.

The adapter layer must be the same for all M3UA/SUA associations assigned to the AS.

The value specified for the aname parameter cannot refer to an IPLIMx or IPSG association.

The asname=default parameter cannot be specified.

An association can be assigned to a maximum of 50 application servers.

Notes

The DCM card has 16 MB of memory. Socket/association limits are based on card memory as is the ratio of associations to sockets. This ratio, known as the trade ratio, defines the number of sockets that are equivalent to one association with respect to memory consumption.

By default the AS recovery timer value is set to 200 ms when an AS is entered. This value can be changed at any time using the `chg-as` command. The new timer value will be used the next time the AS enters the AS-Pending state.

The trade ratio states the quantity of associations to sockets that may be provisioned on a certain card, as follows:

Trade Ratio = a:s

Where:

a=association : s=socket

The maximum sockets/associations per DCM card are:

- Socket to Association Ratio—8:1
- Max Sockets—50
- Max Associations—4

Output

```
ent-as:asame=asx:aname=asxp1
```

```
    rlghncxa03w 05-05-17 15:35:05 EST  EAGLE 34.0.0
    ENT-AS: MASP A - COMPLTD
;
```

Related Commands

chg-as, *dlt-as*, *rtrv-as*

ent-assoc Enter Association

Use this command to configure the SCTP associations in the IPAPSOCK table. This command associates the local host and local port to a remote host and remote port in the IPAPSOCK table. This command provides the association to transport protocol data units and adapter layer peer messages. Each association is connected to a process on the far end.

Parameters

aname (mandatory)

Name assigned to this association (in IPAPSOCK table).

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

lhost (mandatory)

The local host name as defined in the IP Host table.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string of characters beginning with a letter and comprising up to 60 characters in length

adapter (optional)

The adapter layer for this association.

Range:

diam

m2pa

m3ua

sua

Default:

m3ua if the local host is an IPGWx card and the adapter type is not specified.

m2pa if the local host is an IPLIMx or IPSG card and the adapter type is not specified.

diam if the local host is a DEIR card running DEIRHC GPL and the adapter type is not specified.

alhost (optional)

Name of alternate local host. When specified, this parameter configures the SCTP association as a multi-homed endpoint.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz, *none*

Any string of characters beginning with a letter and comprising up to 60 characters in length

none—the alhost is not configured; the SCTP association is configured as a uni-homed endpoint

link (optional)

The signaling link for this association.

Synonym:

port

Range:

a, b, a1-a31, b1-b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

Default:

a

lport (optional)

The SCTP port number for the Local Host.

Range:

1024 - 65535

Default:

0

m2patset (optional)

The M2PA timer set assigned to this association.

Range:

1 - 20

Default:

1

rhost (optional)

Name of Remote Host as defined in the IP Host table.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string of characters beginning with a letter and comprising up to 60 characters in length

rport (optional)

The SCTP port number for the Remote Host.

Range:

1024 - 65535

Default:

0

Example

```
ent-assoc:aname=assoc1:lhost=gw105.nc.tekelec.com:lport=1030
:rhost=gw100.nc.tekelec.com:rport=1030:adapter=m3ua
```

```
ent-assoc:aname=assoc1:lhost=gw105.nc.tekelec.com:lport=1030
:rhost=gw100.nc.tekelec.com:rport=1030:adapter=diam
```

Dependencies

The value specified for the aname parameter must already exist in the IP Socket/Association (IPAPSOCK) table.

The hostnames specified in the lhost and alhost parameters must refer to different IP addresses.

The IP host names specified in the lhost and alhost parameters must exist in the IP Host table and must be provisioned as local to this EAGLE.

The hostnames specified in the lhost and alhost parameters must refer to IP addresses on the same IP card.

To assign an association on an IPLIMx card for a local host, the signaling link associated with the signaling link port must have its ipliml2=m2pa.

If the m2patset parameter is specified, then the adapter=m2pa parameter must be specified.

If the card is running an IPLIM or IPLIMI application, then an association with adapter=sua or *m3ua* cannot be assigned as a value for the lhost parameter. If the card is running the DEIRHC GPL, then the adapter type must be DIAM.

Association connection parameters (lhost, rhost, lport, rport) must be unique.

The card location for the card associated with the lhost and alhost must exist in the IP Link table.

The allowed maximum is 1 association per signaling link on IPLIMx cards.

There is a maximum of 50 connections (association-to-AS assignments + sockets) per Local Host on IPGWx cards.

A maximum of 4000 connections (association-to-AS assignments + sockets) are allowed per system.

If the value specified for the lhost parameter refers to an IPSG card or a DEIR card running the DEIRHC GPL, then the link parameter cannot be specified.

A maximum of 32 associations can be provisioned on an IPSG card.

The value specified for the link parameter must be valid for the card and application type:

- Link A—card running the SS7IPGW or IPGWI application

- Links A - A7 and B - B7—card running the IPLIM or IPLIMI application
- Links A - A15 and B - B15—card running the IPSG application

The value specified for the host parameter must begin with an alphabetic character and can contain a..z, A..Z, 0..9, - (hyphen), or . (period). If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

ALHOST must not be specified when association has adapter of DIAM type.

LHOST with REALM and RHOST with REALM are mandatory parameters for an association with adapter type DIAM.

RHOST is a mandatory parameter for a DIAM association.

RHOST must be present in the IPHOST table.

Remote IP address (RHOST) must not exist in the IPLINK table.

The IP Socket/Association (IPAPSOCK) table cannot contain more than 4000 entries.

Notes

The IPAPSOCK table is used to associate the Local Host/Local Port to a Remote Host/Remote Port. This fully specifies the connection.

For a diameter association, the IPAPSOCK table is used to associate the Local Host/Local Realm/Local Port to a Remote Host/Remote Realm/Remote Port. This fully specifies the diameter connection.

SCTP associations can be configured as either uni-homed or multi-homed endpoints. Uni-homed endpoints are SCTP associations configured with the lhost parameter specified and the alhost parameter not specified. In this case, the lhost represents an IP address that corresponds to either the A or B network of the IP application card (see `chg-ip-lnk`). Multi-homed endpoints are SCTP associations configured with both the *lhost* and alhost parameters specified. In this case, the lhost represents an IP address corresponding to one of the networks (A or B) of the IP card while the alhost represents an IP address corresponding to the other network of the same IP card.

If a valid lhost parameter is specified that equates to a valid IP address, the lhost maps directly to a card location in the IP Link table, which can then determine the card's application (IPLIMx or SS7IPGWx). If the application is an IPLIMx, two additional validation checks are made:

- The adapter parameter value must equal *m3ua* or *m2pa*.
- The ipliml2 value for the IPLIMx signaling link must be the same as the association adapter parameter value.
- The ipliml2 value for an IPLIMx signaling link cannot be set to *m3ua*.

If the determination of the application running on the card or the signal link cannot be performed when the `ent-assoc` command is executed, the check will be performed by the `chg-assoc` command.

An association with an adapter value of *m2pa* cannot be assigned to an SS7IPGW or IPGWI host.

There are fields in the IPAPSOCK table that receive default values even though there are no parameters on this command for changing those fields. If a different value is desired, the `chg-assoc` command must be used. The `chg-assoc` command can also be used if the hostnames are too long to fit on the command line with other parameters. The fields in question and their default values are:

- open=no
- alw=no

- rmode=lin
- rmin=120
- rmax=800
- rtimes=10
- cwmin=3000
- ver=rfc
- istrms=2
- ostrms=2

For the M2PA RFC feature, when the application is IPLIMx and the adapter=m2pa parameter is specified, the supported M2PA version is set to M2PA RFC by default.

For the S13/S13' EIR feature, if the E5-SM8G-B card is running the DEIRHC GPL, an adapter other than diam cannot be specified.

Output

```
ent-assoc:aname=assoc1:lhost=gw105.nc.tekelec.com:lport=1030
:rhost=gw100.nc.tekelec.com:rport=1030:adapter=m3ua
```

```
    rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
    ENT-ASSOC: MASP A - COMPLTD
;
```

Related Commands

chg-assoc, *dlt-assoc*, *rtrv-assoc*

ent-card

Enter Card

Use this command to add a card to the database. The card type and application specifies the function assigned to the card.

Parameters

Note: The phrase "Service Module card" refers to a Database Services Module (DSM), E5-SM4G, or E5-SM8G-B card when any of these cards can be used. The cards are provisioned with the type=dsm and appl=vsccp parameters.

appl (mandatory)

Application. The application for the card.

Range:

xyyyyyy

1 alphabetic character followed by up to 6 alphanumeric characters. Valid applications are:

atmansi—Used by E5-ATM and E5-ATM-B cards to support ANSI high-speed ATM signaling links and T1 functions.

atmitu—Used by E5-ATM and E5-ATM-B cards to support ITU E1 high-speed ATM signaling links and E1 functions.

ccs7itu—Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards for ITU-TSS MTP functions.

elap- Used by E5-APP-B card to support ELAP/LNP functionality.

enumhc- Used by E5-SM8G-B cards to support the ENUM application.

epap - Used by E5-APP-B card to support EPAP/RTDB functionality.

eroute—Used by STC and E5-STC cards for EAGLE 5 Integrated Monitoring Support functions.

gls—Used by E5-TSM cards for downloading gateway screening to LIM and Service Module cards.

imf --- Used by E5-APP-B card to support IMF functionality.

ipgwi—Used by E5-ENET and E5-ENET-B cards for IP point-to-multipoint connectivity for ITU point codes.

iplim—Used by E5-ENET and E5-ENET-B cards for IP point-to-point connectivity for ANSI point codes.

iplimi—Used by E5-ENET and E5-ENET-B cards for IP point-to-point connectivity for ITU point codes.

ips—Used by E5-IPSM and E5-ENET-B cards for the IP User Interface feature.

ipsg—Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA.

lsms - Used by E5-APP-B card to support LSMS/LNP functionality.

mcp—Used by E5-MCPM-B cards for the Measurements Platform feature.

nas - Used by E5-APP-B card to support NAS (storage of LNPDB from LSMS) functionality.

siphc— Used by E5-SM8G-B Cards to support SIP application.

ss7ansi—Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards for ANSI MTP functions.

ss7ipgw— Used by E5-ENET and E5-ENET-B cards for TCP/IP point-to-multipoint connectivity.

stplan—Used by E5-ENET and E5-ENET-B cards to support STP LAN functions.

switch - Used by Telco switch to add power consumed by Telco Switch to Frame Power Budget. This is not an application gpl.

vsccp—Used by Service Module cards to support EPAP-based features and LNP features. If no EPAP-based features or LNP features are turned on, and a Service Module card is present, the VSCCP GPL processes GTT traffic.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311- 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 6201 - 6208, 6211 - 6218, 6301 - 6308, 6311 - 6318

type (mandatory)

The type of hardware being added.

Range:

dcm

Data Communications Module card (E5-ENET or E5-ENET-B card). Applications for this card type are STPLAN, IPLIM, IPLIMI, SS7IPGW, and IPGWI.

dsm

E5-SM4G or E5-SM8G-B card to support EPAP-based features, LNP features, and the GTT feature. The application for this card type is VSCCP. The E5-SM8G-B card also supports the S13/S13' EIR, ENUM, and SIP Number Portability features. The application for the E5-SM8G-B card running the S13/S13' EIR, ENUM, or SIP application is DEIRHC, ENUMHC, or SIPHC respectively.

e5appb

E5-APP-B card to support ELAP, EPAP, IMF, LSMS, and NAS applications.

enet

E5-ENET or E5-ENET-B card to support the IP Signaling Gateway. The application for this card type is IPSG.

enetb

E5-ENET-B card to support the IP Signaling Gateway. The application for this card type is IPSG

ipsm

IP Services Module card (E5-IPSM or E5-ENET-B card) to support the IP User Interface feature. The application for this card type is IPS.

limatm

E5-ATM or E5-ATM-B card to support high-speed signaling links. The application for this card type is ATMANSI.

lime1atm

E5-ATM or E5-ATM-B card to support high-speed signaling links. The application for this card type is ATMITU.

lime1

HC-MIM, E5-E1T1, or E5-E1T1-B card used as an E1 card or an SE-HSL card. Applications for this card type are SS7ANSI and CCS7ITU.

limt1

HC-MIM, E5-E1T1, or E5-E1T1-B card used as a T1 card; or E5-E1T1 or E5-E1T1-B card used as an ST-HSL-A card. Applications for this card type are SS7ANSI or CCS7ITU.

mcpm

E5-MCPM-B card used as a Measurement Collection and Polling Module (MCPM) card for the Measurements Platform feature. The application for this card type is MCP.

stc

E5-ENET or E5-ENET-B card used as a Signaling Transport Card (STC or E5-STC) for the EAGLE 5 Integrated Monitoring Support feature. The application for this card type is EROUTE.

telco

TELCO switch to add power consumed by Telco Switch to Frame Power Budget.

tsm

E5-TSM card used for Gateway Screening. The application for this card type is GLS.

data (optional)

The type of RTDB data that can be loaded on an E5-SM4G or an E5-SM8G-B card.

Range:

dn

only DN related data from EPAP is loaded on the card

elap

ELAP data are loaded on the card

epap

all RTDB data from EPAP are loaded on the card

Note: The *epap* value can only be specified by Oracle personnel in a debug mode when the EPAP Data Split feature is ON.

gtt

Only OAM data are loaded on the card. The card will not load any ELAP or EPAP data at all.

imsi

only IMSI related data from EPAP is loaded on the card

force (optional)

If the force=yes parameter is used to add a LIM card to the database, it is recommended that you add the required number of Service Module cards to the database after the LIM card is added to avoid the loss of global title translation (GTT) traffic.

Range:

yes

Default:

yes

srvname (optional)

The name/identifier of the server/host running on E5-APP-B cards and Telco Switches.

Range:

yyyyyyyyyyyyyyyy

Example

```
ent-card:loc=1206:type=limatm:appl=atmansi:force=yes
ent-card:loc=1208:type=limatm:appl=atmansi:force=no
ent-card:loc=1105:type=enet:appl=ipsg
ent-card:loc=1201:type=dsm:appl=vsccp:data=dn
ent-card:loc=1101:type=e5appb:appl=epap:srvname=tklcepap:force=yes
ent-card:loc=1103:type=e5appb:appl=elap:srvname=tklcelap
ent-card:loc=6201:type=telco:appl=switch:srvname=telco1
ent-card:loc=1101:type=dsm:appl=siphc=data=dn
ent-card:loc=1101:type=dsm:appl=vsccp:data=elap
ent-card:loc=1104:type=dsm:appl=deirhc
ent-card:loc=1101:type=dsm:appl=enumhc
```

Dependencies

Note: The LNP feature is "turned on" when an LNP ported TNs quantity is shown in the `rtrv-ctrl-feat` command output.

For features that are enabled with the `enable-ctrl-feat` command, use the `rtrv-ctrl-feat` command to verify whether a feature is enabled or turned on. For features that are turned on with the `chg-feat` command, use the `rtrv-feat` command to display the ON or OFF status of the features.

Table 62: Valid Card Applications and Types shows the card names, the only valid card type (type parameter) and application (appl parameter) combinations, the card part numbers, and the maximum number of cards allowed in the database.

The card location must not be 1113-1118, *xy*09 or *xy*10 where *x* is the frame and *y* is the shelf.

The specified shelf location must be provisioned and present in the frame.

The specified card location cannot already be provisioned in the database.

The DSM card must be inserted into an odd-numbered location. The n+1 slot next to the DSM card must be empty, where **n** is the odd-numbered location (for example, if the DSM card is in location 1101, then the 1102 slot must be empty and unprovisioned).

The Measurements Platform feature must be turned on before the command can be entered for an MCPM card (type=mcpm:appl=mcp).

A valid value must be specified for the appl parameter.

A card that is in an active maintenance state cannot be provisioned with this command. A card must be in the Out-of Service-Memory Administration (OOS-MA) state before it can be provisioned.

The n+1 slot next to the DSM or HC-MIM card must be empty, where *n* is the odd-numbered location (for example, if the DSM card is in location 1101, then the 1102 slot must be empty and unprovisioned).

The GTT feature must be turned on to specify the appl=vsccp parameter.

The GWS feature must be turned on to specify the appl=gls parameter.

The LAN feature must be turned on to specify the appl=stplan parameter.

A valid card type must be specified. See the description for the type parameter for a list of valid values.

Table 62: Valid Card Applications and Types lists the maximum number of cards of each card type and application that are allowed in the system.

All provisioned shelves must contain HIPR cards before more than 115 LIM-ATM cards can be provisioned.

If EPAP Data Split feature is ON, a value of *dn* or *imsi* must be specified for the data parameter. The epap value can only be specified by Oracle personnel.

If ELAP or EPAP is specified for the data parameter, the Dual ExAP Config feature must be enabled.

When data=gtt is specified, either the Dual ExAP Config feature must be enabled or the EPAP Data Split feature must be turned ON.

When data=epap is specified, the Dual ExAP Config feature must be enabled and the EPAP Data Split feature must be OFF.

The EPAP Data Split feature must be turned on before the data parameter can be specified.

If the EPAP Data Split feature is turned on or the Dual ExAP Config feature is enabled, and the value specified for the loc parameter indicates an E5-SM4G or E5-SM8G-B card, then the data parameter must be specified. The data parameter can be specified only for an E5-SM4G or E5-SM8G-B card.

The Diameter S13/S13' Interface for EIR feature must be enabled before the type=dsm and appl=deirhc parameters can be specified.

The data parameter is not allowed with the DEIRHC GPL.

A maximum of 32 EPAP based cards can be provisioned with type=dsm and data=EPAP/DN/IMSI.

The SIPNP feature must be enabled before the type=dsm and appl=siphc parameters can be specified.

The DATA parameter can only be equal to EPAP/ELAP when type=dsm and appl=siphc parameters are specified.

The srvname parameter must be specified for an E5-APP-B card and Telco Switch.

The srvname must be unique for each E5-APP-B card and Telco Switch to be provisioned in the system.

Unless the force parameter is specified, two E5-APP-B cards running the same application cannot be provisioned in slots drawing power from the same FAP power source. EAGLE shelf card slots XXX1, XXX2, XXX5, and XXX6 draw power from the A designation FAP power source. Cards XXX3, XXX4, XXX7, and XXX8 draw power from the B designation FAP power source.

The srvname parameter can only be used with E5-APP-B card or Telco Switch.

Telco switch can only be provisioned in a shelf with type equal to FPB.

E5-APP-B card and Telco switch cannot be provisioned in the same shelf. They are mutually exclusive.

A maximum of 6 Telco switches can be provisioned in a shelf.

E5-ENET-B and E5-APP-B card can be provisioned if shelf FAN bit is turned ON.

When re-entering the command for the provisioning of the 26th Service Module card, the re-entered command must specify type=dsm and the same loc value as the original command. See "Service Module Cards" under *Notes* for more information.

5275 E5275 Cmd Rej: ent-card command for type DSM already in progress

Notes

ITU Environment

The force parameter can be specified to add the card even if its addition would exceed the SCCP TPS threshold. If the force=yes parameter is specified, the command is accepted but the following warning message appears:

```
WARNING: System current rated TPS unable to support additional SS7 card = use
FORCE=YES.
```

If the force=yes parameter is specified, it is recommended that the required number of Service Module cards be added to the database after the LIM card is added. This action avoids the loss of GTT traffic. Another option is to add additional Service Module cards or to increase the SCCP TPS threshold, and then add the LIM card. This action prevents the alarm from being triggered.

For additional information on using the force parameter, see Chapter 4, "System Administration Procedures" of the *Database Administration - System Management User's Guide*.

STC Cards

STC cards are E5-ENET and E5-ENET-B cards that run the EROUTE application. E5-ENET and E5-ENET-B cards provisioned with type=stc can be referred to as E5-STC cards.

The type=stc and appl=eroute parameters apply only when the EAGLE 5 Integrated Monitoring Support (E5IS) feature is turned on.

An "n+1" STC configuration is required to provide redundancy: therefore, a minimum of two STC cards must be provisioned in the EAGLE.

The EAGLE can contain a maximum of 32 STC cards.

The STC cards must be provisioned in the same shelf that contains the cards or links being monitored.

Cards Running the STPLAN Application

E5-ENET and E5-ENET-B cards can be provisioned to run the STPLAN application. E5-ENET and E5-ENET-B cards running the STPLAN application can be referred to as E5-SLAN cards.

An "n+1" STP LAN configuration is required to provide redundancy: therefore, a minimum of two E5-SLAN cards must be provisioned in the EAGLE. A minimum of 2 E5-SLAN cards must be provisioned in the EAGLE for "n+1" redundancy purposes.

The cards used to run the STPLAN application (E5-SLAN cards) must be provisioned in the same shelf that contains the cards or links being monitored.

E5-SM4G/E5-SM8G-B Cards

If an LNP feature quantity that is greater than 192 million numbers and less than 240 million numbers is present in a node, and there is an attempt to insert an E5-SM4G or E5-SM8G-B card, then the card auto-inhibits (see the `alw-card` command).

IPSM Cards

IPSM cards consist of E5-IPSM and E5-ENET-B cards.

A maximum of three IPSM cards are supported for a single EAGLE node, on any shelf or combination of shelves.

IPSG Cards

IPSG cards consist of E5-ENET or E5-ENET-B cards running the IP Signaling Gateway application (type=enet or enetb and appl=ipsg). The IPSG application combines the functionality of IPLIMx M2PA and IPGWx M3UA.

E5-ATM/E5-ATM-B Cards

E5-ATM and E5-ATM-B cards support ANSI and ITU implementations. The cards can support 3 ATM signaling links, operating at 1 Erlang.

IP Signaling Capacity Guidelines

System limits on the total number of cards allowed in the system are not enforced by the `ent-card` command. If the HIPR2 High Rate Mode feature is turned off, then the total IP Signaling TPS for the system must be less than or equal to 500,000 TPS. If the HIPR2 High Rate Mode feature is turned on, then the total IP Signaling TPS for the system must be less than or equal to 750,000 TPS. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the total IP Signaling TPS for the system must be less than or equal to 1,000,000 TPS.

E5-TSM Cards

A maximum of eight E5-TSM cards are supported for a single EAGLE node, on any shelf or combination of shelves, to support the GLS application for Gateway Screening.

Fast Copy Cards

E5-ENET or E5-ENET-B cards running the IPSG or IPGHC GPL are considered to be *FC- capable*. A card running the IPGHC GPL must be in the IS-NR State before the card can be considered *FC- capable*. This restriction does not apply to cards running the IPSG GPL. An *FC- capable* card is considered *FC-enabled* when Fast Copy monitoring is enabled for the respective GPL.

Service Module Cards

Service Module cards consist of E5-SM4G and E5-SM8G-B cards.

If the `ent-card` command is issued while an EPAP-based feature is enabled, then a warning is issued only for the provisioning of the 26th Service Module card. The command must be re-entered within 30 seconds to be accepted. If the command is entered a second time with type=dsm and a different loc specified, the command will be rejected.

E5-E1T1/E5-E1T1-B Cards

E5-E1T1 and E5-T1T1-B cards support ANSI and ITU implementations and can be used to replace the HC-MIM cards. HC-MIM cards continue to be supported.

Each E5-E1T1 card provides access to eight E1/T1 ports. Each card supports only one SE-HSL signaling link on one of the eight ports and it must be link A.

Each E5-E1T1-B card provides access to eight E1/T1 ports. Each card supports up to two SE-HSL signaling links on one of the eight ports (links A or B).

EPM and EPM-B Based Cards

E5-ATM, E5-E1T1, E5-ENET, and E5-SM4G cards are based on the EPM. Release 44.0 introduces the E5-ATM-B, E5-ENET-B, and E5-MCPM-B cards and Release 45.0 introduces the E5-E1T1-B card, which are all based on a new EPM-B. If the Message Flow Control option is provisioned (see the *chg-stpopts* command), and fan trays are installed, then the EPM-B cards can co-exist and be hot-swapped with the EPM cards. The E5-ENET-B card running the IPS application and the E5-MCPM-B card do not require Message Flow Control.

MCPM Cards

E5-MCPM-B cards are the MCPM cards. These cards are used to perform Measurements collection and reporting functionality for nodes with a link capacity greater than 2,400 (1,200 if 15 Minute Measurements is enabled). E5-OAM Integrated Measurements is used for nodes with a link capacity of 2400/1200 or less.

E5-APP-B Cards

E5-APP-B cards support the ELAP, EPAP, IMF, LSMS and NAS applications. E5-APP-B card is dual-slot card. These cards host the EPAP, ELAP, IMF, LSMS and NAS application servers that can be placed in any odd numbered slot in any EAGLE shelf. These cards do not connect to the IMT bus. The ENT-CARD command only reserves a slot in an EAGLE shelf for this card. An E5-APP-B card cannot be provisioned if there is another E5-APP-B card already on the same source of power unless the force parameter is specified.

TELCO Switches

Telco Switches are not application cards. The support of Telco Switches is added in the ENT-CARD command to reserve a slot in an Eagle shelf (type=FPB) and add the power consumed by Telco Switch to the Frame Power Budget. These switches will not be connected to the IMT bus. Telco Switch and E5-APP-B cards will be mutually exclusive for a shelf. There can be a maximum of 6 Telco Switches in a shelf.

Output

`ent-card:loc=1206:type=lime1:appl=ss7ansi`

```
   rlghncxa03w 06-06-01 11:11:28 EST  EAGLE 35.0.0
   ENT-CARD: MASP A - COMPLTD
;
```

`ent-card:loc=1101:type=dsm:appl=siphc`

```
tekelecstp 12-07-27 10:24:14 EST EAGLE 45.0.0
ent-card:loc=1101:type=dsm:appl=siphc
Command entered at terminal #4.
ENT-CARD: MASP A - COMPLTD
;
```

This example shows the output when the `ent-card` command is not re-issued within 30 seconds for the provisioning of 26th SCCP card when any EPAP based feature is enabled.

```
ent-card:type=dsm:appl=vsccp:loc=1306
```

```
    tekelecstp 10-02-27 23:06:21 EST  EAGLE 42.0.0
    ent-card:type=dsm:appl=vsccp:loc=1306
    Command entered at terminal #1.
;

    CAUTION: Please ensure EPAP Application Server is running on
    hardware supporting 32 SCCP cards e.g.: T1200.

    Re-enter command within 30 seconds to confirm change.

    tekelecstp 10-02-27 23:06:21 EST  EAGLE 42.0.0
    ENT-CARD: MASP B - Command Aborted

> Command is not re-entered within 30 seconds.

    ENT-CARD command (Type=DSM) confirmation timer expired
```

This example shows the output when the `ent-card` command is re-issued within 30 seconds for the provisioning of 26th SCCP card when any EPAP based feature is enabled.

```
ent-card:type=dsm:appl=vsccp:loc=1306
```

```
    tekelecstp 10-02-27 23:07:16 EST  EAGLE 42.0.0
    ent-card:type=dsm:appl=vsccp:loc=1306
    Command entered at terminal #1.
;

    CAUTION: Please ensure EPAP Application Server is running on
    hardware supporting 32 SCCP cards e.g.: T1200.

    Re-enter command within 30 seconds to confirm change.

    tekelecstp 10-02-27 23:07:16 EST  EAGLE 42.0.0
    ENT-CARD: MASP B - Command Aborted

> ent-card command is re-issued within 30 seconds.

> ent-card:type=dsm:appl=vsccp:loc=1306

Command Accepted - Processing

    tekelecstp 10-02-27 23:07:28 EST  EAGLE 42.0.0
    ent-card:type=dsm:appl=vsccp:loc=1306
    Command entered at terminal #1.
;

    tekelecstp 10-02-27 23:07:28 EST  EAGLE 42.0.0
    ENT-CARD: MASP B - COMPLTD
;
```

This example shows the output when the `ent-card` command is issued for the provisioning of any additional (>26 and <=32) SCCP card when any EPAP based feature is enabled.

```
ent-card:type=dsm:appl=vsccp:loc=1307
```

```
    tekelecstp 10-02-27 23:11:18 EST  EAGLE 42.0.0
    ent-card:type=dsm:appl=vsccp:loc=1307
```

```
    Command entered at terminal #1.
;

    tekelecstp 10-02-27 23:11:18 EST  EAGLE 42.0.0
    ENT-CARD: MASP B - COMPLTD
;
```

```
ent-card:loc=1105:type=e5appb:appl=epap:srvname=tklcepap1
```

```


tekelecstp 12-07-13 11:42:29 EST  45.0.0-64.37.0
    ent-card:loc=1105:type=e5appb:appl=epap:srvname=tklcepap1
    Command entered at terminal #4.
    ENT-CARD: MASP A – COMPLTD
;
```

```
ent-card:loc=1103:type=e5appb:appl=elap:srvname=tklcelap1
```

```


tekelecstp 12-07-13 11:42:55 EST  45.0.0-64.37.0
    ent-card:loc=1103:type=e5appb:appl=elap:srvname=tklcelap1
    Command entered at terminal #4.
    ENT-CARD: MASP A – COMPLTD
```

```
ent-card:loc=1101:type=e5appb:appl=epap:srvname=tklcepap2
```

```


tekelecstp 12-07-13 11:43:29 EST  45.0.0-64.37.0
    ent-card:loc=1101:type=e5appb:appl=epap:srvname=tklcepap2
    Command entered at terminal #4.
Command Rejected: E2667 - Same Power source of E5APPB cards running same
application

    ENT-CARD: MASP A - Command Aborted
```

This example shows the output when the ent-card command is issued for provisioning the 1st TELCO Switch in a shelf.

```
ent-card:loc=6201:type=telco:appl=switch:srvname=telco1
tekelecstp 12-09-06 10:58:45 EST 45.0.0
ent-card:loc=6201:type=telco:appl=switch:srvname=telco1
Command entered at terminal #4.

WARNING: Minimum two TELCO Switches are needed per shelf.

ENT-CARD: MASP A - COMPLTD.
;
```

This example shows the output when the ent-card command is issued for the provisioning the 7th TELCO Switch in a shelf.

```
ent-card:lock=6211:type=telco:appl=switch:srvname=telco11
```

```


tekelecstp 12-09-06 11:01:50 EST 45.0.0
ent-card:loc=6211:type-telco:appl=switch:srvname=telco11
Command entered at terminal #4.
Command Rejected: E2678 - Maximum 6 TELCO Switches can be provisioned in a shelf
```

```
ENT-CARD: MASP A - Command Aborted
```

`ent-card:loc=1101:type=dsm:appl=siphc`

```
tekelecstp 12-07-27 10:24:47 EST EAGLE 45.0.0
    ent-card:loc=1101:type=dsm:appl=siphc
    Command entered at terminal #4.
    ENT-CARD: MASP A - COMPLTD
;
```

This example shows the output to configure an E5-SM8G-B card running the DEIRHC GPL.

`ent-card:loc=1103:type=dsm:appl=deirhc`

```
tekelecstp 13-04-5 10:24:47 EST EAGLE 45.1
    ent-card:loc=1103:type=dsm:appl=deirhc
    Command entered at terminal #4.
    ENT-CARD: MASP A - COMPLTD
;
```

Related Commands

chg-card, *dlt-card*, *init-card*, *rept-stat-card*, *rmv-card*, *rst-card*, *rtrv-card*

ent-csl

Enter Common Screening List

Use this command to enter new screening data into the Common Screening List (CSL). The Common Screening List commands are used to tailor certain types of general screening information to specific features.

Parameters

ds (optional)

Digit string. A unique string of digits that is used by the specified screening feature.

Range:

1-15 hexadecimal digits.

Valid digits are *0-9, a-f, A-F*.

- 1-6 digits—Prepaid IDP Query Relay *ccnc* list
- 1-15 digits—Prepaid IDP Query Relay *gt* list
- 1-10 digits—Prepaid IDP Query Relay *skbcsm* list
- 4 digits—IDP Screening for Prepaid *skts* list
- 1-15 digits—IDP Screening for Prepaid *insl* list
- 1-15 digits—VFLEX *vmpfx* list
- 1-6 digits—Info Analyzed Relay Base *ccnc* list
- 1-15 digits—Info Analyzed Relay Base *gt* list
- 2 digits—Info Analyzed Relay Base *trig* list

- 1-15 digits — EIR *imsipfx* list

Table 27: TRIGTYPE Hexadecimal Codes lists valid hexadecimal values for the Info Analyzed Relay Base *trig* list *ds* entries.

feature (optional)

Feature name. The name of the enabled feature for which the command is entered.

Note: The pn or feature parameter must be specified to identify the feature.

Range:

ayyyyyyyyyyyyyyyyyyyyyyyy

1 alphabetic character followed by up to 24 optional alphanumeric characters, including spaces and special characters, enclosed in double quotation marks (" ").

- EIR
- IDP Screening for Prepaid
- IDP Service Key Routing
- Info Analyzed Relay Base
- Prepaid IDP Query Relay
- VFLEX

list (optional)

The name of the Common Screening List associated with the feature.

Note: This parameter must be specified when the feature uses more than one type of Common Screening List.

Range:

ccnc
CC+NC List

delpfx
Delete Prefix List

gt
Global Title List

imsipfx
IMSI Screening Prefix List

insl
In Network Subscriber List

npbypass
SIP NPBYPASS List

skbcsm
SK+BCSM List

skts
SK+TS List

trig

Trigger List

vmpfx

Voice Mail Prefix List

The following screening lists are valid for the indicated features:

- *ccnc*, *gt*—Prepaid IDP Query Relay and Info Analyzed Relay Base
- *imsipfx* ---EIR

  Note: If the list argument is not specified in this command, thenlist=imsipfx by default is taken.

- *skbcsm*—Prepaid IDP Query Relay and IDP Service Key Routing
- *skts*, *insl*—IDP Screening for Prepaid
- *trig*—Info Analyzed Relay Base
- *vmpfx*—VFLEX

The *delpfx* list is not supported at this time. This list should only be used by Oracle personnel.

p1 (optional)

Parameter Value 1. This parameter is specific to the feature and list that use the parameter.

Range:

zzzzzzzzzz

Valid values for the IDP Service Key Routing feature are:

- *3* or *prepaid1*—Prepaid Portability Type 3 for the SKBCSM list
- *4* or *prepaid2*—Prepaid Portability Type 4 for the SKBCSM list
- *6-35* or *prepaid3-prepaid32*—Prepaid Portability Types 6 through 35 for the SKBCSM list
- *255* or *prepaidno*—No Prepaid Portability Type for the SKBCSM list

Valid values for the EIR feature are:

- 1 or *range* - Check only Range IMEI Table for the IMSIPFX list
- 2 or *individual* - Check only Individual IMEI Table for the IMSIPFX list
- 3 or *both* - Check Individual IMEI Table then Range IMEI Table for the IMSIPFX list
- 4 or *none* - No check in either Individual or Range IMEI Table for the IMSIPFX list

Valid values for the Prepaid IDP Query Relay feature are:

- *0, 1*—National or International for the DELPFX list, which is for Oracle personnel use ONLY.

Note: The p1 parameter is used by the IDP Service Key Routing feature or the EIR feature.

Default:

prepaidno

p2 (optional)

Parameter Value 2. The IDP Relay Service that is associated with an SKBCSM list DS entry. Multiple IDP Relay Services can be provisioned for use with NPP or Response Type for EIR feature that is associated with an imsipfx list DS Entry. This value can be entered as a number or as a mnemonic.

Range:

zzzzzzzzzz

Valid values for the Prepaid IDP Query Relay feature are:

1 or *idprcdpn* —IDPRCDPN Service for the SKBCSM list

2 or *idprcdpn2* —IDPRCDPN2 Service for the SKBCSM list

3 or *idprcdpn3* —IDPRCDPN3 Service for the SKBCSM list

4 or *idprcdpn4* —IDPRCDPN4 Service for the SKBCSM list

Valid values for the EIR feature are:

1 or *whitelist* - Response Type as Whitelist for imsipfx list.

2 or *graylist* - Response Type as Graylist for imsipfx list.

3 or *blacklist* - Response Type as Blacklist for imsipfx list.

4 or *unknown* - Response Type as Unknown for imsipfx list.

Note: The p2 parameter is used by the Prepaid IDP Query Relay feature or the EIR feature.

Default:

idprcdpn

p3 (optional)

Parameter 3. The parameter value is specific to the feature and list name that use this parameter. No feature currently uses this parameter.

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24 (optional)

Point code.

pci (optional)

ITU international point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pfxstrip (optional)

This parameter in NPBYPASS list indicates whether matched prefix must be deleted or not.

Range:

yes

no

Default:

no

pn (optional)

Part number. The 9-digit "893xxxxxx" part number of the feature for which the command is entered. The `rtrv-ctrl-feat` command description shows the part number in the command output example.

Note: The pn or feature parameter must be specified to identify the feature.

Range:

893000000 - 893999999

The first 3 digits are *893*. Do not separate the digits with dashes or spaces. The following part numbers are valid for this command:

- *893012301*---EIR
- *893015501*—IDP Screening for Prepaid
- *893034201*—Info Analyzed Relay Base
- *893016001*—Prepaid IDP Query Relay
- *893016701*—VFLEX

scpgta (optional)

Signaling Control Point (SCP) Global Title Address (GTA). The value used by the SKGTARTG Service Action in IDP Relay IDPRCDPN(X) Services to replace the SCCP CdPA GTA in the outgoing message.

Range:

1 - 21 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

Note: The scpgta parameter is used by the Prepaid IDP Query Relay feature.

Default:

none

Example

```
ent-csl:feature=”Prepaid IDP Query Relay”:list=ccnc:ds=123456
ent-csl:pn=893015001:list=insl:ds=123456789bcdEF
```

```
ent-csl:feature="Prepaid IDP Query
Relay":list=skbcsm:ds=0000000056:p2=idprcdpn2:scpgta=896589
ent-csl:feature="EIR":list=imsipfx:ds=401134134:p1=range:p2=whitelist
```

Dependencies

An enabled feature must be specified using either a valid part number (pn parameter) or feature name (feature parameter). The specified feature must use a Common Screening List.

The feature that is specified in the feature parameter must be enabled.

The list parameter must be specified for features that use more than one type of screening list.

The value specified for the list parameter must be valid for the specified screening feature.

The length of the digit string specified for the ds parameter must be valid for the screening feature and list type.

A valid ds parameter value is required for the specified feature and list type.

The following parameters are allowed with the indicated common screening list type:

- list=gt — ds parameter
- list=ccnc — ds parameter
- list=imsipfx---ds parameter
- list=insl--- ds parameter
- list=skbcsm — ds and scpgta parameters
- list=skts — ds parameter
- list=trig — ds parameter
- list=vmpfx — ds parameter

The leading digit pattern of the value specified for the ds parameter must be unique in the specified screening list for the indicated feature.

Each list table is allowed to contain a maximum number of entries:

- IDP Screening for Prepaid
  - INSL —50 entries
  - SKTS—25 entries
- Prepaid IDP Query Relay
  - CCNC —20 entries
  - GT—500 entries
  - SKBCSM—150 entries
- VFLEX
  - VMPFX—100 entries
- Info Analyzed Relay Base
  - CCNC—20 entries
  - GT—500 entries
  - TRIG—150 entries

- EIR
  - IMSIPFX — 1000 entries

The pc or ds parameter must be specified in the command. The parameters cannot be specified together in the command.

The value specified for the feature parameter must be a valid feature name for a feature that uses a Common Screening List. The feature name must be specified as it appears in the `rtrv-ctrl-feat` command output. Enough of the name must be specified to make the name unique when two features begin with the same word or acronym.

The value specified for the ds parameter must be unique in the specified screening list for the indicated feature.

The scpgta and pc parameters cannot be specified together in the command.

If the scpgta parameter is specified, then the ds parameter must be specified.

A valid p1 and p2 parameter value is required for the specified feature and list type.

Notes

Table 27: TRIGTYPE Hexadecimal Codes lists the decimal values, the hexadecimal values, and the mnemonic for each TRIGTYPE code that can appear in the CSL TRIG list.

Table 27: TRIGTYPE Hexadecimal Codes

Hex	Decimal	Mnemonic	Hex	Decimal	Mnemonic
00	0	Unspecified	1A	26	Inter-LATA_ Toll_Call.
01	1	All_Calls.	1B	27	World_Zone_ Call.
02	2	Double_ Introducing _Star.	1C	28	International_ Call.
03	3	Single_ Introducing_ Star.	1D	29	Unrecognized_ Number.
04	4	Reserved	1E	30	Prior_ Agreement.
05	5	Double_ Introducing_ Pound.	1F	31	Specific_ Called_Party_ Digit_String
06	6	Single_ Introducing_ Pound.	20	32	Mobile_ Termination

Hex	Decimal	Mnemonic	Hex	Decimal	Mnemonic
07	7	Revertive_ Call.	21	33	Advanced_ Termination
08	8	0_Digit.	22	34	Location
09	9	1_Digit.	23	35	Locally_Allowed _Specific_Digit_ String
0A	10	2_Digit.	24	36	Orgination_ Atempt_ Authorized.
0B	11	3_Digit.	25	37	Calling_ Routing_ Address _Available.
0C	12	4_Digit.	26	38	Initial_ Termination
0D	13	5_Digit.	27	39	Called_ Routing_ Address_ Available
0E	14	6_Digit.	29	40	O_Answer.
0F	15	7_Digit.	29	41	O_Disconnect.
10	16	8_Digit.	2A	42	O_Called_ Party_Busy.
11	17	9_Digit.	2B	43	O_No_Answer.
12	18	10_Digit.	40	64	Terminating_ Resource_ Available
13	19	11_Digit.	41	65	T_Busy.
14	20	12_Digit.	42	66	T_No_Answer.
15	21	13_Digit.	43	67	T_No_Page_ Response.
16	22	14_Digit.	44	68	T_Unroutable.
17	23	15_Digit.	45	69	T_Answer.
18	24	Local_Call.	46	70	T_Disconnect.

Hex	Decimal	Mnemonic	Hex	Decimal	Mnemonic
19	25	Intra-LATA _Toll_Call.			

Output

```
ent-csl:feature="VFLEX":list=vmpfx:ds=123456789abcdEF
```

```
    tekelecstp 08-05-22 13:53:59 EST  EAGLE 39.0.0
    VM Prefix List table is (1 of 100) 1% full
    ENT-CSL: MASP A - COMPLTD
;
```

```
ent-csl:pn=893040601:list=npbypass:ds=0000000012:pfxstrip=yes
```

```
tekelecstp 12-06-25 15:29:14 EST EAGLE 45.0.0
ent-csl:pn=893040601:list=npbypass:ds=0000000012:pfxstrip=yes
Command entered at terminal #4.
PFX List (2 of 1000) 1%
ENT-CSL: MASP A - COMPLTD
;
```

Related Commands

chg-csl, *dlt-csl*, *rtrv-csl*, *rtrv-ctrl-feat*

ent-cspc

Enter Concerned Signaling Point Code

Use this command to add signaling points to a current broadcast signaling point code group. These point codes are notified of the receipt by the system of subsystem-prohibited (SSP) and subsystem-allowed (SSA) SS7 SCCP management messages from an application at an adjacent signaling point and subsystem. This command can also be used to add new groups to the table.

Note: The command must be entered first with the group only (no point code); then the command must be entered again with the group code and the point code.

Parameters

Note: See *Point Code Formats and Conversion* in Appendix A for a detailed description of point code formats, rules for specification, and examples.

grp (mandatory)

Name of the group. This parameter is a character string associated with this broadcast list.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (optional)

Point code.

This parameter is mandatory when the group and point code are entered, after the group has been entered.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. The *prefix* subfield indicates a private point code.

Range:

p-, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix-p

un-000-127

sna-000-15

mna-000-31

Example

```
ent-cspc:grp=grp01:pc=144-201-001
ent-cspc:grp=group02:pcn24=10-100-10
ent-cspc:grp=grp01
ent-cpsc:grp=grp01:pc=240-3-55
ent-cspc:grp=grp01:pci=7-233-5
ent-cspc:grp=grp01:pci=s-7-233-5
```

```
ent-cspc:grp=grp01:pcn24=234-56-245
ent-cspc:grp=grp01:pcn16=123-13-27
```

Dependencies

Reserved words (for example, " none ") cannot be used to name a group.

The specified CSPC Broadcast group name must not exist if a point code is not specified. If the specified group name does not exist, and a point code is not specified, a new group is created.

The Spare Point Code Support feature must be enabled before the spare point code prefix *s-* can be specified for an ITU-I or ITU-N point code.

If the CSPC group name and a point code are specified, the group name must exist in the database.

The specified point code must exist in the Routing Table and cannot already exist in the specified group.

The destination point code must be a full point code (*ni-nc-ncm*).

The concerned signaling point code must have been specified previously as a full point code destination, or it must be a member of a previously specified cluster.

A maximum of 2550 Concerned Signaling Point Code Broadcast groups can be defined.

A maximum of 96 point codes can be defined for each group.

If the ANSI/ITU SCCP Conversion feature is not enabled, then the first point code to be entered defines the network type for the group. All subsequent point codes for the group must be for the same network type.

The ANSI/ITU SCCP Conversion feature must be enabled before the point codes in a group can be of different network types.

The point code must exist in the routing table.

A routeset and link that provides a path to the new CSPC must be configured before the `ent-cspc` command can be entered.

Notes

To broadcast SSPs and SSAs to one or more mated applications, each mate's point code must be added to the CSPC group. Otherwise the broadcast is not sent to the mate.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (*s-*).

Output

The command must be entered with just the grp parameter to define a new group in the database.

```
ent-cspc:grp=grp01
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
```

```
    ENT-CSPC:  MASP A - COMPLTD
;
```

The command must specify an existing group and a point code to add the point code to the group.

`ent-cspc:grp=grp01:pc=144-201-001`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-CSPC:  MASP A - COMPLTD
;
```

Related Commands

dlt-cspc, *rtrv-cspc*

ent-dconn

Enter Diameter Connection

Use this parameter to enter DEIR connection information. The DCONN table supports the provisioning information related to the Diameter connections.

Parameters

dcname (mandatory)

Diameter connection name. This parameter specifies the unique logical name assigned to each diameter connection.

Range:

ayyyyyyyyyyyyyy

A string of alphanumeric characters, beginning with a letter and up to 15 characters in length. Valid values are *a..z*, *A..Z*, *0..9*.

Default:

No change to the current value

System Default:

null

aname (mandatory)

Association name linked with particular diameter connection.

Range:

ayyyyyyyyyyyyyy

A string of alphanumeric characters, beginning with a letter and up to 15 characters in length. Valid values are *a..z*, *A..Z*, *0..9*.

Default:

No change to the current value

System Default:

null

maxtps (optional)

Maximum TPS. This is the maximum TPS for a diameter connection. The unused card capacity will be allocated among the connections that have exceeded their RSVDTPS up to the limit of the MAXTPS value provisioned for the particular connection.

Range:

100 - 8000

Default:

No change to the current value

System Default:

8000

rsvdtps (optional)

Reserved TPS. This is the guaranteed TPS (Transactions per second) for a diameter connection. Total RSVDTPS on a card cannot exceed 8000.

Range:

100 - 8000

Default:

No change to the current value

System Default:

250

td (optional)

Diameter Peer Disconnect timer. This timer is used to control how long the S13 process will wait for a DPA (Disconnect Peer Answer) response before sending a DPR (Disconnect Peer Request). The value given to a timer is in seconds.

Range:

1 - 10

Default:

No change to the current value

System Default:

3

tw (optional)

Diameter Watchdog timer. This timer is used to control how long the S13 process will wait for a DWA (Diameter Watchdog Answer) response before sending a DWR (Diameter Watchdog Request). The value given to a timer is in seconds.

Range:

6 - 30

Default:

No change to the current value

System Default:

6

Example

```
ent-dconn:dcname=connection1:aname=assoc1:rsvdtps=1000
ent-dconn:dcname=connection2:aname=assoc2:rsvdtps=500:td=5:tw=10
ent-dconn:dcname=connection3:aname=assoc3:maxtps=5000:td=2
```

Dependencies

S13/S13' EIR feature must be enabled before entering any diameter connection.

DCONN table should be accessible.

A unique DCNAME must be specified for a new connection.

The adapter for the association linked to diameter connection on DEIR card must be of type DIAM.

ANAME must be present in IPAPSOCK table.

ANAME cannot be assigned to another diameter connection.

Any OPEN association cannot be assigned to a new diameter connection (the open parameter set to *yes*/*no* with the chg-assoc command).

RSVDTPS of all the diameter connections on a particular card must not exceed the MAXTPS.

RSVDTPS of a diameter connection must be less than or equal to MAXTPS.

Notes

The `ent-assoc` command should be used to configure an association for the adapter type = DIAM prior to establishing any diameter connection.

Maximum of 32 connections can be provisioned per Diameter card and maximum of 16 diameter cards are allowed. So, maximum of 512 diameter connections can be provisioned.

Output

`ent-dconn:dcname=connection1:aname=assoc1:rsvdtps=1000`

```
tekelecstp 13-03-20 15:04:28 EST EAGLE 45.1.0
ent-dconn:dcname=connection1:aname=assoc1:rsvdtps=1000
Command entered at terminal #4.
ENT-DCONN: MASP A - COMPLTD
;
```

`ent-dconn:dcname=connection3:aname=assoc3:maxtps=5000:td=2`

```
tekelecstp 12-06-25 15:04:28 EST EAGLE 45.1.0
```

```
ent-dconn:dcname=connection3:aname=assoc3:maxtps=5000:td=2
Command entered at terminal #4.
ENT-DCONN: MASP A - COMPLTD
;
```

Related Commands

chg-dconn, *dlt-dconn*, *rtrv-dconn*

ent-dlk

Enter Data Link

Use this command to add a TCP/IP data link to the database. The TCP/IP data link is used to send copies of SS7 MSUs (selected by the gateway screening feature) to a remote host for further processing.

Parameters

ipaddr (mandatory)

The TCP/IP data link's IP address. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.126.100.5*, where *192.126.100* is the network number and *5* is the machine's host number.

Range:

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

auto (optional)

Automatic. This parameter specifies whether the hardware automatically determines duplex and speed.

Note: This parameter is valid only for E5-ENET or E5-ENET-B cards (running the SLANHC GPL).

Range:

yes

Duplex and speed are automatically determined.

no

Duplex and speed are not automatically determined.

Default:

yes

duplex (optional)

The mode of operation of the interface

Note: This parameter is valid only for E5-ENET or E5-ENET-B cards (running the SLANHC GPL).

Range:

half

The mode of operation of the interface is half duplex.

full

The mode of operation of the interface is full duplex.

Default:

half

speed (optional)

The bandwidth for the interface in megabits per second

Range:

10

100

Default:

10

Example

```
ent-dlk:loc=1201:ipaddr=196.3.202.45
ent-dlk:loc=1101:ipaddr=192.168.63.11:speed=10:duplex=half
ent-dlk:loc=1107:ipaddr=192.168.63.12:auto=yes
```

Dependencies

The shelf and card must be equipped.

The IP address (ipaddr) cannot be in the TCP/IP link table and cannot be a TCP/IP node.

The specified card cannot contain any data links.

The specified card's status must be out of service maintenance disabled (OOS-MT-DSBLD). Enter the `rept-stat-card` command to verify the state of the card.

The specified TCP/IP data link cannot be in the database.

The specified card must be running the STPLAN application.

The first octet of the IP Address cannot be 127. The 127 represents an IP address for loopback.

If the auto=yes parameter is specified, then the speed and duplex parameters cannot be specified.

The speed and duplex parameters must be specified together in the command.

If the speed=100 parameter is specified, then an E5-ENET or E5-ENET-B card (running the SLANHC GPL) must be used.

The IP address (ipaddr) cannot be in the TCP/IP link table and cannot be a TCP/IP router.

Notes

The value of the ipaddr parameter cannot match the TCP/IP default router's IP address (the iprte parameter of the `ent-ip-node` command).

Output

`ent-dlk:loc=1201:ipaddr=196.3.202.45`

```
    tekelecstp 07-04-03 11:12:34 EST  EAGLE 37.0.0
    ENT-DLK: MASP A - COMPLTD
;
```

The following example issues an error message because the first octet of the IP address is a loopback address. `ent-dlk:loc=1201:ipaddr=127.3.202.45`

```
    rlghncxa03w 07-04-03 11:43:04 EST  EAGLE 37.0.0
    Command Rejected : First octet of IPADDR cannot be 127.
    ENT-DLK: MASP A - COMPLTD
;
```

Related Commands

act-dlk, *canc-dlk*, *dlt-dlk*, *rept-stat-dlk*, *rtrv-dlk*, *tst-dlk*

ent-dstn Enter Destination

Use this command to add a destination address (a destination point code, capability point code, or network cluster address) and the associated destination attributes to the destination point code table.

Caution: When using the Network Routing feature, limited network management is provided for point codes not covered by full point code routing, Cluster Routing, or Nested Cluster Routing.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dpc (mandatory)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (mandatory)

Destination point code.

dpci (mandatory)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (mandatory)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

Default:

No change to current value.

dpcn16 (mandatory)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p-, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix-p

un-000-127

sna-000-15

mna-000-31

Default:

No change to the current value.

aliasa (optional)

ANSI alias point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). This parameter is not valid if an ANSI (DPC or DPCA) point code is entered.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

aliasa/aliasi/aliasn/aliasn24/aliasn16 (optional)

Alias point code.

aliasi (optional)

ITU international alias point code list with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

If an ITU international destination (DPCI) point code is entered, then the *dpci* and *aliasi prefix* subfields cannot be the same (both spare or both non-spare). Up to 2 comma-delimited entries can be entered in the point code list.

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

aliasn (optional)

ITU national alias point code list in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

If an ITU national destination (DPCN) point code is entered, then the *dpcn* and *aliasn prefix* subfields cannot be the same (both spare or both non-spare). Up to 2 comma-delimited entries can be entered in the point code list.

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

aliasn24 (optional)

24-bit ITU national alias point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. This parameter is not valid if a 24-bit ITU national (DPCN24) point code is entered.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

aliasn16 (optional)

16-bit ITU national alias point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). This parameter is not valid if a 16-bit ITU national (DPCN16) point code is entered.

Range:

000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un-000-127

sna-000-15

mna-000-31

bei (optional)

Broadcast exception indicator. This parameter specifies whether the STP broadcasts network management messages to adjacent signaling points.

Note: The network management messages contain information about the indicated cluster and any of that cluster's member signaling points that are on its exception list. The messages whose broadcast is determined by this parameter are:

- TFP—transfer prohibited
- TCP—transfer cluster prohibited
- TFA—transfer allowed
- TCA—transfer cluster allowed

Range:

yes

Network management messages are not broadcast

no

Network management messages are broadcast

Default:

yes —If the DPC is a member whose associated cluster destination has bei=yes specified.

no —for DPCs in the cluster or if the DPC is a member whose associated cluster destination has bei=no specified or the bei parameter is not specified.

clli (optional)

The Common Language Location Identifier assigned to this destination.

Range:

ayyyyyyyyyy

1 alphabetic character followed by 10 alphanumeric characters

Default:

Null string

domain (optional)

The network in which the destination entity or node exists.

Range:

ss7

Default:

ss7

elei (optional)

Exception-list exclusion indicator, for cluster destinations only. This parameter specifies whether the system excludes or includes (maintains) a dynamic status exception list (x-list) for each cluster route used to reach the member signaling points that make up the cluster.

Range:

yes

Do not maintain a dynamic status x-list

no

Maintain a dynamic status x-list

Default:

no

homescp (optional)

This parameter specifies whether the destination point code (DPC) is considered a Home SCP when performing SCCP processing for messages with no Global Title Address Digits (Global Title Indicator (GTI) is set to zero)

This parameter can only be set to "yes" for full DPCs.

Range:

yes

the DPC is considered a Home SCP

no

the DPC is not considered a Home SCP

System Default:

no

homesmsc (optional)

This parameter specifies whether the DPC is considered a Home SMSC when performing SCCP processing for messages with no Global Title Address Digits (GTI is set to zero).

This parameter can only be set to "yes" for full DPCs.

Range:

yes

the DPC is considered a Home SMSC

no

the DPC is not considered a Home SMSC

System Default:

no

ipgwapc (optional)

IP gateway adjacent point code indicator.

Range:

yes

no

Default:

no

ncai (optional)

Nested cluster allowed indicator. Specifies whether the route to the cluster point code can be different for provisioned members of the cluster. A point code is a member of a cluster point code if it has the same network identifier (NI) and network cluster (NC) values as the cluster point code. This parameter can be specified only for cluster point codes. Nested cluster routing is allowed if this parameter is set to *yes* and the CRMD and NCR features are turned on.

Range:

yes

The cluster point code is a nested cluster point code. Point codes that are members of this cluster point code can be assigned to route sets that are different from the route set assigned to the cluster point code.

no

The cluster point code is not a nested cluster point code. Point codes that are members of this cluster point code must be assigned to the same route set assigned to the cluster point code.

Default:

no

nprst (optional)

NM bits reset. This parameter specifies whether the NM bits should be set to 00.

This parameter applies only to ITU IAM messages. The nptype=nm parameter must be specified (see the `chg-tifopts` command) before this parameter can be specified.

Range:

off

Do not set NM Bits to 00 in an ITU IAM message if the TIFOPTS nptype option value is *nm*

on

Set the NM Bits to 00 in an ITU IAM message if the TIFOPTS nptype option value is *nm*

System Default:

off

ppc (optional)

ANSI proxy point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

The proxy point code must be a full point code.

Synonym:

ppca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

ppc/ppca/ppci/ppcn/ppcn24/ppcn16 (optional)

Proxy point code.

The proxy point code must be a full point code.

ppci (optional)

ITU international proxy point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

ppcn (optional)

ITU national proxy point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

ppcn24 (optional)

24-bit ITU national proxy point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

ppcn16 (optional)

16-bit ITU national proxy point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un-000-127

sna-000-15

mna-000-31

prx (optional)

Proxy point code indicator. This parameter specifies whether a destination is used as a proxy point code.

Range:

yes

The destination is used as a proxy point code.

no

The destination is not used a proxy point code.

Default:

no

Will not be used as a proxy point code.

rcause (optional)

Release cause. The condition that triggers the sending of a Release message.

Note: If the rlcopc parameter is specified (see the `chg-tifopts` command), and a value of 0 - 127 is specified for the rcause parameter, then the rcause parameter value overrides the values specified for the TIFOPTS table's rcausenp and rcausepfx parameters.

Range:

0 - 127, none

none —use the values specified for the TIFOPTS table's rcausenp and rcausepfx parameters

System Default:

none

sccpmsgcnv (optional)

SCCP UDT(S)/XUDT(S) Message Conversion Indicator. The type of conversion performed on messages for the specified destination.

Range:

none

conversion is not required on messages for the destination

udt2xudt

convert all UDT(S) messages for the destination to XUDT(S) messages

xudt2udt

convert all non-segmented XUDT(S) messages for the destination to UDT(S) messages

sxudt2udt

convert all segmented and non-segmented XUDT(S) messages for the destination to UDT(S) messages

Default:

none

spc (optional)

ANSI secondary point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm)*.

Synonym:

spca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

spc/spca/spci/spcn/spcn24/spcn16 (optional)

Secondary point code.

spci (optional)

ITU international secondary point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

spcn (optional)

ITU national secondary point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

spcn24 (optional)

24-bit ITU national secondary point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-s*p).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

spcn16 (optional)

16-bit ITU national secondary point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p-, 000-127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un--000---127

sna---000---15

mna---000---31

splitiam (optional)

This parameter specifies when and how to split an ITU IAM message into 1 IAM message + 1 SAM message.

This parameter applies only to ITU IAM messages.

Range:

15-31, none

15-31 - Maximum number of CdPN digits allowed in the IAM message before splitting occurs. The remaining digits, up to a total of 32, are encoded in the SAM message.

none -the value specified for the TIFOPTS table's splitiam parameter is used to determine when to split the IAM message

System Default:

none

Example

To add destination 8-1-1 with CLLI of systest1:

```
ent-dstn:dpc=8-1-1:clli=systest1:bei=yes
```

To add destination 8 with ITU and national aliases:

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

To add cluster 20-2-*:

```
ent-dstn:dpc=20-2-*:elei=yes:bei=yes
```

To add a destination with an SPC of 100:

```
ent-dstn:dpc=20-2-2:spc=100-100-100
```

To add nested cluster 21-2-*:

```
ent-dstn:dpc=21-2-*:elei=yes:bei=yes:ncai=yes
```

To add network routing destination 21-*-*:

```
ent-dstn:dpc=21-*-*
```

To add ITU national destination 7654 with a group code of FR and secondary point code of 7050:

```
ent-dstn:dpcn=7654-fr:spc=7050-fr
```

To add ITU-N 24-bit destination 15-100-10:

```
ent-dstn:dpcn24=15-100-10:bei=no
```

To add a 24-bit ITU-N destination with a 24-bit ITU-N secondary point code of 99:

```
ent-dstn:dpcn24=12-12-12:spcn24=99-99-99
```

To add destination 1-6-1 with a 24-bit ITU-N alias:

```
ent-dstn:dpci=1-6-1:aliasn24=4-4-4
```

To add private ANSI destination point code p-100-100-101 with spare point code alias s-1-123-1:

```
ent-dstn:dpca=p-100-100-101:spca=2-2-3:aliasi=s-1-123-1:aliasn=128
```

To add spare ITU-I destination point code s-2-100-1 with ANSI alias point code 121-120-120 and ITU-N alias spare point code s-129:

```
ent-dstn:dpci=s-2-100-1:spci=s-2-129-9:aliasa=121-120-120:aliasn=s-129
```

To add spare ITU-N destination point code s-231 with ITU-N secondary point code 129, ANSI alias point code 120, and ITU-I alias spare point code s-2-123-2:

```
ent-dstn:dpcn=s-231:spcn=129:aliasa=120-120-122:aliasi=s-2-123-2
```

To define a destination as a proxy point code:

```
ent-dstn:dpc=11-11-11:prx=yes
```

To associate a proxy point code with a destination point code:

```
ent-dstn:dpc=11-11-11:ppc=2-7-2
```

To add ITU-I destination point code 3-30-3 with ITU-I spare alias s-3-30-3:

```
ent-dstn:dpci=3-30-3:aliasi=s-3-30-3
```

To add ITU-N destination point code 8199-aa with ITU-I aliases s-4-0-7 and 4-0-7:

```
ent-dstn:dpcn=8199-aa:aliasi=s-4-0-7,4-0-7
```

To add destination 11 with SCCPMSGCNV type as UDT2XUDT:

```
ent-dstn:dpc=11-11-11:sccpmsgcnv=udt2xudt
```

To add ITU-N 16-bit destination 121-10-5:

```
ent-dstn:dpcn16=121-10-5
```

Dependencies

Note: A full point code contains numerical values for all three segments of the point code.

The ANSI self-ID destination point code for the STP must be defined before ANSI destinations can be entered.

The ITU-I self-ID destination point code for the STP must be defined before ITU-I destinations can be entered.

The ITU-N self-ID or SPCN destination point code for the STP must be defined before ITU-N destinations can be entered.

The 24-bit ITU-N self-ID or SPCN24 destination point code for the STP must be defined before 24-bit ITU-N destinations can be entered. (See the `chg-sid` command.)

The Destination point code table can contain up to 2000 entries.

The destination address must be a full point code or a cluster point code.

The specified destination address cannot already exist in the Destination entity set.

A destination address cannot already be defined as an alias address.

The Spare Point Code Support feature must be enabled before the spare point code prefix (s-) can be specified for an ITU-I or ITU-N destination, secondary, or alias point code.

The specified dpc value cannot match the point code, secondary point code, or capability point code of the system.

A destination can have up to two alias point codes. A destination alias point code type (ANSI, ITU-I, ITU-N, ITU-N24) must not match that destination's true point code type. If both alias point codes are defined, the point code types of the aliases must not match.

Alias point codes are supported only for full point code destinations.

Alias point codes for destinations must be full point codes.

An alias point code cannot already be defined as a destination point code.

The format of the specified dpcn or aliasn parameter must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

If the 7000 Routesets or 8000 Routesets feature is enabled, then the total number of provisioned aliases in the system cannot exceed 8000. If the 10,000 Routesets feature is enabled, then the total number of provisioned aliases in the system cannot exceed 10000.

If an ANSI or ITU-I point code is specified, the aliasn or the aliasn24 parameter can be specified, but not both.

A 24-bit ITU-N point code cannot have:

- A 14-bit ITU-N alias point code
- An ANSI alias point code

A 24-bit ITU-National point code can have an ITU-I point code alias. This allows conversion of 14-bit ITU-I routing label to 24-bit routing label and vice versa.

An ITU-I point code can have either a 14-bit ITU-N alias or a 24-bit ITU-N alias, but not both.

A 14-bit ITU-N point code cannot have a 24-bit ITU-N alias point code.

An ANSI point code cannot have a 24-bit ITU-N alias point code.

The CRMD feature must be turned on before a cluster destination point code (*ni-nc-**) can be specified.

A cluster destination cannot be defined using the same network identifier (*ni*) and network cluster (*nc*) subfields of any previously defined alias ANSI point codes.

The CRMD (Cluster Routing and Management Diversity) and NCR (Nested Cluster Routing) features must be turned on before the ncai parameter can be specified.

If the ncai=yes parameter is specified, then the maximum number of provisioned nested clusters must be no greater than 500.

When a cluster point code is specified, the collection of signaling points sharing the same network identifier (*ni*) and network cluster (*nc*) subfields must have the same route set.

Cluster DPCs are not allowed to inherit cluster members that have routes with A or E linkset types.

Network routing is valid only if the Network Routing (NRT) feature is turned on.

When using network routing, if the destination point code has a value of * in the *nc* subfield, the *ncm* subfield must also be * (e.g., dpc=21-*-*).

The ncai parameter can be specified only for cluster destinations.

Alias ANSI point codes cannot have the same network identifier (*ni*) and network cluster (nc) subfields as a cluster point code that is already defined.

The CRMD feature must be turned on before the elei parameter can be specified.

The elei parameter can be specified only for cluster destinations (e.g., dpc=ni-nc-*).

The CLLI of the destination point code cannot match the CLLI of the system.

A reserved word cannot be specified for the destination identifier (clli).

If the corresponding destination for the specified destination point code is an adjacent signaling point (matched a Far End point code in its linkset entity set), the CLLI of the specified destination point code cannot be assigned to any other destination address.

The value of the dpc parameter must be a valid point code.

If specified, the spc parameter value must be already be configured as a secondary point code in the Secondary Point Code table.

The value specified for the spc parameter must be a full point code.

If the spc parameter is specified, the domain=ss7 parameter must be specified.

If the spc parameter is specified, then the value specified for the dpc parameter must be a full point code.

The network type of the value specified for the spc parameter must match the network type of the value specified for the dpc parameter.

If an ITU national destination is provisioned and the ITUDUPPC feature is turned on, and if the destination does not use an SPC, the group code of the destination must be the same as the group code of the ITU national true point code.

For example, if the ITU national true point code has a group code of *ee*, then you can add destinations with group codes of *ee* without using an SPC. Destinations with a group code of *ff*, however, must use an SPC with a group code of *ff*.

The Route table cannot be full.

If an ITU national destination is provisioned and the ITUDUPPC feature is turned on, and if the destination uses an SPC, then the group code of the destination must match the group code of the SPC.

For example, if the ITU national true point code has a group code of *ee*, then you can add destinations with group codes of *ee* without using an SPC. Destinations with a group code of *ff*, must use an SPC with a group code of *ff*.

The ncai parameter can be specified only for cluster destinations (for example (dpc=ni-nc-*).

The value of the clli parameter cannot already exist in the Route table.

The ICNP feature must be turned on before the icnpxlat, cgpafmt, and cdpafmt parameters can be specified.

The NCR feature must be enabled before the ncai parameter can be enabled.

If the 6000 Routesets feature is turned on, and the destination point code to be provisioned is above 5000, then the GPSM-II OAM cards must be used.

The alias parameter must be specified with a different point code type than the dpc parameter.

The aliasa and dpca parameters cannot be specified together in the command. The aliasi and dpci parameters and the aliasn and dpcn parameters cannot be specified together in the command if the *prefix* subfields are the same (both are spare or both are non-spare).

The Proxy Point Code feature must be enabled before the prx=yes parameter can be specified.

If the ipgwapc=yes parameter is specified, then the prx=yes parameter cannot be specified.

If the ipgwapc=yes parameter is specified, then the ppc parameter cannot be specified.

The Proxy Point Code feature must be enabled before the ppc parameter can be specified.

If the ppc parameter or the prx=yes parameter is specified, then the value specified for the dpc parameter must be a full point code.

The spc and ppc parameters cannot be specified together in the command.

The values specified for the dpc and ppc parameters must have the same network type.

The values specified for the dpc and ppc parameters must have the same group code.

The number of proxy destinations cannot exceed the value given by the enabled Proxy Point Code quantity feature.

If the value of the dpc parameter is a private point code, then the prx=yes parameter cannot be specified.

If the value of the dpc parameter is a private point code, then the ppc parameter cannot be specified.

The dpc parameter and the prx=yes parameter must be specified before the ppc parameter can be specified.

The total number of proxy destinations cannot exceed the total capacity (100) of the Proxy Point Code feature.

The prx parameter must have a value of *yes* or *no*.

Cluster destination point codes cannot inherit cluster members that have routes using proxy linksets.

The spare ITU-I self-ID destination point code for the STP must be defined before spare ITU-I destinations can be entered.

The spare ITU-N self-ID destination point code for the STP must be defined before spare ITU-N destinations can be entered.

A maximum of two aliases can be specified per destination point code.

If the dpci parameter is specified, then a combination of ITUI and ANSI aliases cannot be specified. If the dpcn parameter is specified, then a combination of ITUN and ANSI aliases cannot be specified.

Two ITUI or two ITUN aliases can be specified for the same destination point code only if the aliases have different prefixes. One alias must be spare and one non-spare.

The TIF Number Portability feature must be enabled before the rcause or nprst parameter can be specified.

A TIF feature must be enabled before the splitiam parameter can be specified.

The XUDT UDT Conversion feature must be turned on before the sccpmsgcnv parameter can be specified.

The value specified for the ppc parameter must already exist in the DSTN table and the prx=yes parameter must be assigned.

ITU-N16 destination cannot be provisioned if ITU-N16 site id is not provisioned.

The J7 Support feature must be enabled before the aliasn16 parameter can be specified.

If the J7 Support feature is enabled then the aliasa and aliasn24 parameters cannot be specified.

Spare point codes for aliasn 1 and aliasn 2 must be different, and spare point codes for aliasi 1 and aliasi 2 must be different.

Notes

Upon initial installation of the system, the self point code must be entered before you enter any destination.

When you define a DPC with the unique destination signaling point of a provisioned cluster, the DPC automatically inherits the route set of its cluster if the ncai=no parameter is specified. If the ncai=yes parameter is specified, the provisioned members can have a different route set.

When you define a cluster point code for previously defined destination signaling points, the cluster automatically inherits the unique route set of its members.

For ITU national duplicate point codes, you cannot change a destination's group code. To move a destination from one group to another, provision a new destination that uses the new group code and delete the old destination.

The system requires that the destination point code of each routeset be entered in the database. For example, to enter 6000 routesets in the database, 6000 destination point codes must be entered in the database.

If you have turned on the 5000 Routes feature, prior to provisioning the additional routing table entries, you must issue the `chg-stpopts` command to specify the maximum number of allowed DPCs and dynamic x-list entries.

If the 6000, 7000, 8000, or 10,000 Routesets feature is enabled, then in order to enter more than 2000 destination point codes, the maximum number of point codes that can be configured on the system must be changed to 6000, 7000, 8000, or 10000 respectively, using the mtpdpcq parameter of the `chg-stpopts` command.

In this command, only ITU-international and ITU national point codes and aliases support the spare point code subtype prefix (s-). Only ITU-international and ITU national point codes support the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-). Aliases do not support the private (internal) point code prefix.

If the Proxy Point Code feature is enabled, then the value specified for the ppc or dpc parameter (when the destination point code is designated as a proxy point code) must be full point codes. Cluster point codes and private point codes are not supported.

Output

This example shows the output with the NCR, NRT, and CRMD features off and all Routes and Routesets features off:

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
rlghncxa03w 04-08-17 15:35:05 EST  EAGLE 31.8.0
Destination table is (10 of 2000) 1% full
Alias table is (8 of 12000) 1% full
```

```
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with the NCR, NRT, and CRMD features off and the DSTN5000 (5000 Routes) feature on:

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (10 of 5000) 1% full
    Alias table is (8 of 12000) 1% full
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with one or more of the NCR, NRT, or CRMD features on and the DSTN5000 (5000 Routes) feature on:

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   5000
        FULL DPC(s):                    9
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  10
        CAPACITY (% FULL):             1%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                   8
        CAPACITY (% FULL):             1%
    X-LIST ENTRIES ALLOCATED:         500
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with the NCR, NRT, and CRMD features off and the 6000 Routesets feature on:

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (60 of 6000) 1% full
    Alias table is (8 of 12000) 1% full
    ENT-DSTN: MASP A - COMPLTD
;
```

Thus example shows the output with one or more of the NCR, NRT, or CRMD features on and the 6000 Routesets feature on:

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   6000
        FULL DPC(s):                   46
        NETWORK DPC(s):                 1
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  12
        CAPACITY (% FULL):             1%
```

```
    ALIASES ALLOCATED:               12000
        ALIASES USED:                   8
        CAPACITY (% FULL):             1%
    X-LIST ENTRIES ALLOCATED:         500
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with the NCR, NRT, and CRMD features off. When the 7000 Routesets quantity feature is on, the Destination table line shows "...of 7000". When the 8000 Routesets quantity feature is on, the Destination table line shows "...of 8000."

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    Destination table is (60 of 7000) 1% full
    Alias table is (8 of 8000) 1% full
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output with one or more of the NCR, NRT, or CRMD features on. When the 7000 Routesets quantity feature is on, the DESTINATION ENTRIES ALLOCATED line shows "7000". When the 8000 Routesets quantity feature is on, the DESTINATION ENTRIES ALLOCATED line shows "8000."

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
    rlghncxa03w 04-08-18 08:29:15 EST  EAGLE 31.8.0
    DESTINATION ENTRIES ALLOCATED:   8000
        FULL DPC(s):                    9
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  10
        CAPACITY (% FULL):             1%
    ALIASES ALLOCATED:               8000
        ALIASES USED:                   8
        CAPACITY (% FULL):             1%
    X-LIST ENTRIES ALLOCATED:         500
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output when none of the NCR, NRT, or CRMD features on. A destination is defined as a proxy point code.

```
ent-dstn:dpc=11-11-11:prx=yes
```

```
    tekelecstp 07-03-07 16:34:32 EST  EAGLE 37.5.0
    Destination table is (11 of 2000) 1% full
    Alias table is (0 of 12000) 0% full
    PPC table is (2 of 10) 20% full
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output when one or more of the NCR, NRT, or CRMD features are on. The destination refers to a proxy point code.

```
ent-dstn:dpc=1-1-1:ppc=11-11-11
```

```
    tekelecstp 07-03-05 17:34:18 EST  EAGLE 37.5.0
    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                   27
        EXCEPTION DPC(s):               0
        NETWORK DPC(s):                 1
        CLUSTER DPC(s):                 1
        Proxy DPC(s):                   1
        TOTAL DPC(s):                  30
        CAPACITY (% FULL):              2%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                   0
        CAPACITY (% FULL):              0%
    X-LIST ENTRIES ALLOCATED:         500
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output when the NCR, NRT, and CRMD features are off and the 10,000 Routesets feature is on:

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0
    Destination table is (10 of 10000) 1% full
    Alias table is (8 of 10000) 1% full
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output when one or more of the NCR, NRT, or CRMD features and the 10,000 Routesets feature is on:

```
ent-dstn:dpc=8-8-8:aliasi=1-2-3:aliasn=124
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0
    DESTINATION ENTRIES ALLOCATED:   10000
        FULL DPC(s):                     9
        NETWORK DPC(s):                  0
        CLUSTER DPC(s):                  1
        TOTAL DPC(s):                   10
        CAPACITY (% FULL):              1%
    ALIASES ALLOCATED:               10000
        ALIASES USED:                    8
        CAPACITY (% FULL):              1%
    X-LIST ENTRIES ALLOCATED:         500
    ENT-DSTN: MASP A - COMPLTD
;
```

This example shows the output when the J7 feature is enabled:

```
ent-dstn:dpci=1-2-6:aliasn16=2-4-6
```

```
    tekelecstp 13-02-27 13:58:55 EST  45.0.0-64.56.0
    ent-dstn:dpc=1-2-6:aliasn16=2-4-6
    Command entered at terminal #4.
    Destination table is (2 of 2000) 1% full
    Alias table is (1 of 12000) 0% full
```

```
    ENT-DSTN: MASP A - COMPLTD
;
```

Related Commands

chg-dstn, *chg-rte*, *dlt-dstn*, *dlt-rte*, *ent-rte*, *rept-stat-dstn*, *rept-stat-rte*, *rtrv-dstn*, *rtrv-rte*

ent-e1 Enter E1 Interface

Use this command to enter an interface into the system for HC-MIM or E5-E1T1 /E5-E1T1-B cards used as an E1 or SE-HSL cards.

E1 ports 1, 3, 5, and 7 (master ports) can be independently channel bridged with their adjacent even-numbered (slave) E1 ports 2, 4, 6, and 8 to allow non-signaling data pass-through.

Any of the 8 ports can be specified when the card is used as a standard E1 card. No more than 2 ports on the HC-MIM or E5-E1T1-B or no more than 1 port on the E5-E1T1 when used as an SE-HSL card can have defined E1 interfaces.

Parameters

e1port (mandatory)

E1 card port number. The value must be an E1 port for which an interface has not been configured on the specified E1 card.

Range:

1 - 8

Any 2 of the 8 ports on an HC-MIM or E5-E1T1-B card can be specified when the card is used as an SE-HSL card.

Any 1 of the 8 ports on an E5-E1T1 card can be specified when the card is used as an SE-HSL card.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

cas (optional)

CAS multiframing or CCS indicator.

Range:

on

CAS multiframing

off

CCS

Note: CAS cannot be specified for HC-MIM and E5-E1T1 cards.

Default:

off

chanbrdg (optional)

Port bridging status. This parameter specifies whether an odd-numbered E1 port is channel bridged with its adjacent even-numbered E1 port for non-signaling data pass through.

Range:

on

off

Default:

off

crc4 (optional)

CRC4 enable or disable indicator.

Range:

on

off

Default:

on

e1tsel (optional)

Timing source

Range:

line

slave

external

master

recovered

recovered from the paired master port for channel bridged slave ports

Default:

line

encode (optional)

Indicator for use of HDB3 or AMI encoding/decoding.

Range:

hdb3

ami

Note: AMI encoding is supported for cards that are used as E1 cards (not as SE-HSL cards).

Default:

hdb3

force (optional)

This parameter specifies to provision an odd-numbered E1 port to channel bridging mode if the adjacent next higher even-numbered port is already provisioned with an E1 interface.

Range:

yes

no

linkclass (optional)

Link class for links that are assigned to E1 cards ("channelized" links) or SE-HSL cards ("unchannelized" links).

Range:

chan

unchan

Default:

chan

minsurate (optional)

Minimum signal unit rate. The minimum number of SUs present on a link uniformly distributed. This parameter is valid only when the linkclass=unchan parameter is specified for an SE-HSL card.

Range:

500 - 2000

Default:

1000

si (optional)

Value of two Spare International bits of NFAS data.

Range:

0 - 3

Default:

0

sn (optional)

Value of five Spare International bits of NFAS data.

Range:

0 - 31

Default:

0

Example

```
ent-e1:loc=1205:e1port=1:crc4=off:cas=on:encode=hdb3:e1tsel=external:si=2
:sn=12
```

```
ent-e1:loc=1205:e1port=2:cas=off:encode=ami
```

```
ent-e1:loc=1203:e1port=1:chanbrdg=on:e1tsel=recovered
```

```
ent-e1:loc=1203:e1port=3:chanbrdg=on:e1tsel=external
```

```
ent-e1:loc=1203:crc4=on:e1port=2:encode=hdb3:e1tsel=line:linkclass=unchan
:minsurate=2000
```

Dependencies

The card location specified by the loc parameter must be equipped.

The card specified by the loc parameter must be an LIME1 card type.

The port specified by the e1port parameter cannot already be equipped with an E1 interface.

The cas=on parameter cannot be specified if:

- A value of 3 - 8 is specified for the e1port parameter
- The chanbrdg=on parameter is specified
- The value specified for the loc parameter indicates an HC-MIM or E5-E1T1 card

The chanbrdg=on and cas=on parameters cannot be specified if the linkclass=unchan parameter is specified. The minsurate parameter can be specified only when the linkclass=unchan parameter is specified.

The chanbrdg=on parameter can be specified only for cards used as E1 cards (not as SE-HSL cards).

The chanbrdg=on parameter cannot be specified for even-numbered E1 ports.

If the chanbrdg=on parameter is specified, then the e1tsel parameter must be specified.

If the chanbrdg=on parameter is specified, then the e1tsel=line parameter cannot be specified.

The chanbrdg=on parameter must be specified before the e1tsel=recovered parameter can be specified.

Only 2 ports can be used for E1 interfaces on an HC-MIM or E5-E1T1-B card that is used as an SE-HSL card. Any 2 of the 8 ports can be used on the SE-HSL card.

If the chanbrdg=on parameter is specified for an odd-numbered E1 port, then the force=yes parameter must be specified if the adjacent even-numbered port is already provisioned with an E1 interface.

Before the chanbrdg=on parameter can be specified for an odd-numbered E1 port, all signaling links assigned to the adjacent even-numbered E1 port must be deleted (see the `dlt-slk` command).

The shelf FAN bit must be turned ON for the shelf on which an HC-MIM or E5-E1T1-B card is being used as an E1 or SE-HSL card.

HIPR2 cards must be equipped in card locations *xy*09 and *xy*10 (*x* is the frame, *y* is the shelf) on each EAGLE shelf that contains one or more HC-MIM or E5-E1T1/E5-E1T1-B cards that are used as E1 or SE-HSL cards.

An SE-HSL feature quantity must be enabled before the linkclass=unchan parameter can be specified for an SE-HSL card.

The linkclass=unchan parameter can be specified only for HC-MIM and E5-E1T1 cards.

Channelized and unchannelized E1 ports (mixed mode) are not allowed on a single card (the card cannot be used as an E1 card and an SE-HSL card at the same time).

Only 1 port can be used for E1 interfaces on an E5-E1T1 card that is used as an SE-HSL card. Any 1 of the 8 ports can be used on the SE-HSL card.

E1 ports 3 - 8 can be specified for only HC-MIM and E5-E1T1 cards.

Card locations 1113 - 1118 (E5-MASP and E5-MDAL cards) cannot be specified as values for the loc parameter.

The encode=ami parameter is supported only for cards used as E1 cards (not as SE-HSL cards).

Locations *xy*09 and *xy*10, where *x* is the frame and *y* is the shelf, cannot be specified as values for the loc parameter.

Notes

One or two E1 interfaces must be defined on an E1 card after the E1 card type (LIME1) is defined in the database (see the `ent-card` command), and before the signaling links and associated timeslots are defined for the E1 card (see the `ent-slk` command).

When the e1tsel=external parameter is specified, a user-supplied BITS clock is required.

External timing is derived from the EAGLE High-Speed Master Clock (1.544 MHz for T1 or 2.048 MHz for E1): therefore, the Master Timing feature is required. Line timing is derived from its received data stream, if present.

Up to 8 E1 interfaces can be defined on a card used as an E1 card after the E1 card type (LIME1) is defined in the database (with the `ent-card` command), and before the signaling links and associated timeslots are defined for the E1 card.

E1 ports 1, 3, 5, and 7 (master ports) can be independently channel bridged with their adjacent even-numbered (slave) ports 2, 4, 6, and 8 to allow non-signaling data pass-through. The chanbrdg parameter must be specified for the odd-numbered E1 port.

For an SE-HSL card, the minsurate parameter indicates the least number of SUs present on a link uniformly distributed. The number of SUs present is the minsurate parameter value (without link traffic) or the minsurate parameter value minus the number of MSUs (with link traffic).

Output

```
ent-e1:loc=1205:e1port=1:crc4=off:cas=on:encode=hdb3:e1tsel=external:si=2:sn=12
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
```

```
    ENT-E1: MASP A - COMPLTD
;
```

Related Commands

chg-e1, *dlt-e1*, *rtrv-e1*, *tst-e1*

ent-enum-acl

Enter ENUM ACL Table Entry

Use this command to make an entry in the ENUM Access Control List (ACL) Table. The ENUM ACL Table supports the provisioning information related to the allowed IP Addresses for the ENUM application.

Parameters

ipaddr (mandatory)

This is a TCP/IP address expressed in standard dot notation. It specifies allowed IP addresses for the ENUM application.

Range:

Four numbers separated by dots, with each number in the range of 0-255, *.

Note: It also supports wildcard characters as follows:

xxx.xxx.xxx.*
xxx.xxx.*.*
xxx.*.*.*

where xxx can be any number in range of 0-255.

System Default:

0.0.0.0

Example

```
ent-enum-acl:ipaddr=10.248.13.9
ent-enum-acl:ipaddr=10.248.13.*
ent-enum-acl:ipaddr=10.248.*.*
ent-enum-acl:ipaddr=10.*.*.*
```

Dependencies

The ENUM ACL Table should be accessible.

An overlapping IP Address cannot be provisioned in the ENUM ACL Table.

The IP Address specified by the IPADDR parameter must be a valid IP address.

A maximum of 100 IP addresses can be defined in the ENUM ACL Table.

The IP address specified by the IPADDR parameter must be unique.

Notes

Wildcard IP addresses are allowed to support the ranges of IP addresses.

Output

```
ent-enum-acl:ipaddr=10.248.13.*
```

```
    tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    ent-enum-acl:ipaddr=10.248.13.*
    Command entered at terminal #4.
    ENT-ENUM-ACL: MASP A - COMPLTD
;
```

Related Commands

dlt-enum-acl, *rtrv-enum-acl*

ent-enum-prof

Enter ENUM Profile Table Entry

Use this command to configure the data used to generate the ENUM response for three supported resource record formats such as NAPTR, NS and CNAME. The ENUM Profile Table is used to configure the resource record data.

Parameters

prn (mandatory)

Profile name. This parameter specifies the unique logical name assigned to the profile entry used to generate the ENUM response.

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 10 characters in length. Valid values are a..z, A..Z, 0..9.

rtrype (mandatory)

Response type. This parameter specifies the response type for the profile. It identifies the profile used to generate the ENUM response for each resource record type.

Range:

naptr

cname

ns

Default:

No change to the current value

System Default:

naptr

pref (optional)

Preferred Response. This parameter will decide the values for the Order and Preference fields to be encoded for each NAPTR resource record. The values of these fields are only applicable when there are two NAPTR resource records in the ENUM response. This parameter is only valid for the NAPTR response type.

Range:

yes

no

Default:

No change to the current value

System Default:

No

rpdomain (optional)

Replacement domain name. This parameter specifies the domain name present in the replacement field of the NAPTR record, the domain name of the name server in the NS record, and the Canonical Name of the domain server in the CNAME record. This parameter is valid for all three response types.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 32 characters in length. Valid values are *(0-9, A-Z, a-z), . (period), - (hyphen).*

rrdomain (optional)

Domain name present in regular expression. This parameter specifies the domain name used in SIP URI for both ported and non-ported numbers. This parameter is only valid for the NAPTR response type.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 32 characters in length. Valid values are *(0-9, A-Z, a-z), . (period), - (hyphen).*

sparm (optional)

Service parameter. This parameter specifies the supported ENUM services. The ENUM application shall only support two ENUM services.

Range:

tel

sip

Default:

No change to the current value

System Default:

tel

Example

```
ent-enum-prof:prn=pr1:rtype=naptr:rrdomain=abc.oracle.com:sparm=sip
ent-enum-prof:prn=pr2:rtype=naptr:rrdomain=abc1.oracle.com:pref=yes:sparm=sip
ent-enum-prof:prn=pr3:rtype=ns:rpdomain=def.oracle.com
ent-enum-prof:prn=pr4:rtype=cname:rpdomain=cname.123
ent-enum-prof:prn=pr5:rtype=naptr:rrdomain=abc2.oracle.com:sparm=sip
```

Dependencies

The ENUM Profile Table should be accessible.

The domain name for regular expression (RRDOMAIN) can be specified only with RTYPE=NAPTR.

For RTYPE=NS or CNAME, the replacement domain name (RPDOMAIN) must be specified.

The SPARM, PREF and RRDOMAIN parameters are valid only for RTYPE=NAPTR.

The RRDOMAIN parameter is valid only for SPARM=SIP.

A unique profile name must be specified for a new profile.

A maximum of 1024 entries can be provisioned in the ENUM Profile Table.

The RRDOMAIN parameter must be specified with SPARM=SIP.

A profile name of "none" cannot be specified.

Output

```
> ent-enum-prof:prn=pr1:rtype=naptr:sparm=sip:rrdomain=abc.oracle.com
    tekelecstp 18-05-29 03:13:20 MST  EST EAGLE 46.1.0
    ent-enum-prof:prn=pr1:rtype=naptr:sparm=sip:rrdomain=abc.oracle.com
    Command entered at terminal #19.
;

Command Accepted - Processing
    tekelecstp 18-05-29 03:13:20 MST  EST EAGLE 46.1.0
    ENT-ENUM-PROF: MASP B - COMPLTD
;
> ent-enum-prof:prn=pr2:rtype=naptr:sparm=sip:rrdomain=abc.oracle.com
    tekelecstp 18-05-29 03:15:20 MST  EST EAGLE 46.1.0
    ent-enum-prof:prn=pr2:rtype=naptr:sparm=sip:rrdomain=abc.oracle.com
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 18-05-29 03:15:20 MST  EST EAGLE 46.1.0
    ENT-ENUM-PROF: MASP B - COMPLTD
;
> ent-enum-prof:prn=pr3:rtype=ns:rpdomain=def.oracle.com
    tekelecstp 18-05-29 03:18:20 MST  EST EAGLE 46.1.0
    ent-enum-prof:prn=pr3:rtype=ns:rpdomain=def.oracle.com
    Command entered at terminal #19.
;

Command Accepted - Processing
    tekelecstp 18-05-29 03:18:20 MST  EST EAGLE 46.1.0
    ENT-ENUM-PROF: MASP B - COMPLTD
;
```

Related Commands

chg-enum-prof, *dlt-enum-prof*, *rtrv-enum-prof*

ent-enum-profsel — Enter ENUM Profile Selection Table or DN Block Table Entry

Use this command to make an entry in the ENUM Profile Selection Table and the ENUM DN Block Table. The ENUM Profile Selection Table supports the provisioning information related to mapping of Entity Id to Profile Id. The ENUM DN Block Table supports the provisioning information related to mapping of DN Block to Profile Id.

Parameters

edn (optional)

End Dialed Number

Range:

5-15 digits

entityid (optional)

Network Entity

Range:

1-15 hex-digits (0-9, a-f)

prn1 (optional)

Profile Name

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and with a maximum length of 10 characters. Valid values are a..z, A..Z, 0..9.

Note: Response type of specified profile must be NS

prn2 (optional)

Profile Name

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and with a maximum length of 10 characters. Valid values are a..z, A..Z, 0..9.

Note: Response type of specified profile must be CNAME

prn3 (optional)

Profile Name

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and with a maximum length of 10 characters. Valid values are a..z, A..Z, 0..9.

Note: Response type of specified profile must be NAPTR

prn4 (optional)

Profile Name

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and with a maximum length of 10 characters. Valid values are a..z, A..Z, 0..9.

Note: Response type of specified profile must be NAPTR

sdn (optional)

Start Dialed Number

Range:

5-15 digits

Example

```
ent-enum-profsel:entityid=12345:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2
ent-enum-profsel:sdn=12345:edn=12400:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2
```

Dependencies

The ENUM Profile Selection Table should be accessible.

The ENUM DN Block Table should be accessible.

The ENUM Profile Table should be accessible.

Either ENTITYID or SDN and EDN must be specified.

ENTITYID cannot be specified with SDN or EDN.

At least one profile must be specified.

The profile name specified by the prnX (x=1,2,3,4) parameter must be provisioned in the ENUM Profile Table.

SDN and EDN digit length must be the same.

EDN must be greater than or equal to SDN.

The response type specified by profile name prn1, prn2, prn3 and prn4 should be NS, CNAME, NAPTR and NAPTR respectively.

The entity ID value must be unique in the ENUM Profile Selection Table.

NAPTR profile names must be unique.

A maximum of 1024 entries can be provisioned in the ENUM Profile Selection Table.

A maximum of 1024 entries can be provisioned in the ENUM DN Block Table.

The SDN and EDN cannot already be provisioned in the ENUM Profile Selection Table.

The default profile cannot be associated with any profile selection entry.

If SDN is specified then EDN must be specified or vice-versa.

Overlapping SDN and EDN cannot already be provisioned in the ENUM DN Block Table.

Notes

Response type specified by profile name prn1, prn2, prn3 and prn4 should be NS, CNAME, NAPTR and NAPTR respectively.

Entity Id and SDN/EDN are mutually exclusive.

SDN must be specified with EDN and vice-versa.

Output

This example displays output when entity id specified:

```
ent-enum-profsel:entityid=1234:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2
```

```
    tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    ent-enum-profsel:entityid=1234:prn1=ns1:prn2=cname1:prn3=naptr1:prn3=naptr2

    Command entered at terminal #4.
    ENT-ENUM-PROFSEL: MASP A - COMPLTD
;
```

This example displays output when SDN and EDN specified:

```
ent-enum-profsel:sdn=12345:edn=23456:prn1=ns1:prn2=cname1:prn3=naptr1:prn4=naptr2
```

```
    tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0

ent-enum-profsel:sdn=12345:edn=23456:prn1=ns1:prn2=cname1:prn3=naptr1:prn3=naptr2
```

```
    Command entered at terminal #4.
    ENT-ENUM-PROFSEL: MASP A - COMPLTD
;
```

Related Commands

chg-enum-profsel, *dlt-enum-profsel*, *rtrv-enum-profsel*

ent-frm-pwr

Enter Frame Power Threshold

Use this command to add a new entry to the Frame Power Threshold (FPT) table. The frame-level power threshold value in the table is compared with the current calculated maximum power consumption for a particular frame, and appropriate alarms are raised if that consumption exceeds the threshold limit.

The entries in the Frame Power Threshold table contain a Frame ID and the corresponding power threshold value. You can use the following commands to display the threshold and calculated maximum power consumption for the frames in the system.

- The `rtrv-frm-pwr` command displays the current provisioned frame power threshold for each provisioned frame.
- The `rtrv-stp:display=power` command displays the provisioned frame power threshold for each provisioned frame, and displays the maximum calculated power consumption for each frame, based on card population.
- The `rtrv-stp:display=power:frm=xxxx` command displays the provisioned frame power threshold for the specified frame, the maximum calculated power consumption for the frame based on card population, and the maximum power consumption for each card in the frame and for a fan assembly for each shelf.

Note: The frame-level power threshold value needs to be determined from the capacity in Amps of the fuse alarm panel (FAP) for the frame. Contact your site engineer to determine the FAP capacity.

Parameters

frm (mandatory)

Frame ID.

Range:

cf00

Control frame

ef00

First extension frame

ef01

Second extension frame

ef02

Third extension frame

ef03

Fourth extension frame

ef04

Fifth extension frame

thrshld (optional)

Threshold. The frame-level power threshold value, in Amps. This value is compared with the current calculated maximum power consumption for a particular frame (use the `rtrv-stp:display=power:frm=` command to obtain the maximum power consumption value), and the appropriate alarms are raised if current consumption exceeds the threshold limit.

The value of the thrshld parameter needs to be determined from the capacity of the fuse alarm panel (FAP) for the frame. Contact your site engineer to determine the frame FAP capacity.

Range:

30 - 65

Default:

30

Example

Enter the frame power threshold value for the first extension frame.

```
ent-frm-pwr:frm=ef00:thrshld=55
```

Dependencies

A valid value must be specified for the frm parameter.

The valid range for the thrshld parameter is 30-65 Amps.

The specified power threshold value (thrshld parameter) cannot already be provisioned for the specified frame.

The specified frame (frm parameter) must be a provisioned frame.

Notes

The maximum calculated power for a frame is based on the cards that are populated in the system, and includes a fan tray assembly for every shelf (the system cannot detect the presence or absence of a fan tray, and assumes presence for the calculation). These values are typically much higher than the actual power being drawn; the values cannot be used as a gauge of the actual power consumption of the EAGLE.

Output

```
ent-frm-pwr:frm=ef00:thrshld=55
```

```
    tekelecstp 06-04-11 15:18:41 EST  EAGLE 35.0.0
    FRAME POWER THRESHOLD table is (4 of 10) 40% full
    ENT-FRM-PWR: MASP A - COMPLTD
;
```

Related Commands

chg-frm-pwr, *dlt-frm-pwr*, *rtrv-frm-pwr*, *rtrv-stp*

ent-ftp-serv

Enter FTP Server Entry

Use this command to write an entry into the FTP Server table for an FTP Server.

Note: The FTP Server table entry for the Oracle Communications EAGLE FTP Table Base Retrieval (FTRA) is entered through input from FTRA. Though the entry can be made with this command at the EAGLE, the information entered at the EAGLE will be overwritten by the information sent by FTRA.

Parameters

app (mandatory)

Application. This parameter specifies the FTP Client application that interfaces with the FTP server.

Range:

db

Database Backup\Restore application

dist

EAGLE Software Release Distribution application

meas

Measurements Platform application

user

Oracle Communications EAGLE FTP Table Base Retrieval (FTRA)

ipaddr (mandatory)

IP Address of the FTP Server.

login (mandatory)

FTP Server Username (A prompt for entering a password appears on a separate line.)

Range:

zzzzzzzzzzzzzzz

1 to 15 alphanumeric characters; mixed-case is allowed

path (mandatory)

FTP path used to locate the file that will be sent.

Range:

zzzzzzzzzzzzzzzzzzzz (up to 100)

Up to 100 characters; mixed-case string in double quotes with valid FTP path format

prio (mandatory)

Priority of this FTP server when there is more than one FTP Server for this application.

Range:

1 - 10

security (optional)

The parameter specifies whether the FTP connection is secure or not.

Range:

on

Set the FTP connection to be secure.

off

Set the FTP connection to be unsecure.

System Default:

off

Example

```
ent-ftp-serv:app=meas:ipaddr=1.255.0.102:login=ftpmeas1:path="~meas":prio=1
ent-ftp-serv:app=user:ipaddr=1.255.0.102:login=tekperson1:path=”~\data”:prio=1
ent-ftp-serv:app=dist:ipaddr=192.168.53.195:
login=pvftp:prio=1:path="/remote/labftp1/pvftp/dallen2ftp"
ent-ftp-serv:app=db:ipaddr=192.168.53.195:
login=pvftp:prio=1:path="/remote/labftp1/pvftp/aholden"
ent-ftp-serv:ipaddr=10.248.13.9:app=meas:login=root:path="/root":prio=5:security=on
```

Dependencies

A separate prompt appears for you to enter the FTP server password that will be used with the FTP Server Username (login). You must enter a password that is at least 1 and not more than 15 characters long. If you enter an invalid password (you press the Return key without entering a password, or you enter more than 15 characters), you must enter the entire command again to cause the password prompt to appear again. The password that you enter is not displayed as you enter it.

An entry for the specified application ID at the specified priority cannot already exist.

An entry for the specified application ID at the specified IP address cannot already exist.

The app parameter must specify an application that uses the FTP Support feature.

The ipaddr parameter must specify a valid IP address for the FTP server.

The path parameter value must be in a valid FTP path format.

The prio parameter specifies a priority for use of an FTP server by an application when the application has more than one FTP server defined in the table. Each FTP server defined for use by the application must have a priority from 1 to 10 assigned. The available FTP server with the highest priority (smallest number) will be used first by the application.

The FTP Server table can contain entries for a maximum of 10 FTP servers: however, the number of FTP servers supported by an application may be less than 10. Entries that are made for an application cannot be made for more than the maximum number of FTP servers supported by the application.

- The Measurements Platform application (app=meas) supports 3 FTP servers.
- The FTP-based Table Retrieve Application (FTRA) (app=user) supports 2 FTP servers.
- The Database (app=db) and Software Distribution (app=dist) applications each support 1 FTP server.

The Security parameter cannot be set as ON if the OAM IP Security feature is not activated.

Notes

The same FTP server can be defined more than once, but the specified application must be different for each entry.

The FTP connection will be secure when the OAM IP Security feature is activated and the parameter SECURITY is ON. The secure FTP connection (SFTP) uses port 22, which must be opened in the customer's network.

Output

```
ent-ftp-serv:app=meas:ipaddr=1.255.0.102:login=ftpmeas1:path="~meas":prio=1
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
Enter Password:*****
    FTP SERV table is (1 of 10) 10% full
    ENT-FTP-SERV: MASP A - COMPLTD
;
```

```
ent-ftp-serv:app=user:ipaddr=1.255.0.102:login=tekperson1:path=”~data”:prio=1
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
Enter Password:*****
    FTP SERV table is (2 of 10) 20% full
    ENT-FTP-SERV: MASP A - COMPLTD
;
```

The following command is rejected when the OAM IP security feature is not activated.

```
ent-ftp-serv:ipaddr=10.248.13.100:app=user:login=root:path="/root":prio=4:security=on
```

```
tekelecstp 12-09-19 14:47:27 EST 45.0.0-64.42.0
ent-ftp-serv:ipaddr=10.248.13.100:app=user:login=root:path="/root":prio=4:security=on
Command entered at terminal #4.
Enter Password:***
FTP SERV table is (3 of 10) 30% full
E2680 Cmd Rej: OAM IP Security Feature must be activated

ENT-FTP-SERV: MASP A- Command Aborted
;
```

The following command provisions the FTP Server entry with 'security=on' when the OAM IP security feature is activated.

```
ent-ftp-serv:ipaddr=10.248.13.100:app=user:login=root:path="/root":prio=4:security=on.
```

```
tekelecstp 12-09-19 14:49:17 EST 45.0.0-64.42.0
ent-ftp-serv:ipaddr=10.248.13.100:app=user:login=root:path="/root":prio=4:security=on
Command entered at terminal #4.
Enter Password:***
FTP SERV table is (3 of 10) 30% full
ENT-FTP-SERV: MASP A- COMPLTD
;
```

Related Commands

chg-ftp-serv, *dlt-ftp-serv*, *rtrv-ftp-serv*

ent-gserv-data

Enter G-Port SRI Query for Prepaid Service Data

Use this command to enter translation type, originating point code, or global title address data in the GSERV table. These values are used to determine whether a Send Routing Information (SRI) request should receive G-Port SRI Query for Prepaid service or normal G-Port SRI service.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

gta (optional)

Global title address. Use this parameter to specify a calling party (CgPA) global title address.

Range:

1 - 21 digits

opc (optional)

ANSI originating point code in the form of *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code *prefix-ni-nc-ncm*).

Synonym:

opca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24 (optional)

Originating point code. Use these parameters to specify message transfer part (MTP) originating point codes.

opci (optional)

ITU international originating point code with subfields *zone-area-id*.

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

tt (optional)

Translation type. Use this parameter to specify a called party (CdPA) translation type.

Range:

0 - 255

Example

```
ent-gserv-data:tt=26
ent-gserv-data:opc=1-1-1
ent-gserv-data:gta=9194605500
```

Dependencies

Duplicate entries cannot exist in the GSERV table.

The G-Port SRI Query for Prepaid feature must be enabled before this command can be entered.

A new entry cannot be added to the GSERV table because all available space is in use. A maximum of 256 tt values, 50 gta values, and 50 opc values can be entered in the GSERV table.

The tt, opc, and gta parameters cannot be specified within the same command.

The G-Port feature must be enabled before this command can be entered.

Notes

A translation type, originating point code, or global title address value must be entered in the GSERV table and must match the corresponding SRI Query parameter for an SRI message to receive the G-Port SRI Query for Prepaid service.

The G-Port SRI Query for Prepaid feature must be on before entries in the GSERV table can be used to affect a G-Port SRI query

Output

`ent-gserv-data:tt=26`

```
mystp 06-07-27 22:58:17 EST  EAGLE 35.2.0
ENT-GSERV-DATA: MASP A - COMPLTD
```

Related Commands

dlt-gserv-data, *rtrv-gserv-data*

ent-gsmmap-scrn Enter GSM MAP Screening Entry

Use this command to assign the GSM (Global System for Mobile Telecommunication) MAP (Mobile Application Part) screening entries that filter or allow TCAP messages for certain MAP operation codes. The messages are filtered or allowed based on CgPA GTA+NPV+NAIV, CdPA GTA+NPV+NAIV, and forbidden (forbid) parameters. Each CgPA entry is associated with one or more CdPA entries and one or more CgPA entries are associated with a MAP Opcode. This command provisions both CgPA and CdPA entries into the database.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

cgsr (mandatory)

CGPA screening reference. This parameter specifies a CGPA entry for an OPNAME.

Range:

ayyy

1 alphabetic character and up to 3 optional alphanumeric characters

opname (mandatory)

Operation code name. This parameter references the operation code (opcode) defined with the `ent-gsms-opcode` command. GSM Map Screening is performed on the specified address or addresses for the referenced operation code.

Range:

ayyyyyyy

Up to 8 alphanumeric characters

action (optional)

The screening action to take if a message is forbidden as defined by the forbid parameter.

Range:

atierr

Generate an ATI reject message. This option is only valid for ATI MAP operation codes.

discard

Discard the MSU

dupdisc

Route the original message to the duplicate node. The original message will not be sent to the original node. If, however, the duplicate node is not available for routing, the MSU is discarded.

duplicate

Route the message as normal to the original destination and route a copy of the original message to the duplicate node. If the MSU fails to route to the duplicate node, a UIM is generated indicating the duplicate routing failure.

forward

Route the original message to the forward node. The original message will not be sent to the original node. If, however, the forward node is not available for routing, the MSU is routed to the original node.

pass

Route the message as normal to the destination.

route

Route the message as normal to the original destination node; no UIM will be generated. The original destination is the node to which normal GTT would be sent if no GSM MAP actions are taken.

Default:

discard

cdsr (optional)

CDPA screening reference. A CDPA entry for a combination of CGSR and OPNAME.

Range:

ayyy

1 alphabetic character and up to 3 optional alphanumeric characters

eaddr (optional)

Ending CDPA address. This parameter is used with the npv, naiv, cgsr, and cdsr parameters.

Range:

1-15 digits

Valid digits are *0–9, a-f, A-F*

forbid (optional)

Forbidden parameter value. A forbidden parameter for the entered address. If a forbidden parameter is detected, then the message is rejected by the action defined by the action parameter.

Range:

all

All parameters are forbidden. Take the specified screening action defined by the action parameter for messages arriving at the system.

none

None of the parameters are forbidden. Route the message to its destination.

state

Take the specified screening action defined by the naction parameter for messages arriving at the system that contain state as the forbidden parameter for the entered address/operation code combination.

Note: The state parameter is valid only for GSM ATI messages.

location

Take the specified screening action defined by the naction parameter for messages arriving at the system that contain location as the forbidden parameter for the entered address/operation code combination.

Note: The location parameter is valid only for GSM ATI messages.

Default:

all

force (optional)

Check Mated Application Override. This parameter must be used to complete command execution if the pc/pca/pci/pcn/pcn24 and ssn parameter combination (if the ssn parameter has a value other than *none*) specified in the command is not already defined in the SCCP Application entity set (Remote Point Code/Mated Application Table).

Range:

yes

no

Default:

no

mapset (optional)

MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

naiv (optional)

Nature of Address value for the address or range of CgPA and CdPA addresses. If a message is screened and does not contain matching npv and naiv values, the message is rejected. The message is rejected with the default action defined by the `ent-gsms-opcode` command for the operation code (opcode) parameter entry referenced by the operation name (opname) parameter.

This parameter must be specified with the npv parameter.

Range:

*0 - 127, **

Default:

*

npv (optional)

Numbering Plan value for the address or range of CgPA and CdPA addresses. If a message is screened and does not contain matching npv and naiv values, the message is rejected. The message is rejected with the default action defined by the `ent-gsms-opcode` command for the operation code (opcode) parameter entry referenced by the operation name (opname) parameter.

This parameter must be specified with the naiv parameter.

Range:

*0 - 15, **

Default:

*

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24 (optional)

Point code. The Point Code and SSN parameters are used to enter the node to which the input message will be routed.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

ri (optional)

Routing indicator. This parameter specifies whether a subsequent global title translation is required.

This parameter can be specified only when the value specified for the action parameter is *forward, duplicate*, or *dupdisc*.

Range:

gt

ssn

System Default:

ssn

saddr (optional)

Starting origination address.

With the npv, naiv, and cgsr parameters, this parameter is for a single CGPA entry or the starting CGPA address in the range to be screened.

With the npv, naiv, and cdsr parameters, this parameter is for a single CDPA entry or the starting CDPA address in the range to be screened.

Range:

1-15 digits, *

Valid digits are *0–9, a-f, A-F*

Default:

*

ssn (optional)

Subsystem Number. The Point Code and SSN are used to change the defined node where the input message will be routed.

Range:

002 - 255, none

Default:

none

tt (optional)

Translation type. The value that the CdPA TT is set to as the result of Enhanced GSM Map Screening.

This parameter can be specified only if the value specified for the action parameter is *forward, duplicate*, or *dupdisc*.

Range:

0 - 255, none

Default:

none

Example

The following example adds a MAP OPNAME of ATI with a range of allowed addresses, defines a forbidden parameter for that range of addresses and an action to take if the forbidden parameter is detected, and sets the NPV and NAIV values. This example is wrapped to the next line for readability:

```
ent-gsmmap-scrn:saddr=919461:eaddr=919462:opname=ati:action=discard:forbid=state
:npv=1:naiv=4:cgsr=fela
```

The following example adds a MAP OPNAME of ATI of with a range of allowed addresses, defines a forbidden parameter for that range of addresses and an action to take if the forbidden parameter is detected, and sets the NPV and NAIV values. The command also defines an ITU International Point Code with Subsystem Number 5, and forbids by location messages that have an action of *forward*. This example is wrapped to the next line for readability:

```
ent-gsmmap-scrn:saddr=919461:eaddr=919462:opname=ati:action=forward:pci=1-1-1
:ssn=5:force=yes:forbid=location:cgsr=fela
```

The following example adds a MAP OPNAME of XYZ with an allowed hexadecimal address of abcdefabcdefabc, defines the action *discard* to take if a forbidden parameter is detected, and sets the NPV and NAIV values. The command also defines a CGSR of FELA. This example is wrapped to the next line for readability:

```
ent-gsmmap-scrn:opname=xyz:saddr=abcdefabcdefabc:npv=10:naiv=10:cgsr=fela
:action=discard
```

```
ent-gsmmap-scrn:opname=test2:cgsr=t1:cdsr=cd3:saddr=125:pci=s-1-1-1:ssn=10
:action=duplicate
```

```
ent-gsmmap-scrn:opname=test2:cgsr=cg1:cdsr=cd1:saddr=125:pci=1-1-1:ssn=10
:action=duplicate:mapset=11
```

```
ent-gsmmap-scrn:opname=test3:cgsr=ad:action=forward:pc=1-1-2:ssn=12:ri=gt
```

```
ent-gsmmap-scrn:opname=test4:cgsr=ksl:action=forward:mapset=dflt:pc=1-2-3
:ssn=12:tt=11
```

Dependencies

The GSM Map Screening feature must be turned on before this command can be entered.

The EGMS feature must be turned on before:

- The saddr=* parameter can be specified.
- Values for the saddr and eaddr parameters can contain hexadecimal digits.
- The cdsr parameter can be specified.
- The pc/pca parameter can be specified.

If the eaddr parameter is specified, the saddr parameter must be specified.

If the eaddr parameter is specified, then its value must contain the same number of digits as the value of the saddr parameter.

If the eaddr parameter is specified, its value must be greater than the saddr parameter value.

If the saddr=* parameter is specified, then the eaddr parameter cannot be specified.

If the opname parameter is specified, its value must exist in the GSM MAP Op-Code table.

A value of *state* or *location* cannot be specified for the forbid parameter unless the operation code (opcode) referenced by the opname parameter is 71.

The action=atierr parameter cannot be specified unless the operation code (opcode) referenced by the opname parameter is 71.

The GSM MAP Screening table cannot be full.

The GSM MAP Screening table must have at least two free entries to provision a CgPA entry, because a default wildcard CdPA entry is created for each CgPA entry.

If a single entry is specified for the CgPA/CdPA (the eaddr parameter is not specified), then the combination of saddr/npv/naiv and opname parameters cannot already exist in the GSM MAP screening table.

If a range entry is specified for the CgPA/CdPA (the eaddr parameter is specified), then the saddr/eaddr/npv/naiv and opname combination cannot already exist or overlap another range entry in the GSM MAP screening table.

If a CdPA entry is being created, then the CGSR must already exist for the specified OPNAME.

If a CgPA entry is being created, the CGSR cannot already exist for the specified OPNAME.

The specified cdsr cannot already exist for the specified cgsr.

If specified, the pc/pca/pci/pcn/pcn24 parameter must be a full point code.

If the action parameter is specified with a value of *forward, duplicate*, or *dupdisc*, the pc/pca/pci/pcn/pcn24 and ssn parameters must be specified.

The pc/pca/pci/pcn/pcn24 and ssn parameters can be specified only if the action parameter is specified with a value of *forward, duplicate*, or *dupdisc*.

The force parameter can be specified only if the pc/pca/pci/pcn /pcn24 and ssn parameters are specified.

If the pc/pca/pci/pcn/pcn24 and ssn parameters are specified, and the force parameter is not specified as *yes*, then the PC/SSN must be populated in the SCCP Application entity set (Remote Point Code/MAP Table).

The values for the npv and naiv parameters must both be numbers or asterisks (*).

If specified, the pc/pca/pci/pcn/pcn24 parameter value must exist as a destination in the Ordered Route entity set or reside in a cluster (ANSI only) that exists as a destination in the Ordered Route entity set (for global title routing).

The saddr and parameters must each be between 1 - 15 digits in length.

The npv parameter must be in range (0 - 15, *).

The naiv parameter must be in range (0 - 127, *).

The saddr parameter must have valid hexadecimal digits (0 – 9, a-f, A-F, or *).

The eaddr parameter must have valid hexadecimal digits (0 – 9, a - f, A - F).

The cgsr and cdsr parameters must each begin with an alphabetic character.

The cgsr and cdsr parameters must each consist of 1-4 alphanumeric characters.

If the action parameter has a value of *forward, duplicate*, or *dupdisc*, then the mapset parameter must be specified.

If the mapset, ri, or tt parameter is specified, then the value specified for the action parameter must be *forward, duplicate*, or *dupdisc*.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must exist.

If the value of the mapset parameter is not *dflt*, then the specified PC/SSN must exist in the specified MAP set.

If the mapset=dflt parameter is specified, and the force parameter is not specified as *yes*, then the specified PC/SSN must exist in the specified MAP set.

If the action parameter has a value of *forward, duplicate*, or *dupdisc*, then the value specified for the pc/pca/pci/pcn/pcn24 parameter cannot be associated with a proxy point code.

If the ri=ssn parameter is specified, then the ssn=none parameter cannot be specified.

If the forbid=none parameter is specified, then the action=pass parameter must be specified.

If the FGTTLS feature is enabled, the mapset parameter is specified, and the ssn parameter is not specified or has a value of *none*, then the specified MAPSET/PC combination must already exist in the MAP table.

If the FGTTLS feature is not enabled and the ssn parameter is not specified or has a value of *none*, then the specified point code must already exist in the MAP table.

Notes

GSM screening entries are handled differently from other screening entries such as GWS (gateway screening) in the system database. The following differences apply to provisioning GSM screening entries:

- GSM screening entries can be either single entries or range entries.
- Single entries have precedence in screening over range entries. Thus the single entries are searched first and if a match is found, the range entries are never searched.
- Range entries can overlap single entries.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

```
ent-gsmmap-scrn:opname=test2:cgsr=cg1:cdsr=cd1:saddr=125:pci=1-1-1:ssn=10:ac
tion=duplicate:mapset=11
```

```
    tekelecstp 06-05-29 13:24:41 EST  EAGLE 35.0.0
    GSM Map Screening table is (1 of 4000) 1% full
    ENT-GSMMAP-SCRN: MASP A – COMPLTD
;
```

```
ent-gsmmap-scrn:opname=test3:cgsr=ad:action=forward:pc=1-1-2:ssn=12:ri=gt
```

```
    tekelecstp 08-01-18 17:03:01 EST  EAGLE 38.0.0
    GSM MAP Screening Table (4 of 4000) is 1% full
    ENT-GSMMAP-SCRN: MASP A - COMPLTD
;
```

```
ent-gsmmap-scrn:opname=test4:cgsr=ksl:action=forward:mapset=dflt:pc=1-2-3:ssn=12:tt=11
```

```
    tekelecstp 08-08-20 19:13:01 EST  EAGLE 39.2.0
    GSM MAP Screening Table (1 of 4000) is 1% full
    ENT-GSMMAP-SCRN: MASP A - COMPLTD
;
```

Related Commands

chg-gsmmap-scrn, *chg-map*, *dlt-gsmmap-scrn*, *dlt-map*, *rtrv-gsmmap-scrn*, *rtrv-map*

ent-gsms-opcode

Enter GSM MAP Screening Operation Code

Use this command to assign the concerned GSM (Global System for Mobile Telecommunication) MAP (mobile application part) screening operation codes and the default screening action for the operation code. This command allows the craftsperson to provision a list of all operation codes that the system uses in performing GSM screening.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

opcode (mandatory)

MAP operation code. This parameter refers to the actual decimal value of the MAP operation codes from the TCAP layer of GSM MAP messages.

Range:

*0 - 255, **

If a decimal Map Opcode is not found in the database, then the asterisk (wildcard *), if provisioned, will constitute a match when screening the MSUs.

opname (mandatory)

Operation code name. The opname value is defined with the `ent-gsmmap-scrn` command.

Range:

ayyyyyyy

Up to 8 alphanumeric characters

dfltact (optional)

Default screening action for a MAP operation code. The default screening action is used when a matching CGPA address+NPV+NAIV entry is not found in the GSM MAP screening table.

Range:

atierr

Do not route the MSU. An ATI (Any Time Interrogation) reject message is generated. This option is only valid for ATI MAP operation codes.

discard

Do not route the MSU. The MSU is discarded (thrown away) and an appropriate UIM is issued.

dupdisc

Route the original message to the duplicate node. The original message will not be sent to the original node. If, however, the duplicate node is not available for routing, the MSU is discarded.

duplicate

Route the message as normal to the original destination and route a copy of the original message to the duplicate node. If the MSU fails to route to the duplicate node, a UIM is generated indicating the duplicate routing failure.

forward

Route the original message to the forward node. The original message will not be sent to the original node. If, however, the forward node is not available for routing, the MSU is routed to the original node.

pass

Route the message as normal to the destination.

route

Route the message as normal to the original destination node; no UIM will be generated. The original destination is the node to which normal GTT would be sent if no GSM MAP actions are taken.

Default:

discard

force (optional)

Check Mated Application Override. This parameter must be used to complete command execution if the pc/pca/pci/pcn/pcn24 and ssn parameter combination (if the ssn parameter has a value other than *none*) specified in the command is not already defined in the SCCP Application entity set (Remote Point Code/Mated Application Table).

Range:

yes

no

Default:

no

mapset (optional)

MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24 (optional)

Point code. The pc/pca/pci/ncn/pcn24 and ssn parameters allow the user to change the defined node to which the input message will be routed.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the

`chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

ri (optional)

Routing indicator. This parameter specifies whether a subsequent global title translation is required.

Note: This parameter can be specified only when the value specified for the dfltact parameter is *forward*, *duplicate*, or *dupdisc*.

Range:

gt

ssn

System Default:

ssn

ssn (optional)

Subsystem Number. The pc/pca/pci/pcn/pcn24 and ssn parameters are used to change the defined node where the input message will be routed.

Range:

002 - 255

Default:

none

tt (optional)

Translation type. The value that the CdPA TT is set to as the result of Enhanced GSM Map Screening.

The parameter can be specified only if the value specified for the dfltact parameter is *forward*, *duplicate*, or *dupdisc*.

Range:

0 - 255, *none*

Default:

none

Example

This example adds a MAP operation code of 71 with a name of ATI with a default action of DISCARD:

```
ent-gsms-opcode:opcode=71:opname=ati:dfltact=discard
```

This example adds a MAP operation code of 71 with a name of ATI, a default action of FORWARD, an international point code of 1, a subsystem number of 5, and forces:

```
ent-gsms-opcode:opcode=71:opname=ati:dfltact=forward:pci=1-1-1:ssn=5:force=yes
```

This example adds a MAP operation code of 71 with a name of ATI, a default action of DUPLICATE, an international point code of 1, a subsystem number of 5, and forces:

```
ent-gsms-opcode:opcode=71:opname=ati:dfltact=duplicate:pci=1-1-1:ssn=5:force=yes
```

This example adds a MAP operation code of 71 with a name of ATI, a default action of DUPDISC, an international point code of 1, a subsystem number of 5, and forces:

```
ent-gsms-opcode:opcode=71:opname=ati:dfltact=dupdisc:pci=1-1-1:ssn=5:force=yes
```

This example adds a MAP operation code of * with a name of XYZ, a default action of DUPLICATE, an ANSI point code of 8, a subsystem number of 20:

```
ent-gsms-opcode:opcode=*:opname=xyz:pca=8-8-8:dfltact=duplicate:ssn=20
```

This example adds a MAP operation code of 22 with a name of ATI with a default action of DISCARD:

```
ent-gsms-opcode:opcode=22:opname=ati:dfltact=discard
```

This example shows a spare point code:

```
ent-gsms-opcode:opname=test3:opcode=3:pci=s-1-1-1:dfltact=duplicate:ssn=10:force
```

This example shows a MAP set value. The Flexible GTT Load Sharing feature is ON.

```
ent-gsms-opcode:opname=test3:opcode=3:pc=1-1-1:dfltact=duplicate:ssn=10:mapset=7
```

This example adds a MAP operation code of 27 with a name of TEST3, a default action of FORWARD, an ANSI point code of 1, a subsystem number of 12 and a routing indicator of GT:

```
ent-gsms-opcode:opname=test3:opcode=27:dfltact=forward:pca=1-1-2:ssn=12:ri=gt
```

This example shows a translation type value:

```
ent-gsms-opcode:opname=test4:opcode=32:dfltact=forward:mapset=dflt:pc=1-2-3:ssn=12:tt=11
```

Dependencies

The GSM Map Screening feature must be turned on before this command can be entered.

A valid value must be specified for the dfltact parameter.

The reserved word *none* cannot be specified as a value for the opname parameter.

The pc/pca/pci/pcn/pcn24 and ssn parameters can be specified only if the dfltact parameter is specified and its value is *forward, duplicate*, or *dupdisc*.

If the dfltact parameter is specified with a value of *forward, duplicate*, or *dupdisc*, then the pc/pca/pci/pcn/pcn24 and ssn parameter must be specified.

The force parameter can be specified only if the pc/pca/pci/pcn/pcn24 and the ssn parameters are specified.

The dfltact=atierr parameter cannot be specified unless the value of the operation code referenced by the opname parameter is 71. The atierr option is valid only for ATI MAP operation codes, and the opcode=71 parameter signifies an ATI MAP operation code.

The value specified for the opcode parameter cannot already exist in the GSM Map Op-Code table.

The value specified for the opname parameter cannot already be used in the GSM Map Op-Code table.

If the pc/pca/pci/pcn/pcn24 and ssn parameters are specified, and the force parameter is not specified as *yes*, then the PC-SSN must exist in the SCCP Application entity set (Remote Point Code / Mated Application Table).

The Enhanced GSM Map Screening feature must be enabled and turned on before the opcode=* parameter can be specified.

If specified, the pc/pca/pci/pcn /pcn24 parameter value must be a full point code.

If specified, the pc/pca/pci/pcn/pcn24 parameter value must exist as a destination in the Ordered Route entity set or reside in a cluster (ANSI only) that exists as a destination in the Ordered Route entity set (for global title routing).

The Enhanced GSM Map Screening feature must be enabled and turned on when the PC/PCA is specified.

The opname parameter must consist of alphanumeric characters.

The opname parameter must be no more than 8 characters in length.

If the mapset, ri, or tt parameter is specified, then the value specified for the dfltact parameter must be *forward, duplicate*, or *dupdisc*.

If the dfltact parameter is specified as *forward, duplicate*, or *dupdisc*, then the mapset parameter must be specified.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must exist.

If the mapset parameter is not specified as *dflt*, or if the mapset=dflt parameter is specified, and the force parameter is not specified as *yes*, then the specified PC/SSN must exist in the specified MAP set.

If the dfltact parameter has a value of *forward, duplicate*, or *dupdisc*, then the value specified for the pc/pca/pci/pcn/pcn24 parameter cannot be associated with a proxy point code.

If the ri=ssn parameter is specified, then the ssn=none parameter cannot be specified.

If the FGTTLS feature is enabled, the mapset parameter is specified and the ssn parameter is not specified or has a value of *none*, then the specified MAPSET/PC combination must already exist in the MAP table.

If the FGTTLS feature is not enabled and the ssn parameter is not specified or has a value of *none*, then the specified point code must already exist in the MAP table.

Notes

Origination Addresses are considered to be the SCCP CGPA address as well as the Numbering Plan and Nature of Address values.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

```
ent-gsms-opcode:opname=test3:opcode=3:pc=1-1-1:dfltact=duplicate:ssn=10:mapset=7
```

```
    tekelecstp 06-05-29 13:21:58 EST  EAGLE 35.0.0
    ENT-GSMS-OPCODE: MASP A – COMPLTD
;
```

```
ent-gsms-opcode:opname=test3:opcode=27:dfltact=forward:pca=1-1-2:ssn=12:ri=gt
```

```
    tekelecstp 08-01-18 16:56:43 EST  EAGLE 38.0.0
    ENT-GSM-OPCODE: MASP A - COMPLTD
;
```

```
ent-gsms-opcode:opname=test4:opcode=32:dfltact=forward:mapset=dflt:pc=1-2-3:ssn=12:tt=11
```

```
    tekelecstp 08-08-20 19:13:01 EST  EAGLE 39.2.0
    ENT-GSM-OPCODE: MASP A - COMPLTD
;
```

Related Commands

chg-gsms-opcode, *dlt-gsms-opcode*, *rtrv-gsms-opcode*

ent-gsmssn-scrn

Enter GSM Subsystem Number Screening Entry

Use this command to provision origination and destination SSNs (subsystem numbers) to be screened using the GSM (Global System for Mobile Telecommunication) MAP (mobile application part) screening feature. The value of the ssn parameter that is entered with this command is added to the GSM SSN screening table. All the MAP messages with the originating or destination SSN entered are screened using the GSM Map screening feature.

Parameters

ssn (mandatory)

Subsystem number.

Range:

000 - 255

type (mandatory)

Subsystem type.

Range:

dest

destination SSN

orig

origination SSN

Example

The following example adds an originating subsystem of 10 to the GSM SSN Screening table:

```
ent-gsmssn-scrn:ssn=10:type=orig
```

Dependencies

The GSM Map Screening feature must be turned on before this command can be entered.

A value for the ssn and type parameter combination cannot be specified that already exists in the GSM SSN screening table.

Notes

None

Output

```
ent-gsmssn-scrn:ssn=10:type=orig
```

```
    rlghncxa03w 04-01-10 11:43:04 EST  EAGLE 31.3.0
    ENT-GSMSSN-SCRN: MASP A - COMPLTD
;
```

Related Commands

dlt-gsmssn-scrn, *rtrv-gsmssn-scrn*

ent-gta

Enter Global Title Address Information Command

Use this command to specify the GTA (global title address) information for applicable global title selectors required to specify a global title entry.

This command adds the routing object (a destination address and a subsystem number) for messages requiring a global title translation. The translation is performed on the basis of the global title address (GTA), global title indicator (GTI), numbering plan (NP), nature of address indicator (NAI), and translation type (TT) of each SS7 SCCP message directed to the STP with a routing indicator of 0, indicating a GTT is required.

Note: If the EGTT feature is turned on, the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is turned on.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

gttsn (mandatory)

GTT set name. The entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

xlat (mandatory)

Translate indicator. This parameter specifies translation actions and routing actions.

Range:

dpc

dpcngt

dpcssn

none

acn (optional)

Application context name. This parameter specifies the ITU TCAP *acn* field in the incoming MSU.

Range:

*0 - 255, *, none*

The *acn* supports up to 7 subfields separated by dash (e.g., *1-202-33-104-54-26-007*)

* —any valid value in the ITU TCAP *acn* field in the incoming MSU

none —there is no ITU TCAP *acn* field in the incoming MSU

actsn (optional)

GTT Action Set Name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

ccgt (optional)

Cancel called global title indicator.

Range:

yes

no

Default:

no

cdselid (optional)

CdPA Selector ID.

Range:

0 - 65534

cdssn (optional)

Starting CdPA subsystem number.

Range:

0 - 255

cgcnvsn (optional)

CgPA conversion set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

cggtmod (optional)

Calling party GT modification indicator. This parameter specifies whether calling party global title modification is required.

Range:

yes

no

Default:

no

cgpc (optional)

ANSI CgPA point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

cgpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

cgpcaction (optional)

This parameter is used to provide the required abilities, indicating what any particular translation needs to do with CgPA PC.

Range:

dflt

protocol will be allowed to perform all the required processing/conversion with CGPC.

ignore

CGPC will be left as it was in incoming MSU.

remove

CGPC will be removed from outgoing MSU.

Default:

dflt

cgpci (optional)

ITU international CgPA point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cgpcn (optional)

ITU national CgPA point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cgpcn24 (optional)

24-bit ITU national CgPA point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

cgpcn16 (optional)

16-bit ITU national CgPA point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

cgselid (optional)

CgPA Selector ID.

Range:

0 - 65534

cgssn (optional)

Starting CgPA subsystem number.

Range:

0 - 255

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Point Code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national destination point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

ecdssn (optional)

Ending CdPA subsystem number.

Range:

0 - 255

ecgssn (optional)

Ending CgPA subsystem number.

Range:

0 - 255

egta (optional)

End global title address. This parameter specifies the end of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

Default:

Same as the specified gta value

fallback (optional)

Fallback option. The action taken when the final translation does not match while performing GTT using a FLOBR-specific GTT mode.

Range:

yes

perform GTT based on the last matched entry

no

GTT fails and the MSU is discarded

sysdflt

use the system-wide default fallback option in the SCCPOPTS table

Default:

sysdflt

family (optional)

The ANSI TCAP*family* field in the incoming MSU.

Range:

*0 - 255, *, none*

* —any valid value in the ANSI TCAP *family* field in the incoming MSU

none —there is no value in the ANSI TCAP *family* field in the incoming MSU

force (optional)

Check mated application override. This parameter must be used to complete command execution if the pci/pcn and ssn parameter combination specified in the command is not already defined in the SCCP Application entity set (Remote Point Code/Mated Application Table).

Range:

yes

no

Default:

no

gta (optional)

Global title address. The beginning of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

gtmodid (optional)

Global title modification identifier.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

Default:

none

loopset (optional)

SCCP loopset name. This parameter associates a translation set with a loopset.

Range:

ayyyyyyy

1 leading alphabetic character and up to 7 following alphanumeric characters.

none —There is no association between the translation set and any loopset.

Default:

none

mapset (optional)

MAP set ID. This parameter specifies the Mated Application set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

mrnset (optional)

MRN set ID. The Mated Relay Node set ID.

Range:

1 - 3000, dflt, none

dflt —Default MRN set

none —The GTA translation does not participate in any load sharing

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Originating Point Code

opci (optional)

ITU international originating point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national originating point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

opcode (optional)

The TCAP *opcode* field in the incoming MSU.

Range:

*0 - 255, *, none*

* —any valid value in the TCAP *opcode* field in the incoming MSU

none —there is no value in the TCAP *opcode* field in the incoming MSU

opcsn (optional)

The OPC GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

optsn (optional)

Optional gtt set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code *(prefix-ni-nc-ncm).*

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (optional)

Point code.

pci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix- un-sna-mna*).

Range:

p, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

pkgtype (optional)

The ANSI and ITU TCAP package type.

Range:

ituuni

ITU unidirectional

qwp

Query with Permission

qwop

Query without Permission

resp

Response

cwp

Conversation with Permission

cwop

Conversation without Permission

any

Wildcard value

bgn

Begin

end

End

cnt

Continue

ituabort

ITU abort

ansiabort

ANSI abort

ansiuni

ANSI unidirectional

ANSI TCAP Package Types

ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort, any

ITU TCAP Package Types

bgn, ituabort, ituuni, any, end, cnt

ppmeasreqd (optional)

This parameter specifies whether Per Path measurements are required.

Range:

yes

per path measurements are required

no

per path measurements are not required

Default:

No change to the current value

ri (optional)

Routing indicator.

Range:

gt

Allow a called party address with a routing indicator value of "global title."

ssn

Allow a called party address with a routing indicator value of "DPC/SSN."

ssn (optional)

New translated subsystem number.

Range:

002 - 255

Default:

none

testmode (optional)

This parameter is used to invoke a field-safe Test Tool in order to debug the FLOBR/TOBR rules.

Caution: If the testmode=on parameter is specified, then the rule is used only by test messages. The rule is ignored by 'live' traffic. If the testmode=off parameter is specified, then both test and live messages use the rule. Changing from testmode=off to testmode=on is equivalent to deleting the rule for live traffic.

Range:

on

Process the translation rules defined in the test message

off

Perform standard GTT behavior

Default:

off

Example

The lines in some examples are wrapped for readability:

```
ent-gta:gttsn=lidb:gta=9195554321:xlat=dpc:ri=gt:pc=001-255-253
ent-gta:gttsn=t800:gta=919460:xlat=dpc:ri=gt:pc=001-255-252
ent-gta:gttsn=t800:gta=919461:egta=919468:
xlat=dpcssn:ri=ssn:pc=001-255-252:ssn=254
ent-gta:gttsn=setint000:gta=391951212000000:
egta=391951212399999:xlat=dpcssn :ri=ssn:pci=1-253-1:ssn=255
ent-gta:gttsn=imsi:gta=591975593000000:
egta=591975593299999:xlat=dpcngt:ri=gt :pci=004-167-25
ent-gta:gttsn=test:gta=100000:egta=199999:
pca=1-1-1:ssn=123:xlat=dpcngt:gtmodid=set1
ent-gta:gttsn=test2:gta=123:egta=321:
pcn=222:ssn=10:xlat=dpcngt:ri=gt:gtmodid=set2
ent-gta:xlat=dpcssn:ri=ssn:pcn24=8-8-8:gttsn=any:gta=919833:ssn=20
ent-gta:xlat=dpcssn:ri=ssn:ssn=10:gta=12345678901:
egta=23456789012:gtmodid=set3:pcn=s-124: gttsn=setnat003
ent-gta:xlat=dpcssn:ri=ssn:ssn=10:gta=12345688901:
egta=23456889012:pcn=s-128-aa: gttsn=setnat003
ent-gta:gta=987666799012345678901:egta=987667321099765432101
```

```
xlat=dpcngt:ri=gt:pcn=s-124-aa:ccgt=no: gttsn=setnat003:gtmodid=set6
ent-gta:xlat=dpcssn:ri=ssn:ssn=10:gta=13345688901:
egta=24456889012:pci=s-1-230-2:gttsn=itui1
ent-gta:gttsn=tbla:xlat=dpc:ri=gt:pc=1-1-1:gta=1234567700:mrnset=dflt
ent-gta:gttsn=tbla:xlat=dpc:ri=gt:pc=1-1-1:gta=1234567890:
egta=2234567890:mrnset=23
ent-gta:gttsn=tbla:xlat=dpcngt:ri=gt:pc=1-1-2:gta=2345678901:
egta=3456789012:mrnset=54
ent-gta:gttsn=tbla:xlat=dpcngt:ri=gt:pc=1-1-3:gta=3456789012:
egta=4567890123:mrnset=none
ent-gta:gttsn=tblx:xlat=dpcssn:ri=ssn:pc=1-1-1:gta=1234567890:
egta=2234567890:ssn=10: mapset=23
ent-gta:gttsn=tblx:xlat=dpc:ri=ssn:pc=2-2-2:gta=2345678911:
egta=3456789022:mapset=dflt
```

This example provisions Advanced CdPA GTA translations.

```
ent-gta:gttsn=setcdgta:gta=123456789012345678901:egta=2234567890123456789012:
xlat=dpcssn:ri=ssn:pca=001-001-001:ssn=100:optsn=setcggta:opcsn=setopc
```

This example provisions GTA translations when FLOBR is turned on.

```
ent-gta:gttsn=setcdgta:gta=1234567890:egta=2234567890:
xlat=dpcssn:ri=ssn:pca=001-001-001:ssn=100:fallback=yes:testmode=on
ent-gta:gttsn=setudts1:gta=423456789012345678901:
xlat=dpc:ri=gt:pc=2-2-2:egta=5234567890123456789012:actsn=actudts1
ent-gta:gttsn=setcggta:gta=3234567890123456789012:egta=4234567890123456789012:
xlat=dpcssn:ri=ssn:pca=001-001-001:ssn=20:optsn=setcgssn
ent-gta:gttsn=cggtadsc:gta=62345678901234567890l:
egta=623456789012345678901: actsn=actdisc1
ent-gta:gttsn=setcgpc:cgpca=001-001-001:xlat=dpcssn:
ri=ssn: pca=001-001-001:ssn=20:optsn=setcgssn
ent-gta:gttsn=cgpcudt2:xlat=dpc:ri=gt:pc=2-2-2:
cgpca=001-001-009:actsn=actudts2
ent-gta:gttsn=setopc:opca=002-001-001:xlat=dpcssn:
ri=ssn: pca=001-001-001:ssn=20:optsn=setcgssn
ent-gta:gttsn=opcdis3:opca=002-001-001:actsn=actdisc1
ent-gta:gttsn=setcgssn:cgssn=100:ecgssn=200:
```

```
xlat=dpcssn:ri=ssn: pca=001-001-001:ssn=20
ent-gta:gttsn=cgssnud3:xlat=dpc:ri=gt:pc=001-002-003:
cgssn=100:ecgssn=200:actsn=actudts1: ppmeasreqd=yes
ent-gta:gttsn=setans004:gta=981817:xlat=dpc:pc=1-1-1:ri=gt:cggtmod=yes
ent-gta:gttsn=tblx:xlat=dpcssn:ri=ssn:pc=1-1-1:
gta=1234567890:egta=2234567890:ssn=10: mapset=23:loopset=raleigh1
```

The following example provisions the flexible GTA translations when the FLOBR and OBSR features are turned on.

```
ent-gta:gttsn=setcggta:gta=1234567890:egta=2234567890:
xlat=dpcssn:ri=ssn:pca=001-001-001:ssn=100:fallback=yes:opcsn=setopcsn
ent-gta:gttsn=setopc:opca=2-2-2:xlat=dpcssn:ri=ssn:
pca=001-001-002:ssn=100:optsn=setcgpc:fallback=no
ent-gta:gttsn=setcdgta:gta=567565756552:
xlat=dpc:ri=gt:pc=1-1-2:optsn=setcgpc:fallback=no:opcsn=setopc
```

This example provisions GTA translation when the FLOBR feature is turned on.

```
ent-gta:gttsn=setcdssn:cdssn=5:xlat=dpc:ri=gt:pc=1-1-1:opcsn=setopc
```

These examples provision the GTA translations when the TOBR and OBSR features are turned on.

```
ent-gta:gttsn=setopcode:pkgtype=qwop:opcode=none:family=*:
xlat=dpc:ri=gt:pc=2-2-2:opcsn=setopc: optsn=setcdgta
ent-gta:gttsn=setopcode:pkgtype=bgn:opcode=none:acn=1-2-3-4-5-6-7:
xlat=dpc:ri=gt:pc=2-2-2:opcsn=setopc: optsn=setcdgta
```

This example provisions a DPC translation when the FLOBR feature is turned on.

```
ent-gta:gttsn=setdpc:xlat=dpc:ri=gt:pc=1-1-1:dpc=1-1-2:optsn=setdpc1
ent-gta:gttsn=setcdgta:xlat=none:actsn=asetdisc:ppmeasreqd=yes
ent-gta:gttsn=setopcode:pkgtype=bgn:opcode=none:
acn=1-2-3-4-5-6-8:xlat=none:mapset=1: mrnset=1
```

Example for 16 bit PC and CGPCACTION param.

```
ent-gta:gttsn=gtt1:xlat=dpc:ri=ssn:pcn16=1-14-0:cgpcn16=45-1-0:
mapset=dflt:cgpcaction=ignore
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

The ANSI/ITU SCCP Conversion feature must be enabled before a translated PC that is of a different domain than the GTT set specified by the gttsn parameter can be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before a translated PC and a translation type in different network types can be specified.

The gttsn parameter must be specified and must match an existing gttsn.

The pc/pca/pci/pcn/pcn24/pcn16 parameter cannot be out of range.

If the egta parameter is specified, then the values of the gta and egta parameters must be the same length.

The length of the specified gta parameter must match the number of digits provisioned for the specified GTT set (gttsn) when VGTT is OFF. If the VGTT (variable length GTT) feature is turned on, then up to 10 GTA lengths can exist per GTT set. If the Support for 16 GTT Lengths in VGTT feature is turned on, then up to 16 GTA lengths can exist per GTT set.

The specified gta/egta range must exist for the specified GTT set in the STP active database. While an exact match is not required, you cannot specify an overlap with another range. If the range overlaps, an error is generated that displays a list of overlapped global title addresses. An example follows that shows what happens when the user attempts to enter a global title address range (such as 8005550000 to 8005559999) that overlaps an existing range. The overlapping links must match. If they do not, the error message displays the list of overlapped global title addresses:

```
The following GTA ranges overlap the input GTA range START GTA END GTA
8005550000 8005551999 8005552000 8005553999 8005554000 8005555999 ENT-GTA: MASP
 A - Command Aborted
```

If the translated point code is of type ANSI, the ngti parameter of the referred GTMOD cannot be 4. For ANSI PCs, the ngti value must be 2.

If the new or existing pc/pca/pci/pcn/pcn24/pcn16 parameter is the STP point code or capability point code, then the ccgt=no parameter must be specified.

If the xlat=dpcngt parameter is specified, then the ri=gt parameter must be specified.

If the ssn parameter is specified, then the xlat=dpcssn parameter must be specified.

If the xlat=dpcssn parameter is specified, then the ssn parameter must be specified.

If the value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter is the STP's true point code, the xlat=dpcssn and ri=ssn parameters must be specified.

If the value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter is the STP's true point code and the ssn parameter is specified, the ssn parameter must exist in the SS-APPL table.

Unless the PC is the STP true PC, the value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter must exist as a destination in the Route table or reside in a cluster that exists as a destination in the Route table (for global routing).

If a final GTT (the ri=ssn parameter is specified with the xlat=dpc parameter and without the force=yes parameter), then the PC (pc/pca/pci/pcn/pcn24/pcn16) must exist in the Remote Point Code/MAP table. The force=yes parameter can be specified to execute the command when the PC is not in the table; the following warning message is displayed in the scroll area of the terminal:

```
CAUTION: DPC DOES NOT EXIST IN MATED APPLICATION TABLE.
```

If the ccgt=yes parameter is specified, then the ri=ssn parameter must be specified.

If the ri=gt parameter is specified, then the ccgt=no parameter must be specified.

If the pc/pca/pci/pcn/pcn24/pcn16 parameter is any of the STP's PCs or CPCs, then the ccgt=no parameter must be specified.

If the XGTT feature is enabled, the GTT table can contain up to either 400,000 or 1,000,000 entries, depending on the controlled feature Part Number that is enabled. If XGTT is not enabled, the GTT table can contain up to 269,999 user entries. An error message is displayed if a command entry would result in more than the allowed maximum number of entries in the table.

If the egta parameter is specified, then the value of the egta parameter must be greater than or equal to the value of the gta parameter.

The GTT Set Name must not be *none*.

The pc/pca/pci/pcn/pcn24/pcn16 parameter must be a full PC.

If the VGTT feature is turned on, then up to 10 GTA lengths can exist per GTT set. If the Support for 16 GTT Lengths in VGTT feature is turned on, then up to 16 GTA lengths can exist per GTT set.

If the ri=ssn parameter is specified, then the mrnset parameter must not be specified.

If the Flexible GTT Load Sharing feature is enabled, then the specified PC must already exist in the specified MRN set.

The specified MRN set must already exist in the MRN table.

The mrnset parameter can only be specified when the Flexible GTT Load-Sharing feature is enabled.

If the ri=gt parameter is specified, then the mrnset parameter must be specified.

The mapset parameter can only be specified if the Flexible GTT Load Sharing feature is enabled, and the ri=ssn parameter is specified. If the ri=ssn parameter is specified, the mapset parameter must be specified. If the ri=gt parameter is specified, the mapset parameter cannot be specified.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified PC and SSN must exist in the specified MAP set.

The specified MAP set must exist in the database.

If the xlat=dpc parameter is specified, and the force parameter is not specified as *yes*, then the specified PC and MAP set must exist in the MAP table.

The gta, cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, cgssn, cdssn, opcode/acn/pkgtype, opcode/family/pkgtype, or dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be specified.

The cdselid, cgselid, and optsn parameters cannot be specified together in the command. If the GTT set has a set type of *cdgta*, *cdssn*, or *opcode*, then the opcsn parameter can be specified with one of the above parameters.

If the cgssn parameter is specified, then the optsn and cgselid parameters cannot be specified.

The cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16 and dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameters must have a valid value within the range for each subfield.

The value specified for the ecgssn or ecdssn parameter must be greater than the value specified for the cgssn or cdssn parameter.

The OBSR feature must be enabled before the opcsn, optsn, cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, or (e)cgssn parameters can be specified.

If the GTT set specified by the gttsn parameter (GTTSN set) has a set type of *cdgta* (see the `ent-gttset` command), then the optsn parameter cannot specify a GTT set (OPTSN set) with a set type of *cgssn*.

If the GTTSN set has a set type of *cdgta*, then the OPTSN set must have a set type of *cggta* or *cgpc*.

The FLOBR feature must be turned on before a GTTSN set with a set type of *cgpc*, *cggta*, or *opc* can be specified with an OPTSN with a set type other than *cgssn*.

If the FLOBR feature is turned on, and the GTTSN set has a set type of *cdgta* or *cdssn*, then the OPTSN set cannot have a set type of *opc*.

If the TOBR feature is turned on, and the GTTSN set has a set type of *opcode*, then the OPTSN set cannot have a set type of opc.

The GTA must be specified if the GTTSN set type has a value of *cdgta* or *cggta*. The GTA cannot be specified for other set types.

If the GTTSN set type has a value of *cgpc*, the cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameter must be specified. This parameter cannot be specified for other set types.

The opc/opca/opci/opcn/opcn24/opcn16 parameter must be specified if the GTTSN set type has a value of *opc*. These parameters cannot be specified for other set types.

If the GTTSN set type has a value of *cgssn*, the cgssn parameter must be specified. The cgssn parameter cannot be specified for GTTSN of other types.

The range specified by the cdssn/ecdssn and cgssn/ecgssn parameters cannot overlap a currently existing range for the specified GTT set.

The GTT set name specified by the opcsn parameter must have a set type of *opc* (see the `ent-gttset` command).

The OPC subsystem number set domain must be the same as the GTTSN set domain. If the GTT subsystem number set domain is ANSI, then the OPC subsystem number set domain must be ANSI. If the GTT subsystem number set domain is ITU, then the OPC subsystem number set domain must be ITU.

The translation entry specified by the cgpc, opcode, opc, or dpc parameters cannot already exist.

The cgpc, cgssn, gta, opc, cdssn, and opcode parameters cannot be specified together in the command.

If the cgssn and cdssn parameters are both specified in the same command (in any order), then only the value for the last of the two parameters specified is used during processing.

The Hex Digit Support for GTT feature must be turned on before hexadecimal digits can be specified for the gta or egta parameter.

The value of the loopset parameter must already exist in the database.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value specified for the pc parameter cannot be associated with a proxy point code.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The FLOBR feature must be turned on before the fallback, cdselid, cdssn, ecdssn, or dpc parameter can be specified.

The FLOBR feature must be turned on before the gttsn parameter can specify a GTT set with a set type other than *cdgta* (see the `ent-gttset` command) in the same command with the cgselid parameter.

The OBSR feature must be enabled or the FLOBR feature must be turned on before the cgselid parameter can be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before the GTT set specified by the optsn parameter can have a different domain than the GTT set specified by the gttsn parameter.

A TOBR quantity feature must be turned on before the opcode, pkgtype, acn, or family parameter can be specified.

The opcode, pkgtype, and family parameters must be specified together for ANSI TCAP translations. The opcode, pkgtype, and acn parameters must be specified together for ITU TCAP translations.

If the GTT set specified by the gttsn parameter has a set type of *opcode* (see the `ent-gttset` command), then the opcode/acn/pkgtype or opcode/family/pkgtype parameter must be specified. These parameters cannot be specified for GTT sets of any other set types.

If the GTT set specified by the gttsn parameter has a set type of *cdssn* (see the `ent-gttset` command), then the cdssn parameter must be specified. This parameter cannot be specified for GTT sets with other set types.

The maximum number of OPCODE translation entries cannot exceed the value that is set by the associated TOBR quantity feature.

The GTT set specified by the gttsn parameter must have a set type of *cdgta, opcode*, or *cdssn* (see the `ent-gttset` command) before the opcsn parameter can be specified.

The same value cannot be specified for the gttsn and optsn parameters.

The ANSI/ITU SCCP conversion feature must be enabled and the FLOBR feature must be turned on before the cgcnvsn parameter can be specified.

The GTT set specified by the gttsn parameter must have a set type of cdgta or cggta (see the `ent-gttset` command) before the cgcnvsn parameter can be specified.

If the cgssn parameter is specified, then the ecdssn parameter cannot be specified. If the cdssn parameter is specified, then the ecgssn parameter cannot be specified.

The GTT set specified by the gttsn parameter cannot be the same as the GTT set specified by the cgcnvsn parameter.

If the family parameter is specified, then a value of *ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort*, or *any* must be specified for the pkgtype parameter.

If the acn parameter is specified, then a value of *bgn, ituabort, ituuni, any, end*, or *cnt* must be specified for the pkgtype parameter.

The GTT set specified by the optsn, opcsn, and cgcnvsn parameters must match an existing GTT set.

If the pkgtype=ituabort parameter is specified, then a value of *none* must be specified for the acn and opcode parameters.

If the pkgtype=ansiabort parameter is specified, then a value of *none* must be specified for the family and opcode parameters.

If the family and opcode parameters are specified in the command, then either both parameters must have a value of *none* or neither parameter can have a value of *none*.

The OBSR feature must be enabled or the FLOBR feature must be turned on before the optsn parameter can be specified.

The specified GTT Action Set must already exist in the database.

The actsn=none parameter cannot be specified.

The dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be specified if the GTTSN set type is dpc (see the `ent-gttset` command). If the GTT set has a set type other than *dpc*, then the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot be specified.

If the xlat=none parameter is specified, then the ri, pc/pca/pci/pcn/pcn24/pcn16, force, ssn and ccgt parameters cannot be specified.

The value specified for the gtmodid parameter must already exist in the GTMOD table.

The gtmodid=none parameter cannot be specified.

If the FGTTLS feature is enabled, and the xlat=none parameter is specified, then the mrnset or mapset parameter must be specified.

The specified GTT set must have a set type of *opcode* (see the `ent-gttset` command) before the opcode/acn/pkgtype or opcode/family/pkgtype parameters can be specified. The specified GTT set must have a set type of *cdssn, cgssn, cdgta/cgta, opc*, or *cgpc* before the cdssn, cgssn, gta, opc, or cgpc parameter, respectively, can be specified.

The acn and family parameters cannot be specified together in the command.

If the opc or dpc parameter is specified, then the (e)gta, (e)cgssn, (e)cdssn, and opcode parameters cannot be specified.

The J7 Support feature must be enabled before the cgpcn16/opcn16/dpcn16 parameters can be specified.

The J7 Support feature must not be enabled before the cgpcn24/opcn24/dpcn24/cgpca/opca/dpca parameters can be specified.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

When the Flexible GTT Load Sharing feature and the Intermediate GTT Load Sharing feature are on, multiple relationships can be defined among set of destination point codes in the MRN table, which already exists in the EAGLE. The relationship used in a particular translation is based on the GTA digits used for translation. The MRN set and the post-translation PC create a key that is used to perform lookups in the MRN table. The lookup results in a set of alternate PCs, one of which is selected, based on PC relative cost, to route the MSU in the most cost effective way.

When the Flexible GTT Load Sharing feature is enabled, multiple relationships can be defined among a set of PC/SSNs in the existing MAP table. The relationship used in a particular translation is based on the GTA digits used for translation.

When the Origin-based SCCP Routing feature is turned on, the CdPA GTA, CgPA GTA, CgPA PC, CgPA SSN, and OPC entries can be provisioned. When provisioning, the following rules apply:

- The Advanced CdPA GTA entry can associate with CgPA GTA set, CgPA PC set, or SELID and OPC set.
- The CgPA GTA, CgPA PC, or OPC entry can associate with the CgPA SSN set.
- The CgPA SSN entry cannot associate with any other GTT set.
- The Advanced CdPA GTA entry may contain SELID, which is (together with the CgPA information) derived from incoming MSU to search the Selector table again for the CgPA GTA or CgPA PC Set.

When the Origin-based SCCP Routing feature is enabled, the GTA and EGTA can be used for the CgPA translation as well as the CdPA GTA translation.

The Flexible GTT Load Sharing feature introduces the mrnset parameter. The MRN set and the post-translation PC create a key that is used to perform look ups in the MRN table. This lookup results in a set of alternate PCs, from which one is selected, based on PCs relative cost, to route the MSU in the most cost effective way.

A loopset consists of a set of point codes that form a routing loop in the network. If the SCCP Loop Detection feature is enabled, then the loopset can be associated with or disassociated from specified translation entries. Loopsets that are associated with translation entries are checked during intermediate and final GTT traffic routing. If a loop exists, then the system can be notified with or without discarding the associated traffic.

The maximum length of the resulting GTA string must not exceed 21 digits when translation is complete.

If the FLOBR GTT hierarchy is provisioned on a linkset, then translations do not have to be searched in a predetermined manner. If a translation points to another GTTSET/SELID, then database searches continue. The number of searches is limited by the following conditions:

- The same GTT set name cannot be referred more than once.
- Up to 7 database searches can be performed.

If the FLOBR feature is turned on, then any translation can point to any GTTSETs other than that specified by the GTTSN. The CdPA GTA and CdPA SSN translations can also point to an OPCSN. For CdPA GTA and CdPA SSN translations, if an OPTSN GTTSET/SELID is provisioned apart from an OPCSN, then the OPTSN GTTSET/SELID takes precedence over the OPCSN.

Translations, supporting ANSI or ITU opcodes, associated with the TOBR feature:

- ANSI Opcode—ANSI opcode specifier, ANSI TCAP Package type, and Family
- ITU Opcode—ITU opcode, ITU TCAP Package Type, and ACN

Translations associated with the FLOBR feature:

- CdPA SSN Translations—Can be configured with routing and flexible routing data. The provisioning rules for CdPA SSN translations are the same as CgPA SSN translations in OBSR.
- DPC Translations—The provisioning rules for DPC translations are the same as OPC translations except that the OPCSN parameter cannot be configured for DPC translations.

Output

```
ent-gta:gttsn=opcdis3:xlat=dpc:ri=gt:pc=1-1-1:opca=002-001-001:actsn=actdisc1:ppmeasreqd=yes

    tekelecstp 10-02-24 12:09:18 EST  EAGLE 42.0.0
    ENT-GTA: MASP A - COMPLTD
;
```

Related Commands

chg-gta, *dlt-gta*, *rtrv-gta*

ent-gtcnv Enter Global Title Conversion

Use this command to provision the Default Global Title Conversion table. The table is used during conversion for MTP-routed cross network SCCP UDT(S), XUDT(S) and SCCP Management messages. It is also used during conversion for GT routed messages when a matching entry exists in the Global Title address table but the NGTI value is not provisioned.

Parameters

dir (mandatory)

Direction of conversion.

Range:

atoi

ANSI to ITU conversion

itoa

ITU to ANSI conversion

both

conversion in both directions

gtixlat (mandatory)

Global Title Indicator conversion. This parameter is expressed in the form of the ANSI GTI and the ITU GTI.

Range:

22

Converts an incoming ANSI GTI 2 to an outgoing ITU GTI 2 or an incoming ITU GTI 2 to an outgoing ANSI GTI 2

24

Converts an incoming ANSI GTI 2 to an outgoing ITU GTI 4 or an incoming ITU GTI 4 to an outgoing ANSI GTI 2

tta (mandatory)

ANSI translation type.

Range:

*0 - 255, **

tti (mandatory)

ITU translation type.

Range:

*0 - 255, **

nai (optional)

Nature of address indicator. This parameter is mandatory when gtixlat=24 is specified, and not specified when gtixlat=22 is specified.

Range:

*0 - 63, **

Default:

Not set

np (optional)

Numbering plan. This parameter is mandatory when gtixlat=24 is specified, and not specified when gtixlat=22 is specified.

Range:

*0 - 15, **

Default:

Not set

npdd (optional)

New prefix digits to be deleted. The number of new prefix digits to be deleted. These digits will be replaced with the new prefix digits string (npds).

Range:

0 - 21

Default:

0

npds (optional)

New prefix digits string. The new prefix digits string that will replace the received prefix digits string.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*

Default:

No digits

nsdd (optional)

New suffix digits to be deleted. This parameter identifies the new suffix digits to be deleted that will replace the received suffix digits to be deleted.

Range:

0 - 21

Default:

0

nsds (optional)

New suffix digits string. The new suffix digits string that will replace the received suffix digits string.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*

Default:

No digits

Example

The following example assigns an entry used for ANSI to ITU conversion where the conversion is from GTI 2 to GTI 2.

```
ent-gtcnv:dir=atoi:gtixlat=22:tta=10:tti=5
```

The following example assigns an entry used for ANSI to ITU conversion where the conversion is from GTI 2 to GTI 4. The nsdd parameter specifies that the last 3 digits are to be removed from the end of the address digits, and the nsds parameter specifies that the digits 123 are to be appended to the end of the remaining address digits.

```
ent-gtcnv:dir=atoi:gtixlat=24:tta=11:tti=7:nai=8:np=6:nsdd=3:nsds=123
```

The following example assigns an entry used for ITU to ANSI conversion where the conversion is from GTI 2 to GTI 2. The npdd parameter specifies that the first 3 digits are to be deleted from the beginning of the address digits, and the npds parameter specifies that the digits 407 should be appended to the beginning of the remaining address digits.

```
ent-gtcnv:dir=itoa:gtixlat=22:tta=11:tti=7:npdd=3:npds=407
```

The following example assigns an entry used for ITU to ANSI conversion where the conversion is from GTI 2 to GTI 4. The nsds parameter specifies that the digits 45667 are to be appended to the end of the address digits.

```
ent-gtcnv:dir=itoa:gtixlat=24:tta=11:tti=7:nai=8:np=6:nsds=45667
```

The following example assigns an entry used for ANSI/ITU conversion in both directions where the conversion is from GTI 2 to GTI 2.

```
ent-gtcnv:dir=both:gtixlat=22:tta=11:tti=7
```

The following example assigns an entry used for ANSI/ITU conversion where an incoming ANSI GTI 2 is converted to an outgoing ITU GTI 4 or an incoming ITU GTI 4 to an outgoing ANSI GTI 2.

```
ent-gtcnv:dir=both:gtixlat=24:tta=12:tti=9:nai=6:np=4
```

The following example assigns a default entry for ANSI to ITU conversion where the conversion is from GTI 2 to GTI 2.

```
ent-gtcnv:dir=atoi:gtixlat=24:tta=*:tti=4:nai=6:np=5
```

The following example assigns a default entry for ITU to ANSI where the conversion is from GTI 2 to GTI 4. The npds parameter specifies that the digits 919 are to be appended to the beginning of the address digits.

```
ent-gtcnv:dir=itoa:gtixlat=24:tta=17:tti=*:nai=*:np=*:npds=919
```

The following example specifies hexadecimal digits for the *npds* parameter.

```
ent-gtcnv:dir=atoi:gtixlat=22:tta=*:tti=4:npdd=3:npds=abcdef0123456789
```

The following example assigns a default entry for ITU to ANSI where the conversion is from GTI 2 to GTI 4. The npds parameter specifies that the digits 123 are to be appended to the beginning of the address digits and the nsds parameter specifies that the digits 407 are to be appended to the end of the address digits

```
ent-gtcnv:dir=itoa:gtixlat=24:tta=17:tti=*:nai=*:np=*:npds=123:nsds=407
```

Dependencies

The ANSI/ITU SCCP Conversion feature must be enabled before this command can be entered.

If the gtxlat=22 parameter is specified, then the nai and np parameters cannot be specified.

If the gtxlat=24 parameter is specified, then the nai and np parameters must be specified.

If the dir=both parameter is specified, then a wildcard value (*) cannot be specified for any of the other parameters.

If the dir=atoi parameter is specified, then a wildcard value (*) can be specified only for the tta parameter.

If the dir=itoa parameter is specified, then a wildcard value (*) must be specified for the tti, np, and nai parameters.

The specified dir, tta, tti, np, and nai parameter combination cannot already exist in the database.

The nsdd/nsds and npdd/npds parameters cannot be specified together in the command.

The Default Global Title Conversion table can contain a maximum of 1000 entries.

The Hex Digit Support for GTT feature must be enabled and on before hexadecimal digits can be specified for the npds and nsds parameters.

Notes

The use of asterisks (wildcards) is allowed only once for each direction of ANSI to ITU and ITU to ANSI. This provides a configurable default.

In the conversion direction of ANSI to ITU, an asterisk can be specified only for the ANSI *tta* parameter.

In the conversion direction of ITU to ANSI, the asterisk value must be specified for the itu, tti, np, and nai parameters.

Asterisks are not allowed when conversion is in both directions (dir=both).

The suffix digit manipulation parameters nsdd and nsds cannot be specified in the same command with the prefix digit manipulation parameters npdd and npds parameters. The npdd and nsdd parameters specify how many digits to delete, if any, from the beginning or end respectively of the

Global Title address digits. The npds and nsds parameters specify what digits, if any, to append to the beginning or end respectively of the Global Title address digits.

The gtixlat parameter is expressed in the form of the ANSI GTI and the ITU GTI. The gtixlat parameter is used to indicate the conversion of the Global Title Indicator between the ANSI and ITU standards. For example: A gtixlat value of 24 converts an incoming ANSI GTI 2 to an outgoing ITU GTI 4 or an incoming ITU GTI 4 to an outgoing ANSI GTI 2.

Output

```
ent-gtcnv:dir=atoi:gtixlat=22:tta=10:tti=5
```

```
    rlghncxa03w 04-01-07 11:43:07 EST  EAGLE 31.3.0
    ENT-GTCNV:  MASP A - COMPLTD
;
```

Related Commands

chg-gtcnv, *dlt-gtcnv*, *rtrv-gtcnv*

ent-gtmod

Enter GT Modification Data

Use this command to enter GT Modification (GTMOD) data in the GTMOD table. The GTMOD entry consists of a GTMOD ID and GTMOD specific data. After the GTMOD ID is provisioned, it can be used in GTT and GTT Action commands.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

gtmodid (mandatory)

GTMOD identifier.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

cgpassn (optional)

Calling party subsystem number. This parameter specifies the calling party subsystem address that receives the message.

Range:

002 - 255

ngti (optional)

New global title indicator. This parameter specifies whether a new GTI translation format is type 2 or type 4.

Range:

2

4

nnai (optional)

New nature of address indicator. The value that replaces the received NNAI.

Range:

0 - 127

nnp (optional)

New numbering plan. The value that is used to replace the received numbering plan.

Range:

0 - 15

npdd (optional)

Number of prefix digits to be deleted. The number of digits to be deleted from the prefix of the received GT address.

Range:

1 - 21

npds (optional)

New prefix digits string. The digits to be prefixed to the received GT address.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*

nsdd (optional)

Number of suffix digits to be deleted. The number of digits to be deleted from the suffix of the received GT address.

Range: *1 - 21*

nsds (optional)

New suffix digits string. The digits to be suffixed to the received GT address.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*

ntt (optional)

New Translation type. This parameter specifies the value that replaces the received Translation Type.

Range:

0 - 255

off (optional)

Disables or turns off the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

gt0fill

on (optional)

Enables or turns on the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

gt0fill

precd (optional)

Precedence. This parameter specifies whether the prefix or suffix takes precedence while modifying the received GT address.

Range:

pfx

if the npdd and npds parameters are specified

sfx

if the nsdd and nsds parameters are specified

Example

```
ent-gtmod:gtmodid=set1:npdd=5:npds=123:off=gt0fill:ntt=10
ent-gtmod:gtmodid=gtmodset4:npdd=5:npds=123:nsdd=2:
nsds=1234:ngti=4:on=gt0fill:nnai=12:nnp=5:precd=sfx
ent-gtmod:gtmodid=setntt:ntt=12
```

Dependencies

If the ngti=4 parameter is specified, then the nnp and nnai parameters must be specified.

If the ngti=2 parameter is specified, the nnp and nnai parameters cannot be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before the ngti parameter can be specified.

The Hex Digit Support for GTT feature must be turned on before hexadecimal digits can be specified for the npds or nsds parameters.

The GTMOD table cannot contain more than 100000 entries.

At least one optional parameter must be specified.

The AMGTT, AMGTT CdPA Only, or AMGTT CgPA Upgrade feature must be turned on before any parameter except the ntt parameter can be specified.

The value specified for the gtmodid parameter cannot already exist in the GTMOD table.

The combined digit length of the values specified for the npds and nsds parameters cannot be greater then 21.

If the npdd/npds and nsdd/nsds parameters are specified, then the precd parameter must be specified.

The gtmodid=none parameter cannot be specified.

If the precd parameter is specified, then the npdd, npds, nsdd, or nsds parameter must be specified.

If the on=gt0fill parameter is specified, then the ngti parameter must be specified.

The same value cannot be specified for the on and off parameters.

Notes

on/off options

- *gt0fill* —GT zero fill. Specifies whether the last 0 of the GTA is a treated as a valid digit (OFF) or as filler (ON) during GT Modification for the gti(x)=2 to gti(x)=4 scenario.

Output

```
ent-gtmod:gtmodid=set5:ngti=4:nnp=4:nnai=2:on=gt0fill
```

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 42.0.0

    GTMOD table is (2 of 50000) 1% full

    ENT-GTMOD: MASP A - COMPLTD
;
```

Related Commands

chg-gtmod, *dlt-gtmod*, *rtrv-gtmod*

ent-gtt

Enter Global Title Translation

Use this command to add the routing object, DPC, and subsystem number for messages requiring global title translation. The translation is performed on the basis of the global title address (GTA) and translation type (TT) for each SS7 SCCP message directed to the STP's self-identity DPC or CPC with a routing indicator of 0, indicating a GTT is required.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

gta (mandatory)

Global title address. The beginning of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

pc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24 (mandatory)

Point code.

pci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc,m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

ri (mandatory)

Route indicator. This parameter specifies whether a subsequent global title translation is required.

Range:

gt

Subsequent translation is required.

ssn

Subsequent translation is not required.

xlat (mandatory)

Translate indicator. The type of global title translation to be performed.

Range:

dpc

dpcssn

dpcngt

cggtmod (optional)

Calling party GT modification indicator. This parameter specifies whether calling party global title modification is required.

Range:

yes

no

Default:

no

egta (optional)

Global title end address. The end of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

the gta value

force (optional)

When a final GTT is specified, the DPC and subsystem number must be configured in the mated application table (xlat=dpc and ri=ssn). The force=yes parameter overrides this restriction.

Range:

yes

no

Default:

no

gtmodid (optional)

Global title modification identifier.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

Default:

none

loopset (optional)

SCCP loopset name. This parameter associates a translation set with a loopset.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters.

none —There is no association between the translation set and any loopset

Default:

none

mapset (optional)

MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

mrnset (optional)

MRN set ID.

Range:

1 - 3000, dflt, none

dflt —Default MRN Set ID

none —Removes the specified MRN Set ID from the MRN table

ssn (optional)

Subsystem number. The subsystem address that will receive the message.

This parameter is required and can only be specified if the xlat=dpcssn parameter is specified.

Range:

002 - 255

ttn (optional)

Translation type name. The name is of local significance only, and is related to the translation type.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

Default:

No translation name is given

type/typea/typei/typen/typen24/typeis/typens (optional)

Translation type. This parameter identifies the translation type and network type. This parameter is the decimal representation of the 1-byte field used in SS7.

The type and typea parameters specify an ANSI network.

The typei parameter specifies an ITU-international network.

The typen parameter specifies an ITU-national network.

The typen24 parameter specifies a 24-bit ITU-national network.

The typeis parameter specifies an ITU-international spare network.

The typens parameter specifies an ITU-national spare network.

A translation type numeric value may be entered as an ANSI type (type/typea) and as an ITU type (typei/typen/typen24/typeis/typens). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE protocol processing as either ANSI or ITU; therefore, ITU applies to ITU-I, ITU-I spare, ITU-N, ITU-N spare, and ITU-N24.

Range:

000 - 255

Default:

No translation type is specified

Example

The lines in the following examples are wrapped for readability:

```
ent-gtt:type=3:gta=9195551212:egta=9195552000:
xlat=dpcssn:ri=ssn:pc=001-255-255:ssn=255
ent-gtt:ttn=lidb1:gta=9105551212:egta=9105554000:
xlat=dpcngt:ri=gt:pc=001-255-254
ent-gtt:ttn=c800:gta=9195554321:xlat=dpc:ri=gt:pc=001-255-253
ent-gtt:type=4:gta=919460:xlat=dpc:ri=ssn:pc=001-255-252
```

```
ent-gtt:type=4:gta=919461:xlat=dpcssn:ri=gt:ssn=254
ent-gtt:typea=210:ttn=test:gta=100000:egta=199999:
pca=1-1-1:ssn=123:xlat=dpcngt:ri=gt: gtmodid=abc1
ent-gtt:type=100:ttn=test2:gta=123:egta=321:
pcn=222:ssn=10:xlat=dpcngt:ri=gt: gtmodid=id1
ent-gtt:pcn24=8-8-8:gta=919833:xlat=dpcssn:ri=ssn:ssn=20:typen24=4
ent-gtt:typea=100:ttn=test2:gta=123:egta=321:
pci=2-2-2:ssn=10:xlat=dpcngt:ri=gt
ent-gtt:xlat=dpcssn:ssn=10:ri=gt:pci=s-1-21-1:gta=123456:typei=3
ent-gtt:xlat=dpcssn:ssn=10:ri=gt:pcn=s-124:gta=123456:typen=3
ent-gtt:xlat=dpcssn:ssn=10:ri=gt:pcn=s-125-aa:gta=123456:typen=3
ent-gtt:type=1:xlat=dpc:ri=gt:pc=1-1-1:
gta=1234567890:egta=2234567890:mrnset=23
ent-gtt:type=1:xlat=dpcngt:ri=gt:pc=1-1-2:
gta=2345678901: egta=3456789012:mrnset=54
ent-gtt:type=1:xlat=dpcngt:ri=gt:pc=1-1-3:
gta=3456789013: egta=3456789019:mrnset=dflt
ent-gtt:type=1:xlat=dpcngt:ri=gt:pc=1-1-3:
gta=3456789012: egta=4567890123:mrnset=none
ent-gtt:type=1:xlat=dpcssn:ri=ssn:pc=1-1-1:
gta=1234567890:egta=2234567890:ssn=10: mapset=23
ent-gtt:type=1:xlat=dpcssn:ri=ssn:pc=2-2-2:
gta=2345678911:egta=3456789022:ssn=25: mapset=dflt
```

This example specifies hexadecimal digits for the *gta* and *egta* parameters.

```
ent-gtt:ttn=set1:xlat=dpcssn:ri=ssn:ssn=10:pc=1-1-1:gta=abcd:egta=abce
```

This example specifies that calling party GT modification is required.

```
ent-gtt:xlat=dpc:pc=1-1-1:ri=gt:gta=981234:type=4:cggtmod=yes
ent-gtt:xlat=dpc:ri=gt:pci=s-1-1-4:gta=123456:typeis=5
ent-gtt:xlat=dpc:ri=gt:pcn=s-111:gta=123456:typens=5
```

Dependencies

The end address must be greater than or equal to the start address.

The pcn parameter format must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

Point code entries must be full point codes. Partial point codes are not allowed.

The start global title address length must be equal to the number of digits specified by the given translation type. If the VGTT (variable length GTT) feature is turned on, then up to 10 GTA lengths per translation type can be provisioned. When this command is entered to create entries, the software keeps track of the lengths and allows only 10 different lengths. The global title address specified for the translation type must then have the same number of digits as an existing GTA.

If the end global title address is specified, its length must equal the length of the start global title address.

The maximum length of the resulting GTA string must not exceed 21 digits when translation is complete.

If the translation type is specified, then it must already exist and cannot be an alias.

The ANSI/ITU SCCP Conversion feature must be enabled before a translated PC and a translation type in different network types can be specified.

When the translated point code is of type ANSI, the ngti parameter of the referred GTMOD cannot have a value of 4. For ANSI PCs, the ngti parameter must have a value of 2.

The range, as specified by the start and end global title addresses, cannot exist in the global title translation data for the specified translation type. Each range may be contained completely within a previously defined range, in which case splitting is performed. However, if the ranges overlap, splitting cannot occur, the command is rejected, and a list of overlapped global title addresses is displayed. An example follows that shows what happens when the user attempts to enter a global title address range (such as 8005550000 to 8005559999) that overlaps an existing range. The overlapping links must match. If they do not, error message E2401 is generated displaying the list of overlapped global title addresses:

```
The following GTA ranges overlap the input GTA range
START GTA END GTA 8005550000 8005551999 8005552000 8005553999 8005554000
8005555999 ENT-GTT: MASP A - Command Aborted
```

If a final GTT is specified with the ri=ssn parameter and the xlat=dpc parameter, and if the value of the force parameter is not *yes*, the point code must be configured in the Remote Point Code/MAP Table.

The xlat=dpcssn parameter must be specified before the ssn parameter can be specified.

If the xlat=dpcssn parameter is specified, then the ssn parameter must be specified.

Table 28: Valid ent-gtt Routing Parameter Combinations shows the valid combinations for the xlat, ri, and ssn parameters. All other combinations are rejected.

Table 28: Valid ent-gtt Routing Parameter Combinations

XLAT Value	RI Value	Routing Action	SSN Value
DPC	GT	Translate DPC only and route on GT	Cannot specify
DPC	SSN	Translate DPC only and route on SSN	Cannot specify

XLAT Value	RI Value	Routing Action	SSN Value
DPCSSN	GT	Translate DPC and SSN and route on GT	Must specify
DPCSSN	SSN	Translate DPC and SSN and route on SSN	Must specify
DPCNGT	GT	Translate DPC only and route on GT	Cannot specify

If the XGTT feature is enabled, then the GTT table can have up to either 400,000 or 1,000,000 entries, depending on the controlled feature Part Number that is enabled. If XGTT is not enabled, then the GTT table can contain up to 269,999 user entries.

To enter this command, the Remote Point Code table cannot be full.

To enter this command, the subsystem table for primary remote point codes cannot be full.

If the ri=ssn parameter is specified, the mrnset parameter cannot be specified.

If the Flexible GTT Load Sharing feature is enabled, the specified PC must already exist in the specified MRN set.

The specified MRN set must already exist in the MRN table.

The Flexible GTT Load Sharing feature must be enabled before the mrnset parameter can be specified.

If the ri=gt parameter is specified, then the mrnset parameter must be specified.

If the ri=gt parameter is specified, the mapset parameter cannot be specified.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The mapset parameter can only be specified if the Flexible GTT Load Sharing feature is enabled, and the ri=ssn parameter is specified. If the ri=ssn parameter is specified, the mapset parameter must be specified. If the ri=gt parameter is specified, the mapset parameter cannot be specified.

The specified PC and SSN must exist in the specified MAP set.

At least one entry must be provisioned in the specified MAP set in the MAP table.

If the xlat=dpc parameter is specified, and the force parameter is not specified as *yes*, the specified PC and MAP set must exist in the MAP table.

The Hex Digit Support for GTT feature must be turned on before hexadecimal digits can be specified for the gta or egta parameters.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value of the loopset parameter must already exist in the database.

The tt or the ttn parameter must be specified.

The value specified for the pc/pca/pci/pcn/pcn24 parameter must be a valid point code.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value of the loopset parameter must exist in the Loopset table.

If the value of the pc/pca/pci/pcn/pcn24 parameter is the True Point Code, then the xlat=dpcssn parameter and the ri=ssn parameter must be specified.

If the ssn parameter is specified, and if the value of the pc/pca/pci/pcn/pcn24 parameter is the True Point Code, then the value of the ssn parameter must exist in the SS-APPL table.

The value of the pc/pca/pci/pcn/pcn24 parameter must exist as a destination in the ordered route entity set or must reside in a cluster (ANSI only) that exists as a destination in the ordered route entity set (for global title routing).

If the VGTT feature is turned on, then up to 10 GTA lengths can exist per translation type. If the Support for 16 GTT Lengths in VGTT feature is turned on, then up to 16 GTA lengths can exist per translation type.

The value of the tt parameter must not be defined as an alias.

If both the translation type (tt) and translation type name (ttn) are specified, the translation type name (ttn) must match that of the specified translation type (tt).

If the tt parameter is not specified, then the value of the ttn parameter must match the value of a tt parameter in the STP database.

If the xlat=dpcngt parameter is specified, then the ri=gt parameter must be specified.

The GTT table cannot be full.

The value specified for the pc parameter cannot be associated with a proxy point code.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The GTT set associated with the translation type specified by the ttn parameter must have a set type of cdgta (see the `ent-gttset` command).

The value specified for the gtmodid parameter must already exist in the GTMOD table.

The gtmodid=none parameter cannot be specified.

The network domain of the translation type specified by the ttn parameter cannot be CROSS (see the `ent-gttset` command).

The ttn=none parameter cannot be specified.

The length of the specified gta parameter must match the number of digits provisioned for the specified GTT set (gttsn) when the VGTT feature is turned off. If the VGTT feature is turned on, then up to 10 GTA lengths can exist per GTT set. If the Support for 16 GTT Lengths in VGTT feature is turned on, then up to 16 GTA lengths can exist per GTT set.

Notes

The routing indicator provides routing instructions to the receiving signaling point. If the routing indicator specifies global title, global title translation then needs to be performed at another signaling point.

Up to 200,000 entries are allowed for an individual translation type if all SCCP cards are E5-TSM cards or DSM cards.

The ANSI point code 0 and the ITU-I point code 0-000-0 are not valid point codes.

The EAGLE does not require a MAP table entry to be configured prior to provisioning a GTT entry. The EAGLE assumes that the GTT entry is for a solitary point code/subsystem and automatically creates a MAP entry for the point code/subsystem.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

When the Flexible GTT Load Sharing (FGTTLS) feature and the Intermediate GTT Load Sharing feature are on, multiple relationships can be defined among a set of destination point codes in the MRN table that exists in the EAGLE. The relationship used in a particular translation is based on the GTA digits used for translation. The MRN set and the post-translation PC creates a key that is used to perform lookups in the MRN table. The lookup results in a set of alternate PCs, one of which is selected, based on the PCs relative cost, to route the MSU in the most cost-effective way.

The FGTTLS feature introduces the mrnset parameter. The MRNSET and post-translation PC create a key that is used to perform lookup tasks in the MRN table. This lookup results in a set of alternate PCs, from which one is selected, based on the PCs relative cost, to route the MSU in the most cost-effective way.

When the FGTTLS feature is turned on, multiple relationships can be defined among set of PC/SSNs in the existing MAP table. The relationship used in a particular translation is based on the GTA digits used for translation.

When the FGTTLS feature is ON, the mapset parameter is used. The MAP set and PC/SSN creates a key that is used to perform lookup tasks in the MAP table. The lookup into the MAP table results in a set of mate PC/SSNs, from which one is selected to route the MSU in the most cost-effective way.

If the AMGTT feature is turned off, then the Default GT Conversion Table is used for conversion.

A loopset consists of a set of point codes that form a routing loop in the network. If the SCCP Loop Detection feature is enabled, then the loopset can be associated with or disassociated from specified translation entries. Loopsets that are associated with translation entries are checked during intermediate and final GTT traffic routing. If a loop exists, then the system can be notified with or without discarding the associated traffic.

If the OBSR or FLOBR feature is turned on, then this command can provision only translation entries with a set type of CdGTA.

If the EGTT feature is turned on, then the following occurs:

- For ANSI, if the GTT selector of a true entry is deleted using the `dlt-gttsel` command, then a GTT entry cannot be created for that translation type.
- For ITU, if a true GTT selector entry (GTI=2 or GTI=4) is deleted using the `dlt-gttsel` command, or if the GTT set name of an entry is changed using the `chg-gttsel` command, then a GTT entry cannot be created for that translation type.

Output

```
ent-gtt:xlat=dpc:pc=12-1-11:ri=gt:gta=981234:type=4:cggtmod=yes:gtmodid=set1
```

```
    tekelecstp 10-03-09 12:06:11 EST  EAGLE 42.0.0
    ENT-GTT: MASP A - COMPLTD
;
```

Related Commands

chg-gtt, *dlt-gtt*, *rtrv-gtt*

ent-gttact

Enter a GTT Action entry

Use this command to enter a Global Title Translations (GTT) Action entry. A GTT Action entry consists of an Action ID, an action, and action-specific data. The action specified in the entry determines the actions performed the MSU during translation.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

act (mandatory)

Action. The action applied to the message.

Range:

disc

discard message with no return error

dup

route a copy of the message to a specified duplicate node

fwd

route the original message to a specified forward node instead of the destination indicated by the GTT/ DB data

srvc

apply service (GPORT/GFLEX/SMSMR) on the message

tcaperr

discard message that has a specified TCAP error

udts

discard message and send UDTS/XUDTS

actid (mandatory)

This parameter specifies the Action ID associated with the GTT action entry.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

atcaperr (optional)

ANSI TCAP Error Cause. The reason for discarding the message containing the ANSI TCAP portion that is associated with the TCAPERR GTT Action.

Range:

0 - 255

cdgtmodid (optional)

Called party global title modification identifier. The GTMOD ID to be associated with the called party of a GTT Action entry.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

Default:

None

cggtmodid (optional)

Calling party global title modification identifier. The GTMOD ID to be associated with the calling party of a GTT Action entry.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

Default:

None

cgpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code *(prefix-ni-nc-ncm).*

Synonym:

cgpca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

cgpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cgpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cgpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

cgpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

cgpcogmsg (optional)

The data that is used as the Calling Party Point Code in the outgoing message.

Range:

dflt

Default. The standard Global Title Translation process supplies the CgPA PC.

cgpcicmsg

CgPA PC data from the incoming MSU

opcicmsg

OPC data from the incoming MSU

provcgpc

provisioned CGPC/CGPCA/CGPCI/CGPCN/CGPCN24/CGPCN16 data in the GTT Action

remove

CGPC will be removed from outgoing MSU

Default:

dflt

defactid (optional)

Default Action ID. The default action that is performed when the *fwd* GTT Action fails to route the MSU.

Range: ***ayyyyyyyy***

1 leading alphabetic character followed by 8 alphanumeric characters

The defactid parameter can take one of the following values:

- GTT Action ID with a GTT Action of *disc, udts*, or *tcaperr* (see the act parameter). This value must already be defined in the GTT Action table.
- *fallback* —The MSU is routed using routing data in the translated MSU.

Default:

fallback

itcaperr (optional)

ITU TCAP Error Cause. The reason for discarding the message containing the ITU TCAP portion that is associated with the TCAPERR GTT Action.

Range:

0 - 255

loopset (optional)

SCCP loopset name. The loopset associated with a GTT action.

Range:

ayyyyyyy

1 leading alphabetic character and up to 7 following alphanumeric characters.

none —There is no association between the screening action and any loopset.

Default:

none

mapset (optional)

MAP Set ID. This parameter specifies the Mated Application Set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

mrnset (optional)

MRN Set ID. The Mated Relay Node Set ID.

Range:

1 - 3000, dflt, none

dflt —Default MRN Set ID

none —The GTT Action does not participate in any load sharing.

off (optional)

Disables or turns off the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

uimreqd

useicmsg

on (optional)

Enables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

uimreqd

useicmsg

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code *(prefix-ni-nc-ncm).*

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp).* The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix- un-sna-mna*).

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

ri (optional)

Routing indicator. The routing indicator in the SCCP called party address of the duplicated copy of MSU.

Range:

gt

ssn

route by subsystem number

Default:

ssn

snai (optional)

The service nature of address indicator.

Range:

Sub --- Subscriber Number

Natl --- National significant number

intl --- International number

rnidn --- Routing number prefix and international dialed/directory number

rnndn --- Routing number prefix and national dialed/directory number

rnsdn --- Routing number prefix and subscriber dialed/directory number

ccrndn --- Country code, routing number, and national directory number

snp (optional)

The service numbering plan.

Range:

e164 --- E.164 numbering plan

e212 --- E.212 numbering plan

e214 --- E.214 numbering plan

srvcerr (optional)

The action to be taken when the Service triggered by GTT Action Service fails. The MSU can be processed by either applying the results of the pre-Service GTT, or continue with the specific Service error.

Range:

SRVC --- Continue with specific service error

GTT --- Apply the result of pre-GTT service

Default:

SRVC

srvcname (optional)

Service to be applied on the MSU when*act* is set to*srvc*.

Range:

GFLEX, GPORT, SMSMR

ssn (optional)

Subsystem number. The subsystem number in the SCCP called party address of the MSU.

Range:

2 - 255

Default:

none

udtserr (optional)

UDTS Error Cause. The reason associated with the UDTS GTT Action for discarding the message.

Range:

0 - 255

Example

Provisioning GTT Action entry with action type duplicate:

```
ent-gttact:actid=dup1:act=dup:pc=1-1-1:ssn=10:ri=ssn:mapset=20
ent-gttact:actid=actudts:act=udts:udtserr=10
ent-gttact:actid=actdisc:act=disc
ent-gttact:actid=actfwd:act=fwd:pc=2-2-2:ssn=2:ri=ssn:mapset=10
ent-gttact:act=dup:actid=actdup2:pca=1-1-1:ssn=15:ri=gt:
cdgtmodid=set1:cggtmodid=set5:loopset=loop1:cgpca=2-2-2:cgpcogmsg=provcgpc
ent-gttact:actid=actfwd2:act=fwd:pc=2-2-2:ssn=2:
ri=ssn:defactid=actdisc:on=useicmsg
ent-gttact:act=dup:actid=actdup3:pc=1-1-1:ri=gt:mrnset=dflt:cgpc=2-2-2
ent-gttact:act=fwd:actid=actfwd3:pc=1-1-1:ri=gt:mrnset=dflt:cgpcogmsg=dflt
ent-gttact:act=fwd:actid=actfwd4:pc=1-1-1:
ri=gt:mrnset=dflt:defactid=fallback
ent-gttact:actid=acttcap:act=tcaperr:atcaperr=5
ent-gttact:act=fwd:actid=actfwd5:pcn16=1-14-0:ri=gt:mrnset=dflt:cgpcogmsg=remove
ent-gttact:actid=actsrvc:act=srvc:srvcname=gflex:snp=e164:snai=sub:srvcerr=gtt
```

Dependencies

A value of *disc, udts*, or *tcaperr* must be specified for the act parameter before a value of *uimreqd* can be specified for the on or off parameter.

The GTT Action table cannot contain more than 2000 entries.

If a value of *dup* or *fwd* is specified for the act parameter then the pc/pca/pci/pcn/pcn24/pcn16 parameter must be specified.

If the ri=ssn parameter is specified, then the ssn parameter must be specified.

If the value of the cgpcogmsg=provcgpc parameter is specified, then the cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameter must be specified.

The GTT Action - DISCARD feature must be enabled before a value of *disc*, *udts*, or *tcaperr* can be specified for the act parameter.

The GTT Action - DUPLICATE feature must be enabled before the act=dup parameter can be specified.

The specified PC and SSN must already exist in the specified MAP set.

If the ri=ssn parameter is specified, then the mrnset parameter cannot be specified.

The Flexible GTT Load-Sharing feature must be enabled before the mrnset parameter can be specified.

If the ri=gt parameter is specified, then the mapset parameter cannot be specified.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must already exist in the database.

The specified MRN set must already exist in the MRN table.

If the Flexible GTT Load Sharing feature is enabled, the specified PC must already exist in the specified MRN set.

The point code specified for the pc/pca/pci/pcn/pcn24/pcn16 and cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameters must be within the range specified by the parameter definition.

The point code specified for the pc/pci/pcn/pcn24/pcn16 parameter must be a full point code.

A value of *dup* or *fwd* must be specified for the act parameter before the pc/pca/pci/pcn/pcn24/pcn16, cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, ssn, ri, mrnset, mapset, loopset, cgpcogmsg, cdgtmodid, or cggtmodid parameter can be specified and before a value of *useicmsg* can be specified for the on or off parameter.

The act=tcaperr parameter must be specified before the atcaperr and itcaperr parameters can be specified.

The act=udts parameter must be specified before the udtserr parameter can be specified.

The act=fwd parameter must be specified before the defactid parameter can be specified.

The Service Numbering Plan (*snp*), Service Nature of Address Indicator (*snai*), Service name (*srvcname*) and Service Error Cause (*srvcerr*) parameters can only be specified if action type is *srvc*.

A value of *none* or *fallback* cannot be specified for the actid parameter.

The GTT Action entry specified by the actid parameter cannot already exist in the database.

If the value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter is the STP true point code, then the value specified for the ssn parameter must already exist in the SS-APPL table.

The value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter must already exist as a destination in the Route table.

The value specified for the pc parameter cannot be associated with a proxy point code.

If the pc/pca/pci/pcn/pcn24/pcn16, ri=ssn and ssn parameters are specified, then the PC/SSN must be populated in the SCCP Application entity set (Remote Point Code/MAP Table).

If the value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter is the STP's true point code, then the ri=ssn parameter must be specified.

The value specified for the loopset parameter must already exist in the database.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The GTT Action - FORWARD feature must be enabled before the act=fwd parameter can be specified.

The value specified for the pc/pca/pci/pcn/pcn24/pcn16 parameter must be a point code that is already associated with a valid route.

The AMGTT feature must be enabled before the cggtmodid parameter can be specified.

The value specified for the cdgtmodid and cggtmodid parameters must already exist in the GTMOD table.

A value of *none* cannot be specified for the cdgtmodid or cggtmodid parameter.

A value of *disc*, *utds*, or *tcaperr* must be specified for the defactid parameter.

The GTT Action ID specified by the defactid parameter must already exist.

The values specified for the pc/pca/pci/pcn/pcn24/pcn16 and cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameters must have the same domain.

The loopset=none parameter cannot be specified.

The defactid=none parameter cannot be specified.

The same value cannot be specified for the on and off parameters.

The *snp*, *snai* and *srvcname* parameters must be specified when **act** is set to *srvc*.

The GFLEX Feature must be activated if the GFLEX service is entered with the SRVCNAME parameter.

The GPORT Feature must be activated if the GPORT service is entered with the SRVCNAME parameter.

When the service specified is GFLEX, SNAI must be specified as subscriber, national or international.

The Portability Check for Mobile Originated SMS feature/PPSMS feature must be turned ON, or the MO SMS ASD/MO SMS B-Party Routing/MO SMS GRN/MO SMS IS41-to-GSM Migration/MO-based GSM SMS NP/MO-based IS41 SMS NP feature must be ENABLED before the SMSMR Service is entered with SRVCNAME parameter.

When service is specified as GPORT or SMSMR, the SNP must be specified as E164.

The EPAP Data Split feature is mutually exclusive with SRVC action.

The GTT Action - FORWARD/DISCARD/DUPLICATE feature must be enabled before the act=srvc parameter can be specified.

The GTT destination must exist in the DSTN table.

Notes

on/off options

- *uimreqd* —UIM required. Specifies whether a UIM should be generated.
- *useicmsg* —Use Incoming Message. Specifies whether to apply GTT Action data to the message as the message was received (OFF) or after any EPAP or GTT translation/modification data has been applied (ON).

Output

```
ent-gttact:actid=disc1:act=disc
```

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0
    ent-gttact:actid=disc1:act=disc
    Command entered at terminal #4.

    GTT Action table is (1 of 2000) 1% full

    ENT-GTTACT: MASP A - COMPLTD
;
```

Related Commands

chg-gttact, *dlt-gttact*, *rtrv-gttact*

ent-gttapath

Enter a GTT Action Path Entry

Use this command to enter a GTT Action path entry. A GTT Action path consists of pairs of "setname + value" for Opcode/CgGTA/CdGTA. Each "setname + value" pair must already be defined in the GTT translation table.

Parameters

gttpn (mandatory)

GTT Path name.

Range:

ayyyy

1 leading alphabetic character and up to 4 following alphanumeric characters

acn (optional)

Application context name. The ITU TCAP*acn* field in the incoming MSU.

Range:

0 - 255, none

none—there is no ITU TCAP *acn* field in the incoming MSU

cdgta (optional)

Called Party Global Title Address.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*

cdgttsn (optional)

GTT set name (CDPA type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

cggta (optional)

Calling Party Global Title Address.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*

cggttsn (optional)

GTT set name (CGPA type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

family (optional)

The ANSI TCAP*family* field in the incoming MSU.

Range:

0 - 255, none

none —there is no value in the ANSI TCAP *family* field in the incoming MSU

opcode (optional)

This parameter specifies the TCAP*opcode* field in the incoming MSU.

Range:

0 - 255, none

none—there is no value in the TCAP *opcode* field in the incoming MSU

opgttsn (optional)

GTT set name (Opcode type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

pkgtype (optional)

The ANSI and ITU TCAP package type.

Range:

ituuni
ITU unidirectional

qwp
Query with Permission

qwop
Query without Permission

resp
Response

cwp
Conversation with Permission

cwop
Conversation without Permission

any
Wildcard value

bgn
Begin

end
End

cnt
Continue

ituabort
ITU abort

ansiabort
ANSI abort

ansiuni
ANSI unidirectional

ANSI TCAP Package Types—*ansiuni*, *qwp*, *qwop*, *resp*, *cwp*, *cwop*, *ansiabort*, *any*

ITU TCAP Package Types—*bgn*, *ituabort*, *ituuni*, *any*, *end*, *cnt*

Example

```
ent-gttapath:gttpn=path1:opgttsn=opsn1:acn=111-111-111-111-111-111-111:
opcode=123:pkgtype=ituuni:cdgttsn=cdsn1:cdgta=7654
```

```
ent-gttapath:gttpn=path2:cggttsn=cgsn2:cggta=45673:opgttsn=opsn2:opcode=124:
family=2:pkgtype=ansiuni
```

```
ent-gttapath:gttpn=path3:opgttsn=opsn2:pkgtype=ansiuni:opcode=124:family=2:
cggttsn=cgsn3:cggta=987654:cdgttsn=cdsn1:cdgta=123456
```

Dependencies

If the family parameter is specified, then a value of *ansiuni*, *qwp*, *qwop*, *resp*, *cwp*, *cwop*, *ansiabort*, or *any* must be specified for the pkgtype parameter.

If the acn parameter is specified, then a value of *bgn*, *ituabort*, *ituuni*, *any*, *end*, or *cnt* must be specified for the pkgtype parameter.

If the pkgtype=ituabort parameter is specified, then a value of *none* must be specified for the acn and opcode parameters.

If the pkgtype=ansiabort is specified then a value of *none* must be specified for the family and opcode parameters.

The opcode, pkgtype, and family parameters must be specified together for ANSI TCAP translations. The opcode, pkgtype, and acn parameters must be specified together for ITU TCAP translations.

If the family and opcode parameters are specified in the command, then both parameters must have a value of *none* or neither parameter can have a value of *none*.

A value of *none* cannot be specified for the opgttsn, cggttsn, or cdgttsn parameter.

The GTT Action Path table cannot contain more than 10000 entries.

The path specified cannot already exist in the GTT Action Path table.

The acn and family parameters cannot be specified together in the command.

The GTT Action - DISCARD, GTT Action - FORWARD, or GTT Action - DUPLICATE feature must be enabled before this command can be entered.

A translation entry corresponding to the specified (opgttsn + opcode + pkgtype + acn/family)/(cgttsn + cggta)/(cdgttsn + cdgta) parameters must already exist.

At least one GTT set-value combination must be specified.

The value specified for the opgttsn, cggttsn, or cdgttsn parameter must match an existing GTT setname.

The GTT set name specified by the opgttsn, cggttsn, and cdgttsn parameters must have set types of opcode, cggta, and cdgta, respectively.

The GTA value specified by the cggta or cdgta parameter must be the start GTA in the translation entry.

The GTT path name specified by the gttpn parameter must not exist in the GTT Action Path table.

The value specified for the gttpn parameter cannot be a reserved word.

Output

```
ent-gttapath:gttpn=path2:cggttsn=cgsn2:cggta=45673:opgttsn=opsn2:opcode=124:family=2:
pkgtype=ansiuni
```

```
   tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0
  ent-gttapath:gttpn=path2:cggttsn=cgsn2:cggta=45673:opgttsn=opsn2:opcode=124:
family=2:pkgtype=ansiuni
   Command entered at terminal #4.

   GTT Action Path table is (1 of 10000) 1% full
```

```
    ENT-GTTAPATH: MASP A - COMPLTD
;
```

Related Commands

chg-gttapath, *dlt-gttapath*, *rtrv-gttapath*

ent-gttaset

Enter a GTT Action Set entry

Use this command to enter a Global Title Translations (GTT) Action Set. A GTT Action Set consists of an Action Set name and a group of actions. The specified actions determine what actions that applied to the MSU during translation.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

actsn (mandatory)

GTT Action Set Name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid1 (optional)

GTT Action ID 1. The first action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid2 (optional)

GTT Action ID 2. The second action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid3 (optional)

GTT Action ID 3. The third action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid4 (optional)

GTT Action ID 4. The fourth action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid5 (optional)

GTT Action ID 5. The fifth action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid6 (optional)

GTT Action ID 6. The sixth action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

off (optional)

Disables or turns off the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

testmode

on (optional)

Enables or turns on the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

testmode

Example

```
ent-gttaset:actsn=asetdisc1:actid1=disc1
ent-gttaset:actsn=aset2:actid1=dup1:actid2=disc1
ent-gttaset:actsn=aset3:actid1=actfwd:actid2=actdup1:on=testmode
ent-gttaset:actsn=aset4:actid1=dup1:actid2=actsrvc
```

Dependencies

The GTT Action table must be accessible.

The Action ID specified by the actid1/actid2/actid3/actid4/actid5/actid6 parameter(s) must already exist in the GTT Action table.

At least one Action ID in the Action Set must be associated with an action other than *none* or *fallback*.

The value specified by the actid parameter cannot already exist in a GTT Action Set.

The GTT Action Set table cannot contain more than 20000 entries

The actsn=none parameter cannot be specified.

Only one Action ID in an Action Set can be associated with an action of *disc, udts*, *srvc*, or *tcaperr*.

If an Action ID associated with an action of *fwd* is specified, then no other Action ID in the Action Set can be associated with an action of *disc, udts, tcaperr*, *srvc*, or *fwd*.

If an Action ID associated with an action of *srvc* is specified, then no other Action ID in the same Action Set can be associated with an action of *fwd, disc, udts, tcaperr*, or *srvc*.

If the Action Set contains 5 Action IDs associated with an action of *dup*, then the remaining action ID cannot be associated with an action of *dup*.

Action IDs associated with an action of *disc, udts, tcaperr*, or *fwd* must be the last actions in an Action Set.

One of the optional parameters must be specified.

The actid1/actid2/actid3/actid4/actid4/actid5/actid6 parameters must each specify a unique GTT Action ID in the command.

The EGTT feature must be on before this command can be entered.

The same values cannot be specified for the on and off parameters.

Notes

on/off options

- *testmode* —invokes a field-safe Test Tool used to debug the GTT Action Set rules

Output

```
ent-gttaset:actsn=asetdisc1:actid1=disc1:actid2=dup1:actid3=dup2:actid4=dup3:
actid5=dup4:actid6=dup5:on=testmode
```

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0

ent-gttaset:actsn=asetdisc1:actid1=disc1:actid2=dup1:actid3=dup2:actid4=dup3:actid5=dup4:

actid6=dup5:on=testmode
    Command entered at terminal #4.

    GTT Action Set table is (1 of 20000) 1% full
```

```
    ENT-GTTASET: MASP A - COMPLTD
;
```

Related Commands

chg-gttaset, *dlt-gttaset*, *rtrv-gttaset*

ent-gttsel

Enter GTT Selectors

Use this command to assign applicable global title selectors to a GTT set for enhanced global title translations. If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

Note: The nature of address indicator parameters (naiv or nai) and the numbering plan parameters (npv or np) can be specified using a mnemonic or an explicit value. Either the mnemonic or the explicit value can be specified: however, both values cannot be specified at the same time for the same parameter. *NAIV/NAI Mapping* shows the mapping between the naiv and nai values. *NPV/NP Mapping* shows the mapping between the npv and np values.

gti/gtia/gtii/gtin/gtin24/gtiis/gtins/gtin16 (mandatory)

Global title indicator.

For all EGTT selector commands, the domain is defined as GTI and GTIA (ANSI), GTII (ITU international), GTIN (ITU national), GTIN24 (24-bit ITU national), GTIIS (ITU international spare), GTINS (ITU national spare) and GTIN16 (16-bit ITU National).

For the selector commands, gti and gtia are equivalent. GTT selectors can be provisioned for the same translation type (TT) with different ITU domains. GTT selectors are provisioned independently for each domain. For example, if an entry with gtii=2 and tt=4 already exists, an entry with gtin=2 and tt=4 can be specified.

Range:

0, 2, 4

Supported values for ANSI: gti=0, 2 and gtia=0, 2

Supported values for ITU: gtii/gtin/gtin24/gtiis/gtins/gtin16=0, 2, 4

cdgtasn (optional)

CdPA GTA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

cdgttsn (optional)

CdPA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

cggtasn (optional)

CgPA GTA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

cggttsn (optional)

CgPA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

cgpcsn (optional)

CgPA PC GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

cgssn (optional)

CgPA subsystem number.

Range: ***0 - 255***

eaglegen (optional)

This parameter specifies whether the selector is used by EAGLE generated messages.

Range:

yes

Indicates selector used only by Eagle generated MSU.

gttsn (optional)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

lsn (optional)

Linkset name.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

nai (optional)

Nature of address indicator.

Range:

sub

rsvd

natl

intl

naiv (optional)

Nature of address indicator value.

Range:

0 - 127

np (optional)

Numbering plan.

Range:

e164

generic

x121

f69

e210

e212

e214

private

npv (optional)

Numbering plan value.

Range:

0 - 15

selid (optional)

Selector ID.

Range:

0 - 65534

tt (optional)

Translation type.

Range:

0 - 255

Example

```
ent-gttsel:gti=0:cdgttsn=acdgta
ent-gttsel:gtia=2:tt=10:gttsn=t800
ent-gttsel:gtia=2:tt=253:gttsn=setans253
ent-gttsel:gtii=4:tt=0:np=e164:nai=intl:gttsn=setint000
ent-gttsel:gtii=2:tt=0:gttsn=setint000
ent-gttsel:gtin=4:tt=9:np=e214:nai=natl:gttsn=imsi
ent-gttsel:gtii=4:tt=0:np=e164:nai=sub:gttsn=setint000
ent-gttsel:gtia=2:tt=20:cdgtasn=setcdgta:
cggtasn=setcggta:cgssn=10:selid=0
ent-gttsel:gtia=2:tt=21:cggttsn=setcgpc:cdgttsn=setcdgta:
cgssn=20:selid=1:lsn=ls10
ent-gttsel:gtii=2:tt=40:cdgtasn=setcdgta:cgpcsn=setcgpc:cgssn=12
ent-gttsel:gtii=2:tt=41:cgpcsn=setcgpc:cgssn=255:selid=65534
ent-gttsel:gtin=4:tt=60:npv=5:naiv=5:cdgtasn=setcdgta
ent-gttsel:gtin=4:tt=60:npv=5:naiv=6:cgpcsn=setcgpc:cgssn=112
ent-gttsel:gtia=2:tt=9:cdgttsn=lidb:eaglegen=yes
ent-gttsel:gti=0:cdgttsn=acdgta:selid=1
ent-gttsel:gtin16=0:cgpcsn=abc
ent-gttsel:gtin16=2:cgpcsn=abc:tt=10
ent-gttsel:gtin16=4:cgpcsn=abc:tt=10:np=x121:nai=natl
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

The np and npv parameters cannot be specified in the same command.

The nai and naiv parameters cannot be specified in the same command.

The gti, gtia=4, gti(x)=1, and gti(x)=3 parameters cannot be specified.

If the gti/gtia/gtii/gtin/gtin24/gtiis/gtins/gtin16=2 parameter is specified, then the np/npv and nai/naiv parameters cannot be specified.

If the gtii/gtin/gtin24/gtiis/gtins/gtin16=4 parameter is specified, the np(v) and nai(v) parameters must be specified. These parameters can be specified in any combination: np/naiv, npv/nai, np/nai, or npv/naiv.

A value of *none* cannot be specified for the gttsn, cdgtasn, cggtasn, cgpcsn, cdgttsn, and cggttsn parameters.

At least one GTT set name parameter must be specified. These parameters include:

- cdgtasn, cggtasn, or cgpcsn if the OBSR feature is enabled
- cdgttsn or cggttsn if the FLOBR feature is turned on
- gttsn if the OBSR feature is not enabled and the FLOBR feature is not turned on

The OBSR feature must be enabled before the cggtasn, cgpcsn, cgssn, or cdgtasn parameters can be specified.

The SSNSELID Table cannot contain more than 100,000 entries.

The linkset specified by the lsn parameter must already exist.

The FLOBR feature must be turned on before the lsn, eaglegen, cdgttsn, and cggttsn parameters can be specified.

If the FLOBR feature is turned on, then the cdgtasn, cggtasn, and cgpcsn parameters cannot be specified.

The value specified for the cdgtasn or gttsn parameter must match the name of an existing GTT set.

The GTT set specified by the cdgtasn or gttsn parameter must have a set type of *cdgta* (see the `ent-gttset` command).

An entry cannot already exist that matches the eaglegen, gti, tt, and np(v), and nai(v) parameter combination for the specified CdPA and/or CgPA selector.

The GTT set specified by the gttsn, cdgtasn, or cdgttsn parameter must already exist in the GTT Set table.

The network domain of the specified GTT selector must match the domain of the GTT set that is specified by the gttsn, cdgtasn, or cdgttsn parameter, unless the domain of the GTT set has a value of *cross*.

The GTT set specified by the cgttsn, cggtasn or cgpcsn parameter must already exist in the GTT Set table.

The network domain of the GTT set that is specified by the cggttsn, cggtasn, or cgpcsn parameter must match the domain specified by the gti(x) parameter.

The set type of the GTT set specified by the cggtasn or cgpcsn parameter must match the set type of the corresponding entry in the GTT Set table.

The GTT Set specified by the cdgtasn or gttsn parameter must have a set type of *cdgta* (see the `ent-gttset` command).

The gttsn parameter cannot be specified if the OBSR feature is enabled or the FLOBR feature is turned on.

The GTTDBMM Table cannot contain more than 42,502 entries.

If the gti(x)=4 parameter is specified, then the GTT selector table cannot have more than 5 nai entries per tt/np combination.

The cggtasn, cgpcsn, and cggttsn parameters cannot be specified together in the command.

The gttsn, cdgtasn, and cdgttsn parameters cannot be specified together in the command.

If the gttsn, cdgttsn, or cdgtasn parameter is specified, then the cgssn parameter cannot be specified. If the cggtasn, cgpcsn or cggttsn parameter is specified, then the cgssn parameter must be specified.

If the cdgttsn or cggttsn parameter is specified, then the lsn parameter must be specified.

If the eaglegen=yes parameter is specified, then the lsn, selid, gttsn, cdgtasn, cgssn, cggttsn, cggtasn , and cgpcsn parameters cannot be specified.

If the gti(x)=0 parameter is specified, then the eaglegen, tt, np/npv, and nai/naiv parameters cannot be specified.

If a value of 2 or 4 is specified for the gti(x) parameter, then the tt parameter must be specified.

For existing TTs with gtii/gtin/gtin24/gtiis/gtins/gtin16=4, the domain of the new entry must match the existing domain.

Notes

For gtii/gtin=4, DFLT may appear in the `rtrv-gttsel` output, but *dflt* cannot be specified as value for the np or nai parameters when the `ent-gttsel` command is entered. If a new GTT selector is specified that matches an existing GTT selector's GTI and TT and the existing selector has *dflt* as the value for the np and/or nai parameters, a new entry is created with the new np and nai parameter values. The existing GTT selector entry with the *dflt* value is also retained. The np/nai parameter value *dflt* can be specified for the `chg/dlt/rtrv-gttsel` commands.

The Origin-based SCCP Routing feature allows two GTT sets to be assigned to a GTT selector: CDGTASN and CGGTASN or CDGTASN and CGPCSN. The CGGTASN and CGPCSN GTT sets are mutually exclusive and cannot be assigned to the same GTT selector.

There is no J7 FAK dependency on the GTIA/GTIN16/GTIN24 parameters. The command can be entered successfully whether the J7 FAK is enabled or not enabled.

GTT Selector entries configured using the GTIN24/GTIN16 parameters shall be treated as ITU-N24 entries if the J7 FAK is disabled and shall be treated as ITU-N16 entries if the J7 FAK is enabled.

Output

`ent-gttsel:gti=0:cdgttsn=acdgta`

```
    tekelecstp 10-04-05 15:41:49 EST  Eagle 42.0.0
    ent-gttsel:gti=0:cdgttsn=acdgta
    Command entered at terminal #4.
    ENT-GTTSEL: MASP A - COMPLTD
;
```

Related Commands

chg-gttsel, *dlt-gttsel*, *rtrv-gttsel*

ent-gttset

Enter GTT Set

Use this command to specify the attributes of a new GTT set (a set of global title translations). A GTT set consists of a GTT set name, the number of digits allocated for the GTA (global title address), the domain of the point codes used in the translation, and a pointer to a GTA tree. After the GTT set is provisioned, you can enter subsequent GTT Selector commands and GTA commands.

Parameters

gttsn (mandatory)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

netdom (mandatory)

Network domain. This command does not distinguish between ITU national or ITU international because the Enhanced Global Title Translation (EGTT) feature does not discriminate between the ITU-I and ITU-N translations.

This parameter refers to the incoming message network domain.

Range:

ansi

itu

cross

ndgt (optional)

Number of digits. This parameter specifies the number of digits required for GTAs associated with the GTT set.

Range:

1 - 21

Default:

6

settype (optional)

GTT set type.

Range:

cdgta

cggta

cgpc

cgssn

opc

cdssn

opcode

dpc

Example

```
ent-gttset:gttsn=lidb:ndgt=10:netdom=ansient-gttset:gttsn=t800:netdom=ansi
ent-gttset:gttsn=setint000:netdom=itu:ndgt=15
ent-gttset:gttsn=setcdgt:netdom=cross:ndgt=10:settype=cdgta
ent-gttset:gttsn=setcggt:netdom=ansi:ndgt=11:settype=cggta
ent-gttset:gttsn=setxyz:netdom=ansi:ndgt=11:settype=cggta
ent-gttset:gttsn=setopc:netdom=itu:settype=opc
ent-gttset:gttsn=setcgpc:netdom=ansi:settype=cgpc
ent-gttset:gttsn=setssn:netdom=ansi:settype=cgssn
ent-gttset:gttsn=setopcode:settype=opcode
ent-gttset:gttsn=setcdssn:netdom=ansi:settype=cdssn
ent-gttset:gttsn=setdpc:netdom=ansi:settype=dpc
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

The GTT Set table cannot contain more than 2000 entries.

The gttsn=none parameter cannot be specified.

If the VGTT (Variable Length GTT) feature is turned on, the ndgt parameter cannot be specified.

The gttsn parameter must be specified and must not match an existing gttsn.

If the settype parameter has a value of *cgssn, opc, cgpc, cdssn, opcode*, or *dpc*, then the ndgt parameter cannot be specified.

The netdom=cross parameter can be specified only if the settype=cdgta parameter is specified.

The Origin-based SCCP Routing feature must be turned on if the value of the settype parameter is *cggta, cgssn, opc*, or *cgpc*.

If the OBSR feature is enabled or the FLOBR feature is turned on, then the settype parameter must be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before the netdom=cross parameter can be specified.

The TOBR feature must be turned on before the settype=opcode parameter can be specified.

The OBSR feature must be enabled or the FLOBR feature must be turned on before the settype parameter can be specified and before more than 950 GTT set entries can be provisioned.

The FLOBR feature must be turned on before a value of *cdssn* or *dpc* can be specified for the settype parameter.

Notes

When the Origin-based SCCP Routing feature is turned on, VGTT is supported only for CdPA GTA and CgPA GTA. The *cross* network domain is supported only for CdPA GTA.

Output

`ent-gttset:gttsn=setcdssn:netdom=ansi:settype=cdssn`

```
    tekelecstp 10-03-12 18:28:54 EST  EAGLE 42.0.0
    ENT-GTTSET: MASP A - COMPLTD

    GTT-SET table is (3 of 2000) 1% full.
;
```

Related Commands

chg-gttset, *dlt-gttset*, *rtrv-gttset*

ent-gws-redirect

Enter Gateway Screening Redirect Command

Use this command to provision the gateway screening redirect function. The Redirect table must be provisioned before configuring gateway screening to redirect received MSUs. The values that are specified with this command are stored in the Redirect table, and they are used to set the variable fields of the MSUs being redirected. For example, if the ri=gt parameter is specified, the value *gt* is set for the routing indicator in the called party address (CDPA) of the MSU being redirected.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dpc (mandatory)

Specifies the value used to set the ANSI destination point code field in the routing label of the MSU that is being redirected. The ANSI point code has subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (mandatory)

Destination point code.

dpci (mandatory)

Specifies the value used to set the ITU international destination point code field in the routing label of the MSU that is being redirected. The point code has subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (mandatory)

Specifies the value used to set the ITU national destination point code field in the routing label of the MSU that is being redirected. The point code is in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) when the `chg-stpopts:npcfmti` flexible point code option is on. A group code (*gc*) must be specified when the ITUDUPPC feature is on (*nnnnn-gc*, m1-m2-m3-m4-gc).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

dpcn24 (mandatory)

Specifies the value used to set the 24-bit ITU national destination point code field in the routing label of the MSU that is being redirected. The point code has subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (mandatory)

Specifies the value used to set the 16-bit ITU national destination point code field in the routing label of the MSU that is being redirected. The point code has subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

gta (mandatory)

Specifies the value used to set the global title address (dialed digits) in the SCCP called party address of the MSU being redirected.

Range:

1 - 21 digits

ri (mandatory)

Specifies the value used to set the routing indicator in the SCCP called party address of the MSU being redirected. Use the *gt* value to route by global title digits or use the *ssn* value to route by subsystem number.

Range:

gt

ssn

ssn (mandatory)

Specifies the value used to set the subsystem number (SSN) in the SCCP called party address of the MSU being redirected. This number is the SSN of the SCP to which all MSUs meeting the redirect criteria are to be redirected.

Range:*000 - 255*

tt (mandatory)

Identifies the type of the global title translation (GTT). This value is the decimal representation of the 1-byte field used in SS7 and is used to set the type of the GTT in the SCCP called party address of the MSU being redirected.

Range: *000 - 255*

enabled (optional)

Specifies whether MSUs that have passed gateway screening are to be redirected (*enabled=on*) or routed as normal (*enabled=off*).

Range:

on

off

Default:

on

Example

```
ent-gws-redirect:dpc=1-40-1:ri=gt:ssn=10:tt=1:gta=180833:enabled=on
ent-gws-redirect:dpc=1-40-1:ri=ssn:ssn=10:tt=1:gta=1800833:enabled=off
ent-gws-redirect:dpcn16=1-14-0:ri=gt:ssn=10:tt=10:gta=1:enabled=on
```

Dependencies

The dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be defined in the Destination table or defined as the STP site point code.

If the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter is defined as a destination, it must have at least one route defined.

The redirect function data can be entered only once.

Notes

The SCCP screening functions (CGPA, TT, CDPA, and AFTPC) cannot select an MSU to be redirected.

Do not apply a Redirect Stop Action on the Adjacent Node point code for the BLKOPC and OPC screening functions.

Do not apply a Redirect Stop Action for an allowed DPC screen rule if the rule contains the self-identity point code of the EAGLE where the screening rule is applied. This is because the redirection of SLTAs and SLTMs (Signal Link Test Messages and Acknowledgements) will not return to the originating EAGLE and will cause the link to fail.

If gwsa=off and gwsm=off are specified for all linksets, gateway screening and the GWS redirect function for the DTA feature are disabled.

Output

```
ent-gws-redirect:dpc=1-40-1:ri=gt:ssn=10:tt=1:gta=180833:enabled=on

    rlghncxa03w 03-11-10 11:43:04 EST  EAGLE 31.6.0
    ENT-GWS-REDIRECT: MASP A - COMPLTD
;
```

Related Commands

chg-gws-redirect , *dlt-gws-redirect*, *rtrv-gws-redirect*

ent-home-smsc

Enter HOME SMSC Address

Use this command to enter HOME SMSC specific addresses, currently used to identify Short Message Service Centers in the database. This command updates the HOME SMSCADDR table.

Parameters

smsc (mandatory)

Identifies the type of the Short Message Service Center address.

Range:

1-21 hexadecimal digits. Valid digits are *0-9, a-f, A-F* .

Example

```
ent-home-smsc:smsc=256489
```

```
ent-home-smsc:smsc=256489a98bccee56ad237
```

Dependencies

The Portability Check for Mobile Originated SMS (MNPSMS) feature must be turned on or one of the following features must be enabled before this command can be entered.

- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- MT-Based GSM SMS NP
- MT-Based IS41 SMS NP

The specified HOME SMSC address cannot already exist in the HOME SMSCADDR table.

The HOME SMSCADDR table can contain a maximum of 500 entries.

The HOME SMSCADDR table must be accessible.

The GSM DBMM table must be accessible.

Notes

None

Output

```
ent-home-smsc:smsc=256489
```

```
    rlghncxa03w 04-02-28 08:50:12 EST  EAGLE 31.3.0
    ENT-HOME-SMSC: MASP A - COMPLTD
;
```

Related Commands

dlt-home-smsc, *rtrv-home-smsc*

ent-homern

Enter Home Routing Number Prefix

Use this command to enter up to 100 routing number prefixes for the operating network into the HOMERN table.

Parameters

rn (mandatory)

The home routing number prefix.

Range:

1-15 hexadecimal digits. Valid digits are *0-9, a-f, A-F* .

Example

```
ent-homern:rn=C441234
```

Dependencies

The HOMERN table cannot be full.

The routing number must not already exist in the HOMERN table.

The rn=none parameter cannot be specified.

The A-Port, AINPQ, G-Port, INP, or V-Flex feature must be turned on before this command can be entered.

The HOMERN table must accessible.

Notes

None

Output

```
ent-homern:rn=C441234
```

```
    rlghncxa03w 04-01-28 08:50:12 EST  EAGLE 31.3.0
    HOMERN table is (1 of 100) 1% full
    ENT-HOMERN: MASP A - COMPLTD
;
```

Related Commands

dlt-homern, *rtrv-homern*

ent-ip-conn

Enter IP Connection

Use this command to enter SIP or ENUM connection information. The IPCONN table supports the provisioning information related to the SIP or ENUM connections.

Parameters

cname (mandatory)

Connection name. This parameter specifies the unique logical name assigned to each SIP or ENUM connection.

Range:

zzzzzzzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and upto 15 characters in length. Valid values are a..z, A..Z, 0..9.

lhost (mandatory)

Local host name. This parameter specifies the local host name as defined in the IP Host table.

Special characters, such as hyphens, can be used in the host name if the host name is enclosed in double quotes (" ").

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 60 characters in length. Valid values are a..z, A..Z, 0..9, '-', or '.' .

lport (mandatory)

IP port on SIP or ENUM card on which EAGLE will listen for the SIP or ENUM message

Range:

1024 - 65535

prot (mandatory)

Underlying SIP or ENUM connection protocol.

Range:

tcp

Transmission Control Protocol.

udp

User Diagram Protocol

Note: For ENUMHC, only *udp* is supported

rhost (mandatory)

Remote host. This parameter specifies the name of the remote host as defined in the IP Host table.

Special characters, such as hyphens, can be used in the host name if the host name is enclosed in double quotes (" ").

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 60 characters in length. Valid values are a..z, A..Z, 0..9, '-', or '.' .

Default:

No change to the current value

System Default:

null

rport (mandatory)

IP port of remote end.

Range:

1024 - 65535

Example

```
ent-ip-conn:prot=tcp:lhost=lss1:lport=2019:cname=connection1
ent-ip-conn:prot=udp:lhost=enumhost:lport=2014:cname=enumudp
```

Dependencies

SIPNP Feature must be enabled before entering any SIP connection information.

At least one ENUM card must be provisioned before entering any ENUM connection information.

IPCONN table should be accessible.

A unique CNAME must be specified for a new connection.

The value specified for the HOST parameter must begin with an alphabetic character and can contain a..z, A..Z, 0..9, - (hyphen), or . (period).

New connection cannot be made if the Number of CNAMES has reached the maximum limit.

Duplicate LHOST, RHOST, LPORT and RPORT entry combination is not allowed.

Connections can only be made with a LHOST that is configured on a SIP card.

Remote IP address (RHOST) must not exist in the IPLINK table.

The TCP protocol is not supported for ENUMHC; only the UDP protocol is supported.

Notes

ent-ip-host command should be used to define local host names and remotes host names for IP addresses. This is an existing command and will be used to configure the local host and remote host for an IP address prior to adding any SIP connection.

Maximum of 16 connections can be provisioned against a local host.

If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

Output

`ent-ip-conn:prot=tcp:lhost=lss1:lport=2020:rhost=rss1:rport=2020:cname=connection5`

```
tekelecstp 12-06-25 15:04:28 EST EAGLE 45.0.0
    ent-ip-conn:prot=tcp:lhost=
lss1:lport=2020:rhost=rss1:rport=2020:cname=connection5
    Command entered at terminal #4.
    ENT-IP-CONN: MASP A - COMPLTD
;
```

`ent-ip-conn:prot=udp:lhost=enumhost:lport=2014:cname=enumudp`

```
tekelecstp 14-05-25 15:04:28 EST EAGLE 46.1.0
    ent-ip-conn:prot=udp:lhost= enumhost:lport=2014:cname=enumudp
    Command entered at terminal #4.
    ENT-IP-CONN: MASP A - COMPLTD
;
```

Related Commands

chg-ip-conn, *dlt-ip-conn*, *rtrv-ip-conn*

ent-ip-host

Enter Internet Protocol Hostname

Use this command to configure the IP Host table. The IP Host table defines local and remote host names for IP addresses.

Parameters

host (mandatory)

Host name. This parameter specifies the logical name of the device associated with the specified IP address.

Special characters, such as hyphens, can be used in the host name if the host name is enclosed in double quotes (" ").

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 60 characters in length. Valid values are *a..z, A..Z, 0..9*, or . *(period)*.

ipaddr (mandatory)

The IP address associated with the host name. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where 192.126.100 is the system's network number and 5 is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

realm (optional)

Realm. Specifies the domain of a host from which the message can be sent or received.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 60 characters in length. Valid values are *a..z, A..Z, 0..9, - (dash), . (period)*.

type (optional)

The residency attribute of the host entry.

Range:

local

The IP host name and IP address resides on the IP card in this EAGLE.

remote

The IP host name and IP address resides on equipment not in this EAGLE.

Default:

local

Example

```
ent-ip-host:host=gw100.nc.tekelec.com:ipaddr=150.001.001.001
ent-ip-host:host=gw100.nc.tekelec.com:ipaddr=150.001.001.001:type=local
ent-ip-host:host="gw100.nc-tekelec.com":ipaddr=150.001.001.001
ent-ip-host:host=abc:ipaddr=250.001.001.001:type=remote:realm=xyz.com
```

Dependencies

The value specified for the ipaddr parameter cannot already exist in the IP Host table.

A valid value must be specified for the host parameter. If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

The ipaddr=0.0.0.0. parameter cannot be specified.

The value specified for the host parameter cannot already exist in the IP Host table.

The IP Host table can have a maximum of 4096 host entries.

If a remote host is used (the type=remote parameter is specified), then the value specified for the ipaddr parameter cannot already exist in the IP Link table.

If a local host is used (the type=local parameter is specified), then the value specified for the ipaddr parameter must already exist in the IP Link table.

A valid value must be specified for the realm parameter. If the realm contains a hyphen, then the realm must be enclosed within quotation marks.

HOST and REALM must be specified together for the host associated with diameter connection.

Notes

If the realm contains a hyphen, then the realm must be enclosed within quotation marks.

Realm is mandatory for all the IP hosts associated with diameter connections.

Output

```
ent-ip-host:host=gw100.nc.tekelec.com:ipaddr=150.001.001.001:type=local
```

```
    rlghncxa03w 05-07-17 15:35:05 EST  EAGLE 34.0.0
    ENT-IP-HOST: MASP A - COMPLTD
;
```

```
ent-ip-host:host=abc:ipaddr=250.001.001.001:type=remote:realm=xyz.com
```

```
    rlghncxa03w 13-03-17 15:35:05 EST  EAGLE 45.1
    ENT-IP-HOST: MASP A - COMPLTD
```

Related Commands

dlt-ip-host, *rtrv-ip-host*

ent-ip-node

Enter IP Node

Use this command to define the IP address of a node that will be receiving messages from the STPLAN application.

Parameters

cap (mandatory)

The maximum percentage of Ethernet capacity for the node connection. This capacity is added to other connections to this node for the total capacity of the node.

Note: The value specified for this parameter can be used to calculate throughput for E5-ENET and E5-ENET-B cards. Refer to the *Notes* section for more information.

Range:

1 - 100

ipaddr (mandatory)

The node's IP address. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.126.100.5*, where *192.126.100* is the network number and *5* is the machine's host number.

Range:

4 numbers separated by dots

1-233-first number

0-255-the other three numbers

ipappl (mandatory)

The IP application supported by the node.

Range:

stplan

ipport (mandatory)

The logical IP port that addresses the application on the node.

Range:

1024 - 5000

loc (mandatory)

The card location as stenciled on the shelf of the system that contains the TCP/IP link that will be directly connected to the node.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

iprte (optional)

The default router IP address. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where 192.126.100 is the network number and 5 is the machine's host number.

Range:

4 numbers separated by dots

1-233-first number

0-255-the other three numbers

Example

```
ent-ip-node:ipaddr=13.49.210.50:ipappl=stplan:ipport=1024:loc=1201:cap=15:iprte=193.4.201.84
```

Dependencies

The shelf and card must be equipped.

The node IP address cannot be *127.x.x.x*, where *x* is a number from 1 to 254.

The specified card location must be equipped with a TCP/IP data link.

The IP address must be unique to the TCP/IP link table and to the TCP/IP nodes.

Only one node can be connected for each data link and each application. The IP address, IP application, and card location combination must be unique in the database.

The IP port on each node cannot already be assigned to another application.

The class of the IP address (ipaddr) must match the class of the assigned TCP/IP data link's IP address. The system supports three classes of IP addresses, Class A, Class B, and Class C. Class A IP addresses can contain only the values 1 - 126 in the first field of the IP address. Class B IP addresses can contain only the values 128 - 191 in the first field of the IP address. Class C IP addresses can contain only the values 192 - 223 in the first field of the IP address.

The network portion of the IP address (ipaddr) must match the network portion of the IP address assigned to the TCP/IP data link. The network portion of the IP address is based on the class of the IP address. If the IP address is a Class A IP address, the first field is the network portion of the IP address. If the IP address is a Class B IP address, the first two fields are the network portion of the IP address. If the IP address is a Class C IP address, the first three fields are the network portion of the IP address.

If the network portion and class of the IP address of the TCP/IP node matches the class of the assigned TCP/IP data link's IP address, the iprte parameter cannot be specified. The iprte parameter can be specified only with the `ent-ip-node` command when the network portion and class of the TCP/IP node does not match the class of the assigned TCP/IP data link's IP address. The values of the ipaddr parameter, the IP address of the TCP/IP node, and the iprte parameter cannot be the same.

The capacity of all connections to the given node cannot be greater than 100%.

The router's IP address must not be assigned to a local TCP/IP data link.

The router's IP address must be in the same network as the node's IP address.

Notes

If the IP address is a Class A IP address, do not use the IP addresses *127.x.x.x*, where *x* is a number from 1 - 254. These addresses are reserved for loopback.

Using the CAP Value to Calculate Throughput for E5-ENET/E5-ENET-B Cards

The value specified for the cap parameter can be used to calculate the throughput in transactions per second (TPS) for E5-ENET and E5-ENET-B cards. The TPS value is the smaller of the following values:

- GPL_CARD_CAPACITY
  - E5-ENET/E5-ENET-B card—15000
- 175 [or 17.5] * cap parameter value

Caution: The 175 multiplier is used only when the link negotiates to 100 Mbits/second full duplex. If the link is a different value than 100 Mbits/second full duplex, then a multiplier of 17.5 is used.

Output

```
ent-ip-node:ipaddr=13.49.210.50:ipappl=stplan:ipport=1024:loc=1201:cap=15:iprte=193.4.201.84
```

```
    rlghncxa03w 04-01-18 08:50:12 EST  EAGLE 31.3.0
    ENT-IP-NODE: OAM A - COMPLTD
;
```

Related Commands

dlt-ip-node, *rtrv-ip-node*

ent-ip-rte Enter IP Route

Use this command to configure the destination IP address, subnet mask, and the gateway IP address for the specified card in the Static IP Route table.

Parameters

dest (mandatory)

Destination IP Address. The IP Address of a remote destination host or network to be reached.

Range:

4 numbers separated by dots, with each number in the range of *0–255*.

The IP address *0.0.0.0* is not valid.

gtwy (mandatory)

Gateway IP Address. The IP address assigned to the gateway router that will properly forward IP datagrams with the destination IP address (dest) to the next-hop gateway router or final destination host.

Range:

4 numbers separated by dots, with each number in the range of *0–255*.

The IP address *0.0.0.0* is not valid.

loc (mandatory)

Card location. The unique identifier of a specific IP card in the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

submask (mandatory)

The subnet mask of the destination IP address, in the form of an IP address with a restricted range of values. This parameter is required if the ipaddr parameter is entered.

Range:

The value must be valid for the class of the entered IP address.

Valid for Class A Networks

- 255.0.0
- 255.192.0
- 255.224.0
- 255.240.0
- 255.248.0
- 255.252.0
- 255.254.0
- 255.255.128.0

Valid for Class A or B Networks

- 255.255.0.0
- 255.255.192.0
- 255.255.224.0
- 255.255.240.0
- 255.255.248.0
- 255.255.252.0
- 255.255.254.0
- 255.255.255.128

Valid for Class A, B, or C Networks

- 255.255.255.0
- 255.255.255.192
- 255.255.255.224
- 255.255.255.240
- 255.255.255.248
- 255.255.255.252

Note: The value *255.255.255.255* must be specified if the destination IP address represents a host address. If the destination IP address represents a network address, a value must be specified that identifies the network ID and host ID portions of the address.

Example

```
ent-ip-rte:loc=1301:dest=128.252.10.5:submask=255.255.255.255:
gtwy=140.188.13.33
```

Dependencies

The specified destination IP address (dest parameter):

- Must not be the default route (0.0.0.0)
- Must not correspond to any loopback address (i.e. 127.X.X.X)
- Must be unique per card
- Must not reside on this card's A or B local network

The specified gateway IP address (gtwy parameter):

- Must not be the default route (0.0.0.0)
- Must not correspond to any loopback address (i.e. 127.X.X.X)
- Must correspond to a host IP address that resides on this card's A or B local network

The IP address must be defined for the A or B network, or both, for the card before this command can be entered. (See the *chg-ip-lnk* command.)

Each destination IP address entered into the Static IP Route table must be unique for the card.

A maximum of 64 static IP routes can be defined for a card.

A maximum of 2048 static IP routes can be defined in the IP Route table.

The network address specified by the dest and submask parameters must be different from the network address specified by the pvn and pvnmask, fcna and fcnamask, and fcnb and fcnbmask parameters of the NETOPTS table.

Notes

The Static IP Route table is used to store static IP route entries. Static routes are maintained across card initialization, failures, and reloads. These types of routes are used when the IP Layer cannot determine routes dynamically. Static IP route entries can be added or deleted dynamically.

Output

```
ent-ip-rte:loc=1301:dest=128.252.10.5:submask=255.255.255.255:
gtwy=140.188.13.33
```

```
    rlghncxa03w 12-07-24 15:35:05 EST  EAGLE 45.0.0
    IP Route table is  (1 of 2048) 1% full
    ENT-IP-RTE:   MASP A - COMPLTD
;
```

Related Commands

dlt-ip-rte, *rtrv-ip-rte*

ent-j1 Enter J1 Interface

Use this command to enter a J1 interface on a T1 card.

Any of the 8 ports on an E5-E1T1 card can be specified as a J1 port when the card used is a standard E5-E1T1 or E5-E1T1-B card.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

j1port (mandatory)

J1 port number.

The value must be a J1 port for which an interface has not been configured on the specified J1 card.

Range:

1-8

Any 1 of the 8 ports on an E5-E1T1 card can be specified as a J1 port.

encode (optional)

Indicator for use of B8ZS or AMI encoding/decoding.

Range:

b8zs

ami

Default:

b8zs

j1tsel (optional)

Timing source

Range:

line

slave timing source

external

master timing source

Default:

line

ll (optional)

T1 cable length in feet between the EAGLE and the connecting node.

Range:

0-655

Default:

133

Example

```
ent-j1:loc=1101:j1port=1:encode=ami:j1tsel=external
ent-j1:loc=1102:j1port=1:j1tsel=line
ent-j1:loc=1103:j1port=2
```

Dependencies

The specified card location (loc parameter) must be equipped.

The J1 table must be accessible.

The Card (IMT) table must be accessible.

The port specified by the j1port parameter must not be already equipped with a J1 interface.

Card locations 1113 - 1118 (OAM, TDM, MDAL cards) cannot be specified as values for the loc parameter.

The specified card location must be provisioned with type as limt1 and appl as ccs7itu.

The card must not be provisioned with any E1/T1 ports.

The j1port parameter must be in the range from 1 to 8.

IMT card location cannot be specified.

The J7 support feature must be enabled before the J1 port can be provisioned.

Notes

There is not a new card type for J1. The J1 interface will be provisioned on a T1.

Once the J1 interface is provisioned on it, no T1 interface will be allowed on the T1 card.

This card will be treated as a J1 card.

Output

```
ent-j1:loc=1101:j1port=1:encode=ami:j1tsel=external
```

```
 tekelecstp 13-12-20 12:12:36 EST  46.0.0-65.3.0
 ent-j1:loc=1101:j1port=1:encode=ami:j1tsel=external
 ENT-J1: MASP A - COMPLTD
;
```

Related Commands

chg-j1, *dlt-j1*, *rtrv-j1*, *tst-j1*

ent-lbp

Enter Loopback Point

Use this command to assign a far-end loopback point for testing data signaling link elements in a SS7 transmission path.

Parameters

lbp (mandatory)

Loopback point ID. A far-end loopback point that lies along an SS7 signaling link path between the STP and the target device (up to and including the target device).

Range:

1 - 32

lfst (mandatory)

Link fault sectionalization test. The type of link fault sectionalization loopback test to be performed.

Range:

llt

latching loopback test

nlt

nonlatching loopback test

link (mandatory)

SS7 signaling link. The SS7 signaling link that is to be tested.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling link ports.

loc (mandatory)

Card location. The unique identifier of a specific application subsystem located in the STP.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

rle (mandatory)

Remote link element. The link element to be looped back for testing.

Range:

ds0

ocu

csu

dsu

nei

clli (optional)

The Common Language Location Identifier (CLLI) code, or other mnemonic identifier, used to refer to the given loopback point.

Range:

ayyyyyyyyyy

1 alphabetic character followed by up to 10 alphanumeric characters

rep (optional)

Repetition count. The number of link elements of the same type (not including the target device) that lie between the STP and the link element to be tested.

Range:

0 - 31

Default:

0—If the link element to be looped back for testing is NEI (*rle=nei* is specified)

0—If the LFS test is NLT (non-latched); *lfst=nlt* is specified

0—If no other LBP for this link has the same *rle* value

1–30—Next sequential number for subsequent loopback points of the link to be tested (rle is specified as anything but *nei*)

Example

```
ent-lbp:loc=1101:link=a:lbp=1:rle=ds0:lfst=llt:rep=0:clli=rlghncxa05w
ent-lbp:loc=1101:port=a:lbp=2:rle=nei:lfst=llt
ent-lbp:loc=1205:port=a1:lbp=1:rle=ds0:lfst=llt:clli=rlghncxa05w:rep=1
```

Dependencies

The Link Fault Sectionalization (LFS) feature must be on before this command can be entered.

The card location (loc parameter) must be equipped.

The rle=ds0 parameter and the rle=nei parameter cannot be specified when the lfst=nlt parameter is specified. The DS0 and Network Element Interface (NEI) link elements do not support non-latching loopbacks.

If the rle=nei parameter is specified, the rep=0 parameter must be specified.

The rep parameter can be specified only if the lfst=llt parameter is specified.

Each specified rep parameter value must be greater than any previously specified rep value and less than any subsequent specified rep value.

The specified clli cannot be a reserved word.

The loopback point (LBP) cannot have been previously defined.

The value specified for the lbp parameter cannot exceed the lbp parameter value previously defined for a loopback point with rle=nei specified.

For each SS7 signaling link, only one loopback point with rle=nei specified can be defined.

The rep parameter must be specified if taking the default value results in duplicate rep values for loopback points.

The loopback point with rle=nei specified must be the terminating SS7 signaling link element.

The card location must contain a provisioned HC-MIM, E5-E1T1, or E5-E1T1-B card, provisioned with the LIMT1 card type, that is running either the SS7ANSI or CCS7ITU application.

The card location (loc parameter) must not be reserved by the system.

The values specified for the loc and link parameters must already exist in the database.

Notes

None

Output

```
ent-lbp:loc=1101:link=a:lbp=2:rle=nei:lfst=llt
```

```
    rlghncxa03w 05-02-17 15:35:05 EST  EAGLE5 33.0.0
    ENT-LBP: MASP A - COMPLTD
;
```

Related Commands

act-lbp, *chg-lbp*, *dact-lbp*, *dlt-lbp*, *rtrv-lbp*

ent-lnp-serv

Enter LNP Service

Use this command to reserve an LNP translation type for a unique LNP service. The available services include up to six query services (*ain, in, pcs, lnpqs, wnp,* and *lrnqt*) and any combination of six message relay or user-defined services. Translation type names can also be defined and are defaulted to the corresponding reserved service type names.

Note: LNP Translation Type name referenced in the ENT-LNP-SERV command is different from the Translation Type name referenced in ENT-TT command.

A maximum of 10 LNP services can be assigned in systems with up to 12 million numbers, and a maximum of 15 LNP services can be assigned in systems with more than 12 million numbers (using ELAP). Two of these assigned services will always be reserved for administration of AIN and IN Translation Types. Administration of Message Relay user defined services will also be allowed.

Parameters

serv (mandatory)

Reserved service type name.

Range:

ain

in

pcs

wnp

class

lidb

cnam

isvm

lnpqs

wsmsc

udf1

udf2

udf3

udf4

lrnqt

alias (optional)

Alias translation type.

Range:

000 - 255

dfltact (optional)

This parameter specifies the default action associated with the LNP TT Service entry.

Range:

ayyyyyyy

1 leading alphabetic followed by up to 8 alphanumeric characters. This parameter can have one of the following values:

- a valid GTT Action ID of type *disc/udts/tcaperr* that already exists in the GTT Action table
- *fallback* —Fallback to the relay data for MSUs relayed by LNP using relay data from the LNP database provided by the LNP Message Relay service. For an LNP Query message, the MSU is sent to the LNP local subsystem.
- *falltogtt* —Fallback to GTT. The GTT selector search is performed again, using gttselid=none.

Default:

fallback

dv (optional)

Digits valid.

Range:

sccp

tcap

Default:

sccp —If serv has a value of *class*, *lidb*, *cnam*, *isvm*, *wsmsc*, *udf1*, *udf2*, *udf3*, *udf4*

tcap —If serv has a value of *ain*, *in*, *pcs*, *wnp*, *lnpqs*, *lrnqt*

gttselid (optional)

GTT Selector ID. This parameter specifies the ID used to perform GTT on the MSU processed by the LNP Message Relay or LNP Query Service.

Range:

0 - 65534

Default:

none

off (optional)

Disables or turns off the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned off. Up to 10 feature options can be specified in the list.

Range:

gttrqd

on (optional)

Enables or turns on the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned on. Up to 10 feature options can be specified in the list.

Range:

gttrqd

rqdtblnop (optional)

The action performed with a message that arrives at an SCCP card that does not have the necessary LNP table, and the current message routing is subsystem.

Range:

udts

generate UDTS for the processed MSU

disc

discard the processed MSU

Default:

No change to the current value

tt (optional)

Translation type.

Range:

000 - 255

ttn (optional)

User defined LNP Translation Type name.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters, the value *none* is not allowed.

Default:

Reserved service type name (*serv* parameter)

Example

```
ent-lnp-serv:serv=class:tt=10:ttn=class1:dfltact=disc1:on=gttrqd:gttselid=100
ent-lnp-serv:serv=lidb:tt=16:dv=tcap:ttn=mrlidb
ent-lnp-serv:serv=lrnqt:tt=239:dv=tcap
```

Dependencies

The same value cannot be specified for the on and off parameters.

The dfltact=none parameter cannot be specified.

The EGTT feature must be turned on before the gttselid, dfltact, or on/off=gttrqd parameter can be specified.

If a GTT Action ID is specified as the value for the dfltact parameter, then the Action ID must already exist in the GTT Action table.

If a GTT Action ID is specified as a value for the dfltact parameter, then the GTT Action ID must be associated with an action of *disc/udts/tcaperr* .

The LNP feature must be turned on before this command can be entered.

The PLNP feature must be turned on before the serv=pcs parameter can be specified.

The WNP feature must be turned on before the serv=wnp parameter can be specified.

The LNP SMS feature must be turned on before the serv=wsmsc parameter can be specified.

If a value of *udf1, udf2, udf3*, or *udf4* is specified for the serv parameter, then the dfltact, gttselid and on/off=gttrqd parameters cannot be specified.

The tt parameter must be specified if the alias parameter is not specified.

The ttn=none parameter cannot be specified.

If a value of *udf1, udf2, udf3, udf4*, or wsmsc is specified for the serv parameter, then the dv=sccp parameter must be specified.

If the *lnpqs, ain, in, pcs, wnp*, or *lrnqt* value is specified for the serv parameter, then the dv=tcap parameter must be specified.

A reserved service type name can be specified for the ttn parameter only if it matches the serv parameter value.

The value of the tt parameter cannot already exist in the LNP database.

If the tt parameter is specified, then the value of the serv parameter cannot exist in the LNP database.

A maximum of 6 Message Relay services are allowed.

If the alias parameter is specified, then the serv parameter must already have an assigned translation type.

When the alias parameter is specified, its value cannot already exist in the LNP database as a true translation type for this service.

If the alias parameter is specified, then the specified alias cannot be in use.

If the tt parameter is specified, then its value cannot already exist in the LNP database as an alias for this service.

The value of the ttn parameter cannot exist in the LNP database.

The LRNQT feature must be turned on before the serv= lrnqt parameter can be specified.

If the alias parameter is specified, then the tt, ttn, and dv parameters cannot be specified.

The nrqdtblnop parameter requires that the Dual ExAP Config feature is enabled.

Notes

on/off options

gttrqd —GTT required. Specifies whether GTT is performed after the successful completion of an LNP Message Relay service and before initiation of an LNP Query service. This option has a default of OFF.

Translation type names must be unique for LNP services.

A translation type name can be a reserved service type name only if it matches the specified service.

TTN

LNP Translation type name referenced in the ENT-LNP-SERV command is different from the Translation type name referenced in ENT-TT command.

Output

```
ent-lnp-serv:tt=1:serv=lidb:on=gttrqd:dfltact=falltogtt
```

```
    rlghncxa03w 10-11-08 08:50:12 EST  EAGLE 43.0.0
    ENT-LNP-SERV: MASP A - COMPLTD
;
```

Related Commands

chg-lnp-serv, *dlt-lnp-serv*, *rtrv-lnp-serv*

ent-loopset

Enter Loop Set Command

Use this command to enter the loopset information into the database. This command updates the Loopset table.

Parameters

name (mandatory)

Loopset name. This parameter specifies an entry in the Loopset table.

The *name=none* parameter cannot be specified.

Range:

ayyyyyyy

1 alphabetic and up to 7 alphanumeric characters

pcl (mandatory)

ANSI point code list with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*). This parameter allows up to 6 comma-delimited entries in the point code list.

Synonym:

pcla

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pcli (mandatory)

ITU international point code list with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcln (mandatory)

ITU national point code list in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*). This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcln24 (mandatory)

24-bit ITU national point code list with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pcln16 (mandatory)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. This parameter allows up to 6 comma-delimited entries in the point code list.

Range:

p---, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (--).

prefix---p

un---000---127

sna---000---15

mna---000---31

mode (optional)

Mode of operation. This parameter specifies whether the message is discarded when an SCCP loop is detected.

Range:

notify

Generates a UIM without discarding the message.

discard

Generates a UIM and discards the message.

Default:

notify

Example

This example creates a new loopset using the default mode of *notify* .

```
ent-loopset:name=rtp1:pcl=3-3-3,5-5-5,7-7-7,3-4-3
```

This example creates a new loopset and sets the mode to *discard* .

```
ent-loopset:name=rtp2:mode=discard:pcl=3-3-3,5-5-5,7-7-7,3-4-3
```

This example creates a new loopset with four 16-bit ITU-N point codes.

```
ent-loopset:name=rtp1:pcln16=3-3-3,5-5-5,7-7-7,3-4-3
```

Dependencies

The value of the name parameter cannot already exist in the database.

The SCCP Loop Detection feature must be enabled before this command can be entered.

The GTT feature must be turned on before this command can be entered.

The Loopset table can hold a maximum of 1,000 loopset entries, with each entry containing up to 12 point codes. Additional loopset entries and point codes cannot be added when the table is full.

The values for the pcl parameter must be unique.

The name=none parameter cannot be specified.

At least one valid point code must specified as a value for the pcl parameter.

The values for the pcl parameter cannot consist of any invalid point codes. The valid point codes must be consecutively specified and separated by commas.

Notes

There is no J7 FAK dependency on the apcln16/rpcln16/pc1n16/npc1n16/pc2n16/npc2n16 parameters. The command can be entered successfully when the J7 FAK is not enabled.

There is no J7 FAK dependency on the apcln24/rpcln24/pc1n24/npc1n24/pc2n24/npc2n24 parameters. The command can be entered successfully when the J7 FAK is enabled.

There is no J7 FAK dependency on the apcl/ apcla/rpcla/pc1a/npc1a/pc2a/npc2a parameters. The command can be entered successfully when the J7 FAK is enabled.

Output

The following example creates a new loopset and sets the mode to *discard*.

```
ent-loopset:name=rtp2:mode=discard:pcl=3-3-3,5-5-5,7-7-7,3-4-3
```

```
    rlghncxa03w 07-02-10 08:31:28 EST  EAGLE Rel 35.6.0
    LOOPSET table is (12 of 1000) 1% full
    ENT-LOOPSET: MASP A – COMPLTD
;
```

Related Commands

chg-loopset, *dlt-loopset*, *rtrv-loopset*

ent-ls Enter Linkset

Use this command to add a linkset, with its assigned far-end point code and other linkset attributes, to the database.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

apc (mandatory)

ANSI adjacent destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

apca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix-p-

When chg-sid:pctype=ansi is specified, ni = 000 is not valid.

When chg-sid:pctype=ansi is specified, nc = 000 is not valid if ni = 001-005.

When chg-sid:pctype=ansi is specified, nc = 000 is valid if ni = 006-255.

The point code *000-000-000* is not a valid point code.

apc/apca/apci/apcn/apcn24/apcn16 (mandatory)

Adjacent point code. The DPC of the adjacent signaling node at the far end of the linkset.

apci (mandatory)

ITU international adjacent destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s--, p--, ps--, 0--255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--s--, p--, ps

zone--0-7

area--000--255

id--0--7

The point code *0--000--0* is not a valid point code.

apcn (mandatory)

ITU national adjacent destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s--, *p--*, *ps--*, *0--16383*, *aa--zz*

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--s--, *p--*, *ps*

nnnnn--0--16383

gc--aa--zz

m1--m2--m3--m4---0--14 for each member; values must sum to *14*

apcn24 (mandatory)

24-bit ITU national adjacent destination point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp).* The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p---, 000---255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

msa---000---225

ssa---000---225

sp---000---225

apcn16 (mandatory)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--,000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000--127

sna---000--15
mna---000--31

lsn (mandatory)

Linkset name. Each linkset name must be unique in the system.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

lst (mandatory)

Linkset type. The linkset type of the specified linkset as defined in Telcordia GR-246-CORE, T1.111.5.

Range:

a

Access links

b

Bridge links

c

Cross links

d

Diagonal links

e

Extended links

prx

Proxy links

adapter (optional)

The adapter layer for links provisioned in an IPSG linkset.

Range:

m3ua

m2pa

Default:

m2pa

apcntype (optional)

ITU-N Adjacent Point Code Type. The format used for changeover and changeover acknowledgement messages.

Range:

itun

ITU National Adjacent Point Code Type

itunchina

ITU National China Adjacent Point Code Type

Default:

itun

asl8 (optional)

Adjacent SLS 8-bit indicator. This parameter specifies whether the adjacent node is sending MSUs with 8-bit SLSs.

Range:

yes

no

Default:

no

asnotif (optional)

AS notification. This parameter specifies whether AS notifications should be sent for IPSG-M3UA linkset.

Range:

yes

no

Default:

yes

bei (optional)

Broadcast exception indicator. This parameter specifies whether TFP (transfer prohibited) messages are allowed to be broadcast on the linkset.

Range:

yes

TFPs are not broadcast

no

TFPs are broadcast

Default:

no

cggtmod (optional)

Calling party GT modification indicator. This parameter specifies whether calling party global title modification is required for the specified linkset.

Range:

yes

no

Default:

no

clli (optional)

Far-end Common Language Location Identifier (CLLI). The CLLI assigned to the linkset.

Range:

ayyyyyyyyyy

1 alphabetic character followed by up to 10 alphanumeric characters

Default:

CLLI of the adjacent point code

gsmscrn (optional)

GSM MAP screening. This parameter specifies whether GSM MAP screening is allowed.

Range:

on

off

Default:

off

gttmode (optional)

Global title translation mode. The GTT Mode hierarchy for each link set.

Range:

cd

CdPA GTT only

cg

CgPA GTT only

acdcd

Advanced CdPA GTT, CdPA GTT

acdcgcd

Advanced CdPA GTT, CgPA GTT, CdPA GTT

acdcdcg

Advanced CdPA GTT, CdPA GTT, CgPA GTT

cgacdcd

CgPA GTT, Advanced CdPA GTT, CdPA GTT

cgcd

CgPA GTT, CdPA GTT

sysdflt

System wide default value

fcd

FLOBR CdPA only

fcg

FLOBR CgPA only

fcgfcd

FLOBR CgPA, FLOBR CdPA

fcdfcg

FLOBR CdPA, FLOBR CgPA

cdcg

CdPA GTT, CgPA GTT

Default:

sysdflt

gwsa (optional)

Gateway screening action. This parameter specifies whether gateway screening is on or off for the specified linkset.

Range:

on

off

Default:

on —if scrn is specified

off —if scrn is not specified

gwsd (optional)

Gateway screening MSU discard. This parameter specifies whether the discarding of MSUs that bypass the gateway screening function due to load-shedding is on or off. This parameter is also used with the redirect function; MSUs that cannot be screened are discarded if gwsd=on is specified.

Range:

on

off

Default:

off

gwsm (optional)

Gateway screening messaging. This parameter specifies whether messages are generated for each message screened by gateway screening.

Range:

on, off

Default:

off

ipgwapc (optional)

IP gateway adjacent point code. Specifying ipgwapc=yes indicates that the linkset is entered for a card of application type SS7IPGW or IPGWI and the adjacent point code specified is an IP gateway adjacent point code.

Range:

yes

no

Default:

no

ipsg (optional)

IP signaling gateway adjacent point code. This parameter specifies whether a linkset is entered for an IPSG card. The specified adjacent point code is an IPLIM or IP gateway adjacent point code.

Range:

yes

no

Default:

no

iptps (optional)

IPGWx Linkset TPS.

This parameter is a user-defined portion of the total system IP Signaling TPS. This parameter is allowed and required only for IPGWx linksets (the ipgwapc=yes parameter is specified).

If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

Range:

100 - 32000

The specified value must be divisible by 10.

islsrsb (optional)

Incoming rotated signaling link selection (SLS) bit. The bit (1–4 for ITU and 1 – 8 for ANSI linksets) to rotate as the new SLS LSB (Least Significant Bit) of the incoming linkset. The SLS is not modified in the outgoing message.

Table 29: Incoming SLS Bit Rotation for ITU shows how the rotation affects the four bits of the ITU SLS during linkset selection:

Table 29: Incoming SLS Bit Rotation for ITU

If This Bit is Selected...	Then Bit Locations 4 3 2 1 Are Rotated To...	Description
Bit 4	3 2 1 **4**	SLS = 0110 becomes Rotated SLS = 1100 SLS = 1011 becomes Rotated SLS = 0111
Bit 3	2 1 4 **3**	SLS = 0110 becomes Rotated SLS = 1001 SLS = 1011 becomes Rotated SLS = 1110
Bit 2	1 4 3 **2**	SLS = 0110 becomes Rotated SLS = 0011 SLS = 1011 becomes Rotated SLS = 1101
Bit 1	No rotation is performed because bit 1 is the existing LSB	-

Table 30: Incoming SLS Bit Rotation for ANSI shows how the rotation affects the eight bits of the ANSI SLS during linkset selection:

Table 30: Incoming SLS Bit Rotation for ANSI

If This Bit is Selected...	Then Bit Locations 8 7 6 5 4 3 2 1 Are Rotated To...	
Bit 8	7 6 5 4 3 2 1 **8**	SLS = 10010110 becomes Rotated SLS = 00101101 SLS = 11001011 becomes Rotated SLS = 10010111
Bit 7	6 5 4 3 2 1 8 **7**	SLS = 10010110 becomes Rotated SLS = 01011010 SLS = 11001011 becomes Rotated SLS = 00101111
Bit 6	5 4 3 2 1 8 7 **6**	SLS = 10010110 becomes Rotated SLS = 10110100 SLS = 11001011 becomes Rotated SLS = 01011110

If This Bit is Selected...	Then Bit Locations 8 7 6 5 4 3 2 1 Are Rotated To...	
Bit 5	4 3 2 1 8 7 6 **5**	SLS = 10010110 becomes Rotated SLS = 01101001 SLS = 11001011 becomes Rotated SLS = 10111100
Bit 4	3 2 1 8 7 6 5 **4**	SLS = 10010110 becomes Rotated SLS = 11010010 SLS = 11001011 becomes Rotated SLS = 01111001
Bit 3	2 1 8 7 6 5 4 **3**	SLS = 10010110 becomes Rotated SLS = 10100101 SLS = 11001011 becomes Rotated SLS = 11110010
Bit 2	1 8 7 6 5 4 3 **2**	SLS = 10010110 becomes Rotated SLS = 01001011 SLS = 11001011 becomes Rotated SLS = 11100101
Bit 1	No rotation is performed because bit 1 is the existing LSB.	

This parameter is used for ITU or ANSI messages on a per-linkset basis.

Range:

1 - 8

ITU linksets— *1 - 4*

ANSI linksets— *1 – 8*

The rsls8=yes parameter must be specified (see the `chg-lsopts` command) before a value greater than 5 can be specified for the islsrsb parameter.

Default:

1

itutfr (optional)

ITU TFR (Transfer Restricted) procedure indicator. This parameter specifies whether the TFR procedure is on or off on a per-linkset basis. This parameter is valid for ITU national linksets only.

Range:

on

off

Default:

off

l3tset (optional)

Link timer set. This parameter value is the value that is defined with the `chg-l3t` command.

Range:

1

Default:

1

lsusealm (optional)

IPTPS linkset alarm threshold percent. The percent of the linkset TPS (IPTPS) at which an alarm is generated to indicate that the actual linkset TPS is approaching the configured IPTPS value for the linkset.

Range:

10 - 100

Default:

100

maxslktps (optional)

Maximum per signaling link TPS. The maximum capacity a link is permitted when sufficient unused capacity is present on the host card.

Note: This parameter can only be specified for links in IPSG linksets.

Note: If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

Range:

100 - 9500

Note: The maximum value that can be specified for this parameter depends on the type of IPSG card that is used and whether the E5-ENET-B IPSG High Throughput feature is turned on:

- E5-ENET card-5000 TPS
- E5-ENET-B card when the E5-ENET-B IPSG High Throughput feature is turned off-6500 TPS
- E5-ENET-B card when the E5-ENET-B IPSG High Throughput feature is turned on-9500 TPS

System Default:

value of slktps/rsvdslktps parameter

mtprse (optional)

ANSI or ITU MTP Restart equipped. This parameter specifies whether the node adjacent to the linkset is equipped with MTP Restart.

Range:

yes

equipped

no

not equipped

Default:

no

multgc (optional)

Multiple group codes. This parameter specifies whether multiple group codes can be specified.

Range:

yes

no

Default:

no

nis (optional)

Network Indicator Spare. This parameter specifies whether the Network Indicator Spare option is on or off for the specified linkset. When this option is enabled, the Network Spare value for network indicator for both ANSI and ITU-National (ITU-N) links is supported by the system.

Range:

on

off

Default:

off

ppc (optional)

ANSI proxy point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

The proxy point code must be a full point code.

Synonym:

ppca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

ppc/ppca/ppci/ppcn/ppcn24/ppcn16 (optional)

Proxy Point Code

The proxy point code must be a full point code.

ppci (optional)

ITU international proxy point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code.

Range:

s-, 0-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

Enter *none* to delete the point code.

The point code *0-000-0* is not a valid point code.

ppcn (optional)

ITU national proxy point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (*members*) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

ppcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

ppcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*.

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

randsls (optional)

Random SLS (signaling link selection). This parameter is used to apply random SLS generation for the specified linkset.

The randsls=perls parameter must be specified in the `chg-stpopts` command before specifying the randsls parameter in the `ent-ls` command to enable random SLS generation on a per linkset basis.

Range:

off

Disables random SLS generation on a specified linkset.

class0

Enables random SLS generation for Class0 SCCP traffic on a specified linkset.

all

Enables random SLS generation for Class0 and Class1 SCCP traffic on a specified ITU linkset and for Class0 and ISUP traffic on a specified ANSI linkset.

Default:

off

rcontext (optional)

Routing context. The new routing context for an IPSG-M3UA linkset.

Range:

0 - 4294967295

System Default:

none

scrn (optional)

Gateway screening screen set. The gateway screening screen set assigned to this linkset.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

none —Deletes screen set association with the linkset

slktps (optional)

Reserved per signaling link TPS for IPSG Linkset. The capacity guaranteed to each link in the linkset.

Note: This parameter is required for each link in an IPSG linkset. The parameter cannot be specified for links in non-IPSG linksets. The guaranteed capacity for the links hosted by an IPSG card cannot exceed the IPSG card capacity.

Note: If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

Synonym:

rsvdslktps

Range:

0 - 9500

Note: The maximum value that can be specified for this parameter depends on the type of IPSG card that is used and whether the E5-ENET-B IPSG High Throughput feature is turned on:

- E5-ENET card-5000 TPS
- E5-ENET-B card when the E5-ENET-B IPSG High Throughput feature is turned off-6500 TPS
- E5-ENET-B card when the E5-ENET-B IPSG High Throughput feature is turned on-9500 TPS

slkusealm (optional)

IPTPS signaling link alarm threshold percent. The percent of the link TPS at which an alarm is generated to indicate that the actual link TPS is approaching the alarmed IPTPS (slktps/rsvdslktps or maxslktps) configured for the link.

System Default:

80

slsci (optional)

5-bit to 8-bit SLS conversion indicator. This parameter specifies whether the 5-bit to 8-bit SLS conversion feature is used to select links for outgoing messages direct to the given linkset. When enabled, the system replaces any 5-bit SLS values contained in received messages, with a random 8-bit value before the 5-bit SLS values are used by the STP to select the outgoing link in that linkset.

Range:

yes

enabled

no

disabled

Default:

no

slsocbit (optional)

Other CIC (Circuit Identification Code) Bit. If the SLSOCB feature is turned on, this parameter specifies whether the Other CIC Bit option is to be used during link selection. If the option is to be used, specify which bit (5– 16) of the CIC is to be used as the other CIC bit. During link selection, the specified bit acts as the most significant bit of the new SLS and bits 2 through 4 of the received CIC become the least significant bits of the new SLS. This parameter is used for ITU-ISUP messages. The SLS is not modified in the outgoing message. The following example shows a received CIC where bit 9 is the other CIC bit (slsocbit=9). The new SLS is 0100.

Table 31: SLSOCBIT example (ent-ls)

16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
0	0	0	0	1	0	0	0	1	0	0	1	1	0	0	1
New SLS							0					1	0	0	

Range:

5 - 16, none

Default:

none

slsrsb (optional)

Rotated signaling link selection (SLS) bit. The bit (1–4) to rotate as the new SLS Least Significant Bit (LSB). The SLS is not modified in the outgoing message. *Table 32: SLS Bit Rotation* shows how the rotation affects the four bits of the SLS during linkset selection:

Table 32: SLS Bit Rotation

If This Bit is Selected...	Then Bit Locations 4 3 2 1 Are Rotated To...	Description
Bit 4	3 2 1 4	SLS = 0110 becomes Rotated SLS = 1100 SLS = 1011 becomes Rotated SLS = 0111
Bit 3	2 1 4 3	SLS = 0110 becomes Rotated SLS = 1001 SLS = 1011 becomes Rotated SLS = 1110
Bit 2	1 4 3 2	SLS = 0110 becomes Rotated SLS = 0011 SLS = 1011 becomes Rotated SLS = 1101
Bit 1	No rotation is performed because bit 1 is the existing LSB	-

This parameter is used for ITU messages on a per-linkset basis.

Range:

1 - 4

Default:

1

sltset (optional)

SLTM record. The SLTM record to be associated with the linkset.

Range:

0 - 20

0 –sets the linkset to SLT reflect mode

Default:

1 - ANSI

2 - ITU

spc (optional)

ANSI secondary point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

spc/spca/spci/spcn/spcn24/spcn16 (optional)

Secondary point code.

spci (optional)

ITU international secondary point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

spcn (optional)

ITU national secondary point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

spcn24 (optional)

24-bit ITU national secondary point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

spcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*.

Range:

000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

tpsalmtype (optional)

IPSG IPTPS threshold alarm type. The IPTPS threshold that can be alarmed.

Range:

slktps

the SLKTPS/RSVDSLKTPS threshold is alarmed

maxslktps

the MAXSLKTPS threshold is alarmed

System Default:

slktps

Example

Adds linkset WY64438 with APC 144-201-1 AND LIST C:

```
ent-ls:lsn=wy644368:apc=144-201-001:lst=c
```

Adds linkset LSITUA1 with APCN 5 and LST C. The APCN uses a four-part format where the maximum number of bits in each position is defined by the `chg-stpopts:npcfmti` parameter:

```
ent-ls:lsn=lsitua1:apcn=5-5-5-1:lst=c
```

Adds linkset EXP123 with APCN 2-3-4-5-aa, which has a duplicate point code group of *aa* and linkset type *a*. The ITU national duplicate point code (ITUDUPPC) feature is turned on, so the ITU national point code contains a group code:

```
ent-ls:lsn=exp123:apcn=2-3-4-5-aa:lst=a
```

Add a linkset in which all applicable MSUs arriving on the linkset are screened using the GSM MAP screening feature:

```
ent-ls:lsn=lsitu1:apcn=5000:lst=a:gsmscrn=on
```

Adds linkset LSN24 with 24-bit ITU-N APCN24 10-100-10 and linkset type *a*:

```
ent-ls:lsn=lsn24:apcn24=10-100-10:lst=a
```

Adds linkset LSA2 with private APC p-1-2-4:

```
ent-ls:lst=a:lsn=lsa2:apc=p-1-2-4
```

Adds linkset LSN410234 with private and spare APCN ps-1-1-1-2047-aa:

```
ent-ls:lst=b:lsn=lsn410234:apcn=ps-1-1-1-2047-aa
```

Adds linkset LSI00001 with spare APCI s-1-1-209-7:

```
ent-ls:lst=b:lsn=lsi00001:apci=s-1-1-209-7
```

Adds linkset LSN24 with APCN24 10-100-10 with an APCNTYPE of *itunchina* and linkset type *a*:

```
ent-ls:lsn=lsn24:apcn24=10-100-10:lst=a:apcntype=itunchina
```

Adds linkset LSA using the global title translation mode CGACDCD:

```
ent-ls:lsn=lsa:lst=a:apca=1-1-1:gttmode=cgacdcd
```

Enables random SLS generation for Class0 and Class1 SCCP traffic on ITU linkset LSA:

```
ent-ls:lsn=lsa:lst=a:apci=1-1-2:randsls=all
```

Adds a linkset in which calling party global title modification is required for all GT routed MSUs arriving on the linkset:

```
ent-ls:lsn=ls2:apc=2-2-2:lst=a:cggtmod=yes
```

Adds an IPSG-M3UA linkset:

```
ent-ls:lsn=ls1201:apc=10-10-10:lst=a:adapter=m3ua:ipsg=yes:slktps=100
```

Adds an IPSG-M2PA linkset:

```
ent-ls:lsn=lsm2pa:apc=5-6-7:lst=c:ipsg=yes:slktps=300
```

Adds a linkset and sets the Incoming SLS Bit Rotation on the 2nd Bit:

```
ent-ls:lsn=lsa:lst=a:apci=1-1-2:islsrsb=2
```

Adds linkset LSA using GTT mode FCDFCG when the Flexible Option Based Routing (FLOBR) feature is turned on:

```
ent-ls:lsn=lsa:lst=a:apca=1-1-1:gttmode=fcdfcg
```

Adds ANSI linkset LSA and sets the Incoming SLS Bit Rotation to the 6th bit (the 6th bit in the SLS is used as the LSB):

```
ent-ls:lsn=lsa:lst=a:apca=1-1-1:islsrsb=6
```

Converts the linkset to SLT reflect mode:

```
ent-ls:lsn=ls1:lst=a:apca=1-1-1:sltset=0
```

Add linkset LS1 with 16-bit ITU-N APCN16 120-11-12 and sets linkset to SLT reflect mode:

```
ent-ls:lsn=ls1:lst=a:apcn16=120-11-12:sltset=0
```

Dependencies

The value specified for the apc parameter must be a full point code.

The specified adjacent point code cannot exist as an alias point code.

If the gwsa=on, gwsm=on, and gwsd=on parameters are specified, the scrn parameter must be specified.

The specified adjacent point code cannot be the same as the self-ID destination point code of the STP.

The specified adjacent point code cannot be the same as any self-ID capability point codes of the STP.

If the system is configured for ANSI point codes, and the nc=0 parameter is specified, then the value of the ni parameter must be 6 or greater.

The specified linkset name cannot already exist in the database.

The specified adjacent point code cannot be assigned to any other linkset.

Private (p-) and private and spare (ps-) point codes can be assigned only to IPGW linksets (the ipgwapc=yes parameter is specified).

The maximum number of linksets that can be defined in the system is 1024.

The specified screen set (scrn parameter) must exist in the database.

If the gwsd=on parameter is specified, the gwsa=on parameter must be specified.

If a destination point code matching the specified far-end point code exists, the far-end CLLI for the given linkset must match the destination identifier (DI) of that matching destination.

The mtprse parameter can be specified only if the MTP Restart feature MTPRS (for ANSI) is turned on. The `rtrv-feat` command can be used to verify whether the feature is turned on (mtprs=yes in the output).

If the ipgwapc=yes parameter is specified or the ipsg=yes and the adapter=m3ua parameters are specified, then the mtprse=yes parameter cannot be specified.

The asl8=yes parameter can be assigned only to an ANSI linkset (a linkset containing an adjacent point code in the SS7 domain).

The apcntype parameter can be specified only for ITU-N and ITU-N24 linksets.

The Other CIC (Circuit Identification Code) Bit Used feature (SLSOCB) feature must be turned on before the slsocbit parameter can be specified.

The slsocbit parameter is valid only for ITU linksets.

The slsrsb parameter is valid only for ITU linksets.

The GSM Map Screening feature must be turned on (see the `enable/chg-ctrl-feat` commands) before the gsmscrn parameter can be specified.

The itutfr parameter is valid only for ITU linksets.

The ITU National Duplicate Point Code (ITUDUPPC) feature must be turned on before the multgc=yes parameter can be specified.

The multgc=yes parameter is valid only for ITU-N or ITU-I point codes.

The iptps parameter must be specified for IPGWx linksets.

The iptps parameter cannot be specified for linksets that are not IPGWx.

The specified iptps parameter value must be divisible by 10.

If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 1,000,000.

The ipgwapc=yes or the ipsg=yes parameter must be specified before the lsusealm parameter can be specified.

The ipgwapc=yes or the ipsg=yes parameter must be specified before the slkusealm parameter can be specified.

The Enhanced GSM Map Screening feature must be turned on before the gsmscrn=on parameter can be specified for an ANSI linkset.

The mtprse parameter can be specified only if the MTP Restart feature ITUMTPRS (for ITU), is turned on. The `rtrv-feat` command can be used to verify whether the feature is turned on (itumtprs=yes in the output).

A point code cannot be assigned to a linkset as an APC if the point code has been provisioned with exception routes.

An APC cannot be assigned to an IPGWx linkset that is already assigned to a route involving another linkset.

The Origin-based SCCP Routing feature must be turned on before the gttmode parameter can have a value of *acdcd*, *cgacdcd*, *acdcgcd*, *acdcdcg*, *cgcd*, *cdcg*, or *cg*.

A new IPGW linkset cannot be entered if it contains an APC that is already configured in a routing key. An SAPC cannot be added to an existing IPGW linkset if the new SAPC is already configured in a routing key.

If APCN is specified for the Adjacent Point Code then the format of APCN must match the format dictated by the NPCFMTI parameter via the CHG-STPOPTS command.

The value of the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must exist in the Destination Point Code table.

The gsmscrn parameter can be specified only for ITU linksets.

The value specified for the spc parameter must be a full point code.

If the Multiple Linksets to a Single Adjacent Point Code (MLS) feature is enabled and turned on, then a maximum of 6 non-IPGW linksets can be created using the same adjacent point code.

The values specified by the spc and apc parameters must have the same network type.

The Multiple Linksets to a Single Adjacent Point Code (MLS) feature must be turned on before the spc parameter can be specified.

The value specified by the spc parameter must already exist in the SPC table.

The SPC table must be accessible.

The specified combination of the apc and spc parameters must be unique for each linkset.

The value specified for the spc parameter cannot already be specified as a secondary point code for an adjacent destination point code.

The Proxy Point Code feature must be enabled before the lst=prx parameter can be specified.

The Proxy Point Code feature must be enabled before the ppc parameter can be specified.

The value specified for the ppc parameter must be a full point code.

The lst=prx parameter must be specified before the ppc parameter can be specified. If the lst=prx parameter is specified, then the ppc parameter must be specified.

The values specified for the apc and ppc parameters must have the same network type.

The values specified for the apc and ppc parameters must have the same group code.

The spc and ppc parameters cannot be specified together in the command.

The ppc parameter cannot be specified for more than 10 linksets.

Two adjacent point codes cannot reference each other as proxy point codes.

Only one IPGWx linkset can be created for an adjacent destination point code.

The apc parameter and the prx=yes parameter must be specified before the ppc parameter can be specified.

If the ipgwapc=yes parameter is specified, then the ppc parameter cannot be specified.

If an IPGW linkset is used, then the lst=prx parameter cannot be specified.

If the ipgwapc=yes parameter is specified, then the spc parameter cannot be specified.

The spc and ppc parameters cannot be specified together in the command.

All of the linksets for an adjacent destination point code must be of the same type.

The specified combination of the apc and ppc parameters must be unique for each linkset.

The value specified for the proxy point code must be defined in the Destination table before the lst=prx parameter can be specified.

If multiple linksets are defined for the apc parameter, and if a proxy point code is defined for the apc parameter, then the first linkset defined in the `ent-ls` command must use the proxy point code.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The ipgwapc=yes and ipsg=yes parameters cannot be specified together in the command.

The ipsg=yes parameter must be specified before the adapter parameter can be specified.

The ipsg=yes and adapter=m3ua parameters must be specified before the asnotif parameter can be specified.

The ipsg=yes and the adapter=m3ua parameters must be specified before the rcontext parameter can be specified.

The ipgwapc=yes parameter must be specified before an invalid point code (ANSI network = 0) can be specified as an APC.

If the ipsg=yes parameter is specified, then the slktps/rsvdslktps or maxslktps parameter must be specified.

The ipsg=yes parameter must be specified before the slktps/rsvdslktps or maxslktps parameter can be specified.

The ipsg=yes and adapter=m3ua parameters must be specified before the lst=a parameter can be specified.

A maximum of one IPGW linkset or a maximum of 6 of any other linksets are allowed between any APC and the EAGLE.

If the ipsg=yes and adapter=m3ua parameters are specified, then the multgc=yes parameter cannot be specified.

The ISLSBR feature must be enabled before the islsrsb parameter can be specified.

The FLOBR feature must be turned on before a value of *fcd*, *fcg*, *fcgfcd*, or *fcdfcg* can be specified for the gttmode parameter.

The rsls8=yes parameter (see the `chg-lsopts` command) must be specified for an ANSI linkset before a value greater than 5 can be specified for the islsrsb parameter.

If an ITU linkset is used, then a value of 1 – 4 must be specified for the islsrsb parameter.

The value specified for the slktps/rsvdslktps parameter must be less than or equal to the value specified for the maxslktps parameter.

The value specified for the ppc parameter must already exist in the DSTN table and the prx=yes parameter must be assigned (see the `ent-dstn` command).

The sltset=0 parameter can be specified only for a type A linkset (lst=a).

The value specified for the slktps/rsvdslktps and maxslktps parameters must be within the allowed range.

The ITUTFR **cannot** be specified for a linkset to be configured for APCN16.

The NIS **cannot** be specified for a linkset to be configured for APCN16.

The PPC specified must not be a private point code.

The MTP Restart Equipped (MTPRSE) parameter is only valid for adjacent ANSI nodes in the SS7 domain.

The adapter type specified must be either m3ua or m2pa.

Notes

Of the 1024 maximum linksets supported, up to 255 of the linksets can be gateway linksets.

The system supports a maximum of 700 links. If more then 700 linksets are defined, a maximum of 700 of the defined linksets can be in use at any one time.

The links that directly connect the system with an adjacent node are grouped into one or more linksets. A linkset can contain up to 8 (international standards) or 16 (national standards) signaling links, depending on how the system was configured when the network was created.

Each linkset must be assigned the same physical links at both ends of the link (local and adjacent signaling points) and each link must be assigned the same link number.

Signaling link acknowledgments (SLTA) are the same type of maintenance message as the SLTMs received on the link.

If the gwsa=off and gwsm=off parameters are specified, all MSUs are passed.

If the gwsa=off and gwsm=off parameters are specified for all linksets, gateway screening and the GWS redirect function for the DTA feature are disabled.

If the gwsa=off and gwsm=on parameters are specified, all MSUs pass, but MRNs are generated if an MSU matches a screening condition.

If the gwsa=on and gwsm=off parameters are specified, MSUs are screened but messages are not generated.

If the gwsa=on and gwsm=on parameters are specified, MSUs are screened and MRNs are generated at the rate of one MRN every 20 seconds per link.

If the asl8=yes parameter is specified with the lst=a parameter (a linkset containing access signaling links), this indicates that the originator of the MSUs is generating 8-bit SLSs. For other linkset types, the asl8=yes parameter indicates that the adjacent STP is converting 5-bit SLSs to 8-bit SLSs. The SLS in MSUs received by the system on a linkset that has the asl8=yes parameter assigned to it will not be converted. These MSUs are assumed to contain 8-bit SLSs.

The Network Indicator Spare (nis) parameter can be specified only for ANSI and ITU-N links.

The mtprse parameter value can be specified independently of the value specified on the mtprsi parameter of the `chg-stpopts` command.

The MTP restart option (mtprse) is not a valid option on point-to-multipoint IP links (DCM cards equipped as SS7IPGW links).

When two linksets are used as a combined linkset, each linkset must have the same slsci and asl8 values and the same slsocbit and islsrsb/slsrsb values.

Caution: This is not enforced in the system and there is no warning mechanism if the values of these parameters are not the same for each linkset.

MTP restart provides an orderly process for bringing signaling links back into service after the system has been isolated and restarted. A greater preference is given to restoring the STP to network service in an orderly fashion than to the speed of recovery. The time required is system dependent as shown:

- up to 64 LIMs—62 seconds (Link Alignment Delay)
- 64 - 127 LIMs—97 seconds
- 128 - 191 LIMs—132 seconds
- more than 191 LIMs—167 seconds

The slsrsb parameter alone does not provide an even distribution of ITU-ISUP messages across all links within a linkset. The system uses all four bits of the SLS to determine the actual link to route messages. Because the static bit is simply rotated within the SLS, all possible values of the SLS field are still not realized. The slsocbit parameter must also be specified to provide an even distribution across all links within the linkset. If both parameters are specified for a given linkset, the SLS field is processed in the following order.

- The SLS is modified using the Other CIC Bit option.
- The modified SLS is modified again using the Rotated SLS Bit option.
- The modified SLS is used by the existing linkset and link selection algorithms to select a link

- The ISUP message is sent out the link containing the original, unmodified SLS field.

If the ITU National Duplicate Point Code (ITUDUPPC) feature is turned on, for each group that is defined, a separate ITU national C linkset must be provisioned. The C linkset is used as the alternate route for point codes in the group.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All point code types support the private (internal) point code subtype prefix (p-).

The ITU National and ITU National China Adjacent Point Code types indicate the format that is used for changeover and changeover acknowledgement messages. China specifies a 16-bit field for data in changeover messages. The FSN occupies the first 12 bits. The trailing 4 bits are spare and are coded as 0. ITU uses a 24-bit field for data in the extended changeover/changeover acknowledgement messages. The FSN is encoded in the first 12 bits. The last 12 bits of the field are spare and are coded as zero.

The randsls parameter value applies to SCCP ITU-T messages and Class0 and ISUP ANSI messages when random SLS generation is set to occur on a per linkset basis (the randsls=perls parameter is specified in the `chg-stpopts` command).

If the randsls=perls parameter is specified in the `chg-stpopts` command, it is recommended that the linksets in a combined linkset be provisioned with the same randsls value to avoid undesired SLS distribution.

The value specified for the ppc parameter must be a full point code. Cluster point codes and private point codes are not supported.

Invalid point codes (ANSI network = 0) can be used for the adjacent point code of an IPGWx linkset. Private point codes (p-) can be used for IPGWx linksets, as adjacent point codes (`ent-ls:apc=xxx`) or internal point codes (`ent-rmt-appl:ipc=xxx`). Ordinary point codes can be used in all cases as APCs or IPCs.

If the ISLSBR feature is turned on, and Incoming SLS Bit Rotation is applied to an MSU, then the outgoing SLS bit rotation is not applied for that MSU. If the ISLSBR feature is turned off, or Incoming SLS Bit Rotation is not applied to an MSU, then the outgoing SLS bit rotation is applied for that MSU.

The valid ISLSRSB values for ITU link sets are 1 – 4 and for ANSI link sets are 1 – 8.

The randsls parameter is applied on an incoming linkset for ANSI messages and on an outgoing linkset for ITU messages.

Output

`ent-ls:lsn=lsa:lst=a:apca=1-1-1:gttmode=fcdfcg`

```
    tekelecstp 09-03-22 12:14:11 EST  EAGLE 41.0.0
    Link set table is (1 of 1024) 1% full.
    ENT-LS: MASP A - COMPLTD
;
```

Related Commands

chg-ls, *chg-lsopts*, *dlt-ls*, *ent-dstn*, *rtrv-ls*

ent-map

Enter Mate Applications

Use this command to create new entries in the MAP table, which allow the assignment of mated applications and Alternate RI Mate searches for use with SCCP network management. A mated application is used if the local application becomes unavailable. An Alternate RI Mate is used if all mated applications within a MAP Set become unavailable or congested.

Note: A MAP set is a logical grouping of a set of PC/SSNs that already exist in the EAGLE MAP table. The Flexible GTT Load Sharing (FGTTLS) feature allows a PC/SSN combination to be part of more than one load-sharing group, with each PC/SSN combination defined by a different MAP set.

Note: If the FGTTLS feature is enabled, then all existing entries in the MAP table and all existing GTA translations in the GTT table with ri=ssn are stored in default MAP sets. Additional MAP sets can be provisioned, and GTT entries can be associated to the MAP sets.

Note: The GTT Load Sharing with Alternate Routing Indicator (GTT LS ARI) feature must be enabled to provision Alternate RI Mates.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

pc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (mandatory)

Primary remote point code.

pci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (mandatory)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (--).

un---000---127

sna---000---15

mna---000---31

ssn (mandatory)

Subsystem number. The application's subsystem number. This attribute is composed of the decimal representation of the 1-byte field used in the SS7 protocol.

Range:

2 - 255

grp (optional)

Concerned point code broadcast list (CSPC) group name. The name of a group of point codes that should be notified of the subsystem status. A different CSPC group can be assigned to each mated PC/SSN. For ANSI, the EAGLE broadcasts SSP or SSA to the mate subsystem only if the mate's point code is provisioned as part of the CSPC group to receive an SSP or SSA. This parameter must be provisioned for a node if the node is to receive SSP or SSA broadcasts, even if the node is a mated application.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

Default:

No broadcast list for this mated application.

mapset (optional)

MAP Set ID.

Range:

dflt

new

Default:

dflt if the FGTTLS feature is not enabled

materc (optional)

Mate relative cost. The RC assigned to the mate PC/SSN that is being added to the entity set. The EAGLE determines the multiplicity mode based on the relative costs (the rc and materc parameters) of the subsystem.

Range:

0 - 99

Default:

50

mpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

mpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Default:

000

mpc/mpca/mpci/mpcn/mpcn24/mpcn16 (optional)

Mate remote point code.

mpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Default:

0-000-0

mpcn (optional)

ITU national point code with subfield ITU number (*nnnnn*). The *prefix* subfield indicates a spare point code.

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

Default:

00000

mpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

Default:

000

mpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (--).

un---000---127

sna---000---15

mna---000---31

Default:

000

mrc (optional)

Message routing under congestion. This parameter indicates whether Class 0 messages to the specified PC/SSN can be routed to the next preferred node/subsystem when that PC/SSN is congested.

Range:

yes

no

Default:

yes —if ANSI

no —if ITU

mrnpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

mrnpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Default:

000

mrnpc/mrnpca/mrnpci/mrnpcn/mrnpcn24/mrnpcn16 (optional)

Alternate RI Mate point code.

mrnpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Default:

0-000-0

mrnpcn (optional)

ITU national point code with subfield ITU number (*nnnnn*). The *prefix* subfield indicates a spare point code.

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

Default:

00000

mrnpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

Default:

000

mrnpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000--127

Specify a valid value for each subfield of the point, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000--31

Default:

000

mrnset (optional)

Alternate RI Mate MRN Set ID. The MRN Set where the Alternate RI Mate search is performed.

Range:

1 - 3000, dflt

dflt —default MRN Set

If the mrnpc parameter is specified, and the mrnset parameter is not specified, then the value for the mrnset parameter is automatically set to *dflt*.

mssn (optional)

Mate subsystem number. The mate application's subsystem number. This attribute is the decimal representation of the one-byte field used in the SS7 protocol.

Range:

2 - 255

Default:

Parameter is not used

mwt (optional)

Mate point code weight. The weight assigned to the mate PC/SSN that is being added to a weighted entity set.

Range:

1 - 99

rc (optional)

Relative cost. The EAGLE determines the multiplicity mode based on the relative costs (the rc and materc parameters) of the subsystem. (See*Notes* for additional information on multiplicity modes).

Range:

0 - 99

Default:

10

srm (optional)

Subsystem routing messages. This parameter specifies whether subsystem routing messages (SBR, SNR) are transmitted between the mated applications.

Note: This value can be provisioned in any of the multiplicity modes, but its value only affects traffic if the multiplicity mode is *DOM* or *COM*. See the *Notes* section for more information on multiplicity modes.

Range:

yes

no

Default:

yes —if ANSI

no —if ITU

sso (optional)

Subsystem status option. This parameter specifies whether or not the PC/SSN is to initiate a subsystem test when a RESUME is received for the PC.

Range:

on

off

Default:

off

thr (optional)

Threshold. The in-service threshold assigned to each PC/SSN in a weighted entity set or RC group. The Weighted GTT Loadsharing feature must be turned on before this parameter can be specified.

Note: If this parameter is not specified, a value of 1% is assigned to each weighted PC/SSN.

Range:

1 - 100

wt (optional)

Weight. The weight assigned to the primary PC/SSN that is being added to the weighted entity set.

Range:

1 - 99

Example

In this example, the rc parameter is not required for a solitary PC/SSN pair. If the rc parameter is not specified, the relative cost defaults to 10.

```
ent-map:pc=1-1-1:ssn=10:grp=xyz
```

This example enters 1 and 1 into the MAP table. The rc and materc parameters are required for this command, which defines a map group.

```
ent-map:pc=1-1-0:ssn=10:rc=10:mpc=1-1-1:mssn=10:materc=20:grp=xyz:srm=on
```

These examples enter a solitary point code in the MAP table with the Subsystem Status Option set to ON:

```
ent-map:pc=1-1-3:ssn=20:grp=abc:sso=on
```

```
ent-map:pc=2-2-3:ssn=20:grp=abc
```

This example sets the Subsystem Status Option to ON for the primary and mate:

```
ent-map:pc=1-1-4:ssn=10:rc=10:mpc=1-1-1:mssn=10:materc=20:sso=on
```

This example enters a solitary point code in the MAP table with the Subsystem Status Option set to OFF (the default):

```
ent-map:pc=1-1-6:ssn=10:rc=10:mpc=1-1-7:mssn=10:materc=20
```

This example creates a new MAP Set with Alternate RI Mate 1-1-3/1:

```
ent-map:pc=1-1-1:ssn=15:rc=10:mpc=1-1-2:mssn=25:materc=20:mapset=new:mrnset=1:mrnpc=1-1-3
```

The following example creates a new MAP set, and enters 1 and 1 into the newly created MAP set:

```
ent-map:pc=1-1-1:ssn=10:rc=10:mpc=1-1-2:mssn=20:materc=20:mapset=new
```

The following example enters 1 and 1 into the default MAP set:

```
ent-map:pc=1-1-1:ssn=15:rc=10:mpc=1-1-2:mssn=25:materc=20:mapset=dflt
```

The following example creates a new MAP set and enters a solitary PC/SSN value of 1:

```
ent-map:pc=1-1-1:ssn=10:mapset=new
```

This example enters a solitary PC/SSN of 1 into the default MAP set:

```
ent-map:pc=1-1-2:ssn=15:mapset=dflt
```

This example creates a new MAP set and enters a solitary PC/SSN 1 with the subsystem option ON. It specifies the sso=on parameter for all instances of PC/SSN 1:

```
ent-map:pc=1-1-1:ssn=10:sso=on:mapset=new
```

This example enters a solitary PC/SSN of 1 into the default MAP set with the subsystem option ON. The sso=on parameter is specified for all instances of PC/SSN 1:

```
ent-map:pc=1-1-3:ssn=15:sso=on:mapset=dflt
```

These examples create a weighted shared PC/SSN pair:

```
ent-map:pc=1-1-1:ssn=10:rc=20:wt=30:mpc=1-2-1:mssn=10:materc=20:mwt=20
```

```
ent-map:pc=1-1-1:ssn=10:rc=20:wt=30:mpc=1-2-1:mssn=10:materc=20:mwt=20:thr=40
```

This example creates a new MAP Set with a different ITU network type point code for the Alternate RI Mate PC:

```
ent-map:pci=1-001-1:ssn=15:rc=10:mpci=1-001-2:mssn=25:materc=20:mapset=new:mrnpcn=00126:
mrnset=2
```

Example for 16 bit PC:

```
ent-map:pcn16=1-2-3:ssn=10:rc=20:wt=30:mpcn16=1-1-1:mssn=10:materc=20:mwt=20:thr=40
```

Dependencies

The PC/SSN pair cannot already exist in the MAP table.

The specified MPC/MSSN pair cannot already exist in the MAP table.

The apca and pcn24/pcn16 parameters cannot be specified for the same MAP set. The pci and pcn parameters cannot be specified for the same MAP set if the MAP set contains a true point code.

If a subsystem is configured for a subsystem number (SSN) value in the SS-APPL table, then the specified MAP table entry for that subsystem must be a valid point code type for that subsystem. The following point code types are not valid for the indicated subsystems:

- For the INP subsystem, the True Point code cannot be an ITU-I point code.
- For the AIQ, ATINPQ, VFLEX, and EIR subsystems, the True Point code cannot be an ITU-N24 point code.

The ANSI/ITU SCCP Conversion feature must be enabled before the network type of the CPC broadcast group can be different from the network type of the point code.

If the pci, pcn, or pcn24/pcn16 parameter is specified, then the srm=yes parameter cannot be specified.

The primary remote point code must already exist in the Route table, as a destination in the ordered route entity set, or in a cluster destination for which ordered routes are specified.

If a CSPC broadcast list group name is specified, it must already exist.

A maximum of 1024 unique remote point codes are allowed.

A maximum of 12 SSNs per remote point code can be entered.

The primary subsystem DPCs must be full point codes.

The mate subsystem DPCs must be full point codes.

The LNP, V-Flex, EIR, or INP feature must be turned on or the ANSI41 AIQ or ATINP feature must be enabled before a value that is a true point code can be specified for the pca/mpca parameter.

The AINPQ, EIR, INP, or V-Flex feature must be turned on or the ANSI41 AIQ or ATINP feature must be enabled before a value that is a true point code can be specified for the pcn/mpcn parameter.

The EIR or V-Flex feature must be turned on or the ANSI41 AIQ or ATINP feature must be enabled before a value that is a true point code can be specified for the pci/mpci parameter.

If the mpc/mpca/mpci/mpcn/mpcn24/mpcn16 parameter is specified, then the value must exist in the Routing table.

If the mssn or materc parameter is specified, then the mpc parameter must be specified.

If the pc parameter value is an EAGLE true point code, the subsystem must have a lower relative cost than all other mated subsystems in the group.

The sso parameter cannot be specified with a point code value that is the system true point code.

A true point code cannot be routed to itself.

The mpc and mssn parameters cannot have the same values as the pc and ssn parameters.

The point code must already exist in the Concerned Point Code (CSPC) group.

The number of MPC Subsystem entries must not exceed the table capacity.

If the Flexible GTT Load Sharing feature is not enabled, then the mapset parameter cannot be specified. If the Flexible GTT Load Sharing feature is enabled, then the mapset parameter must be specified.

The EAGLE True PC can be provisioned only in the default MAP set.

The Weighted GTT Loadsharing feature must be turned on before the wt, mwt, or thr parameters can be specified.

If the thr parameter is specified, the wt and mwt parameters must be specified.

If the mpc parameter is specified, the rc parameter must be specified.

The wt and mwt parameters must be specified together in the same command.

If the materc parameter value equals the rc parameter value, a Loadshared Group is indicated, and the rc, mpc, materc, and mwt parameters must be specified.

If the `chg-sid:pctype=ansi` command is entered, a value of *ni=000* cannot be specified.

If the `chg-sid:pctype=ansi` command is entered, and a value of *ni=001 – 005* is specified, a value of *nc=000* cannot be specified.

If the mpc parameter value is a true point code, the subsystem must have a lower RC than all other mated subsystems in the entity set.

The maximum number of entries in the MAP table cannot be exceeded.

The maximum number of possible entries in the MAP table for the specified True Point Code cannot be exceeded. Maximum entries for the ANSI, ITU-I, and ITU-N point codes are:

- ANSI—2 (ANS41 AIQ and LNP), 4 (ANSI41 AIQ, ATINPQ, INP, and V-FLEX)
- ITU-I—4 (ANSI41 AIQ, ATINPQ, EIR, V-FLEX)
- ITU-N—5 (ANSI41 AIQ, ATINPQ, EIR, INP, and V-FLEX)

Note: LNP is mutually exclusive with ATINPQ and V-FLEX, unless the Dual ExAP Config feature is enabled.

If the mwt parameter is specified, the mpc parameter must be specified.

If the mpc parameter is specified, the mssn and materc parameters must be specified.

The entity set being created must be either solitary or dominant to use the true point code as a point code.

If the thr parameter is specified, the rc1, rc2, rc3, and rc4 parameters must be of equal value.

If the mpc parameter is specified, then the mssn parameter must be specified.

SRM=YES cannot be entered with ITU point codes.

If the mpc or mssn parameter is specified, then the materc parameter must be specified.

If the pc/ssn parameters and the mpc/mssn parameters are specified, then the rc parameter must be specified.

If the pcn or mpcn parameter is specified, then the format of the parameter must match the format dictated by the `chg-stpopts:npcfmti` command.

A True PC cannot be routed to itself.

The Spare Point Code Support feature must be enabled to allow provisioning of an ITU-I or ITU-N spare point code.

The True Point Code can be provisioned only in the default MAPSET.

The values specified for the pc and mpc parameters cannot be associated with proxy point codes.

If the mrnset parameter is specified, then the mrnpc parameter must be specified.

The GTT LS ARI feature must be enabled before the mrnset or mrnpc parameters can be specified.

The value specified for the mrnpc/mrnpca/mrnpci/mrnpcn/mrnpcn24/mrnpcn16 parameter must be a full point code.

The point codes and alternate RI Mate point codes must have the same network type as shown:

- ITUI, ITU-N, ITU-I spare, ITU-N-spare—ITUI, ITU-N, ITU-I spare, ITU-N-spare
- ANSI—ANSI
- ITUN-24—ITUN-24
- ITUN-16 ---ITUN-16

The value specified for the mrnset parameter must already exist in the MRN table.

The value specified for the mrnpc parameter must already exist in the specified MRN Set.

The mrnset parameter cannot be specified if the MAP Set specified by the mapset parameter contains a True Point Code.

The `ent-map` command will reject provisioning of local subsystem for ITUN16 SID, so that ITUN16 MSUs won't be forwarded to Local Subsystems.

Notes

Up to 32 PC/SSN pairs can be entered into a mated PC/SSN group.

Multiplicity Modes

For the `-map` commands, an entity set consists of a group of PC/SSNs that are used for traffic distribution, and an RC group consists of PC/SSNs within an entity set that have the same RC. In *loadsharing* mode, an entity set contains 1 RC group. In *combined loadsharing/dominant* mode, an entity set can contain multiple loadsharing groups.

Note: For *dominant* and *combined loadsharing/dominant* modes, the PC/SSN in the MAP table where traffic distribution initializes is determined by the result of GTT translation and is referred to as the preferred PC/SSN. The preferred PC/SSN may not be the lowest cost entry.

The EAGLE supports the following multiplicity modes for nodes/subsystems:

- When a PC/SSN pair is not replicated, the pair is in *solitary* (SOL) mode. The subsystem acts as the only application, with no backup. If this subsystem fails, messages routed to it are discarded and SCCP management returns “Subsystem Unavailable” messages to the originator.
- A group of replicated PC/SSN pairs are in *dominant* (DOM) mode if each PC/SSN pair in the group has a unique RC. The specified subsystem with the lowest RC acts as the primary subsystem, while the mate subsystem acts as a backup.
- A group of replicated PC/SSN pairs are in *load sharing* (SHR) mode if each PC/SSN pair in the group has the same RC. All messages are evenly distributed at the SCCP level to all nodes/subsystems in the group. If failure occurs, the non-affected subsystem assumes the load of its failed mate.
- The *combined load sharing/dominant* (COM) mode supports a combination of load sharing and dominant mode. A group of PC/SSN pairs are in COM mode when at least two of the PC/SSN pairs have the same RC and another node subsystem in the group has a different RC.

If the XMAP feature is enabled, the MAP table can have up to either 2000 or 3000 entries, depending on the controlled feature Part Number that is enabled. If XMAP is not enabled, the MAP table can contain up to 1024 user entries.

The sso parameter changes the initialization of the subsystem status (“prohibited” or “allowed”) for PC/SSN MAP entries. The EAGLE previously marked the subsystem status “allowed” for each PC/SSN entry. The sso parameter marks the subsystem status “prohibited” for each new entry that has sso=on. This causes the EAGLE to generate an SST to the remote point-code when an MTP-RESUME is received. Upon reception of an SSA, the subsystem status is marked “allowed”.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

When the Flexible GTT Load Sharing feature is on, MAP load sharing sets are supported. Each set is identified by the mapset parameter.

When the Weighted GTT Loadsharing feature is turned on, weighted entity sets and RC groups are supported, and threshold values can be assigned to each PC/SSN.

When the GTT Load Sharing with Alternate Routing Indicator feature is enabled, an Alternate RI Mate can be provisioned.

Output

```
ent-map:pc=1-1-1:ssn=10:rc=10:mpc=1-1-2:mssn=20:materc=20:mapset=new
```

```
    tekelecstp 11-03-22 11:22:28 EST  EAGLE 44.0.0
    ent-map:pc=1-1-1:ssn=10:rc=10:mpc=1-1-2:mssn=20:materc=20:mapset=new

    Command entered at terminal #4.
    ENT-MAP: MASP A - MESSAGE: EXTENDED PROCESSING REQUIRED

    New MAPSET Created : MAPSETID = 362
    ENT-MAP: MASP A – COMPLTD
;
```

```
ent-map:pc=1-1-1:ssn=10:rc=10:mapset=dflt:mrnset=1:mrnpc=1-1-2
```

```
    tekelecstp 11-03-12 11:22:28 EST  EAGLE 44.0.0
    ent-map:pc=1-1-1:ssn=10:rc=10:mapset=dflt:mrnset=1:mrnpc=1-1-2
    Command entered at terminal #4.
    ENT-MAP: MASP A - MESSAGE: EXTENDED PROCESSING REQUIRED
    ENT-MAP: MASP A - COMPLTD
;
```

```
ent-map:pc=1-1-1:ssn=100:rc=10:mrc=no:srm=no
```

```
    tekelecstp 11-03-12 11:22:28 EST  EAGLE 44.0.0
    ent-map:pc=1-1-1:ssn=100:rc=10:mrc=no:srm=no
    Command entered at terminal #4.
    ENT-MAP: MASP A - MESSAGE: EXTENDED PROCESSING REQUIRED
    CAUTION: THE VALUE OF SRM IS EFFECTIVE WHEN MULT IS COM OR DOM AND
    THE VALUE OF MRC IS EFFECTIVE WHEN MULT IS DOM.
    ENT-MAP: MASP A - COMPLTD
;
```

Related Commands

chg-map, *dlt-map*, *rtrv-map*

ent-mrn — Enter Mated Relay Node

Use this command to assign point codes and Alternate RI Mates in the Mated Relay Node (MRN) table. The Intermediate GTT Loadsharing feature must be on before this command can be entered. The GTT Load Sharing with Alternate Routing Indicator (GTT LS ARI) feature must be enabled to provision Alternate RI Mates.

If the Flexible GTT Loadsharing feature is enabled, use this command to create a new MRN set, or to add entries to an existing MRN set in the MRN table. If the Flexible GTT Loadsharing feature is turned on, then MRN sets are used.

Note: If only the Intermediate GTT Loadsharing feature is turned on, the MRN table can contain a maximum of 3000 entries. If the Intermediate GTT Loadsharing feature is on and the Flexible GTT Loadsharing feature is enabled, the MRN table can contain a maximum of 6000 entries.

Caution: If any entries are provisioned in the SCCP-SERV table, the maximum number of entries that the MRN table can contain is reduced by that amount. Check the `rtrv-sccp-serv` command output to see if entries exist in the SCCP-SERV table.

Note: An MRN set is a logical grouping of PCs that already exist in the EAGLE MRN table. The Intermediate GTT Loadsharing feature allows PCs to be part of more than one load-sharing group, with each PC defined by a different MRN set. If the Intermediate GTT Loadsharing feature is enabled, then all existing entries in the MRN table and all existing GTA translations in the GTT table with ri=gtare stored in default MRN sets. Additional MRN sets can be provisioned, and GTT entries can be associated to the MRN sets.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

If a point code is being added to an existing weighted entity set, and the dfltwt parameter is not specified, the wt1/wt2/wt3/wt4 parameter must be specified. The wt1/wt2/wt3/wt4 parameter can only be specified if at least two of the rc/rc1/rc2/rc3/rc4 parameters are equal, creating a weighted entity set.

pc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (mandatory)

Post-GTT-translated point code.

pci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (mandatory)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

dfltwt (optional)

Default weight. The weight to be assigned to a specified PC that is not assigned a weight with the wt/wt1/wt2/wt3/wt4 parameter.

Note: If a PC weight is specified with the wt/wt1/wt2/wt3/wt4 parameter and the dfltwt parameter is specified, the default weight is ignored, and the PC is assigned the weight specified by its respective weight parameter.

Range:

1 - 99

mappc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

mappca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Default:

000

mappc/mappca/mappci/mappcn/mappcn24/mappcn16 (optional)

Alternate RI Mate point code.

mappci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Default:

0-000-0

mappcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

Default:

00000

mappcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

Default:

000

mappcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Default:

000

mapset (optional)

Alternate RI Mate MAP Set ID. The MAP Set where the Alternate RI Mate search is performed.

Range:

1 - 36000, dflt

dflt—default MAP Set

Note: If the mappc and mapssn parameters are specified, and the mapset parameter is not specified, then the mapset parameter is automatically set to a value of *dflt*.

mapssn (optional)

Alternate RI Mate subsystem number.

Range:

*2 - 255, *, none*

Default:

none

mrnset (optional)

MRN set ID.

Range:

1 - 3000, dflt, new

dflt—default MRN set

new—create a new MRN set

pc1 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca1

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc1/pca1/pci1/pcn1/pcn241/pcn161 (optional)

Alternate post-GTT-translated point code.

pc2 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca2

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc2/pca2/pci2/pcn2/pcn242/pcn162 (optional)

Alternate post-GTT-translated point code.

pc3 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca3

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc3/pca3/pci3/pcn3/pcn243/pcn163 (optional)

Alternate post-GTT-translated point code.

pc4 (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca4

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc4/pca4/pci4/pcn4/pcn244/pcn164 (optional)

Alternate post-GTT-translated point code.

pci1 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci2 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci3 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (prefix-zone-area-id).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pci4 (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn1 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn2 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn241 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn242 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn243 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn244 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn3 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn4 (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn161 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn162 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn163 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

pcn164 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

rc (optional)

Relative cost. The relative cost of the route for the primary PC.

Range:

0 - 99

rc1 (optional)

Relative cost 1. The relative cost of the route for mate PC 1.

Range:

0 - 99

rc2 (optional)

Relative cost 2. The relative cost of the route for mate PC 2.

Range:

0 - 99

rc3 (optional)

Relative cost 3. The relative cost of the route for mate PC 3.

Range:

0 - 99

rc4 (optional)

Relative cost 4. The relative cost of the route for mate PC 4.

Range:

0 - 99

thr (optional)

Threshold. The in-service threshold of all PCs in a weighted entity set or RC group. The Weighted GTT Loadsharing feature must be turned on before this parameter can be specified.

Note: If a threshold value is not specified when creating a new RC group in an existing entity set, the new RC group is assigned a threshold value of 1%.

Range:

1 - 100

wt (optional)

Weight. The weight assigned to the primary PC.

Note: If PCs are being added to an existing entity set, the wt parameter cannot be specified. If a new entity set is being created, the wt parameter can only be specified if at least two of the specified RC values are equal, which creates a weighted entity set.

Range:

1 - 99

wt1 (optional)

Weight 1. The weight assigned to the mate PC 1 that is being added to the weighted entity set.

Range:

1 - 99

wt2 (optional)

Weight 2. The weight assigned to the mate PC 2 that is being added to the weighted entity set.

Range:

1 - 99

wt3 (optional)

Weight 3. The weight assigned to the mate PC 3 that is being added to the weighted entity set. The Weighted GTT Loadsharing feature must be turned on before this parameter can be specified.

Range:

1 - 99

wt4 (optional)

Weight 4. The weight assigned to the mate PC 4 that is being added to the weighted entity set.

Range:

1 - 99

Example

This example enters point code 1 into the MRN table with a relative cost of 10 and associates point code 1 with it as a point code with a relative cost of 20.

```
ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=20
```

This example updates the group containing point code 1 in the MRN table, to add point code 1 with relative cost of 20 and point code 1 with relative cost of 30 to the group.

```
ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=20:pc2=1-1-10:rc2=30
```

These examples include spare point codes:

```
ent-mrn:pci=s-2-2-1:rc=10:pci1=s-2-2-2:rc1=11:pci2=2-100-1:rc2=12
```

```
ent-mrn:pcn=s-1-1-1-123-aa:rc=1:pcn1=1-1-1-235-aa:rc1=2:pcn2=s-1-1-1-235-aa:rc2=3
```

```
ent-mrn:pc=1-1-1:rc=10:pc1=1-1-2:rc1=10:mrnset=dflt
```

```
ent-mrn:pc=1-1-1:rc=10:pc1=1-1-2:rc1=20:pc2=1-1-3:rc2=30:apc3=1-1-4:rc3=40:apc4=1-1-5:
rc4=50:mrnset=new
```

```
ent-mrn:pc=1-1-3:pc1=1-1-6:rc1=60:pc2=1-1-7:rc2=70:mrnset=111
```

These examples create a new weighted entity set:

```
ent-mrn:pc=1-1-0:rc=10:wt=30:pc1=1-1-1:rc1=10:wt1=10
```

```
ent-mrn:pc=1-1-0:rc=10:wt=30:pc1=1-1-1:rc1=10:wt1=10:thr=50
```

```
ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=10:pc2=1-3-2:rc2=20:wt2=30:pc3=1-10-2:
rc3=20:dfltwt=20
```

```
ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=10:wt1=30:pc2=1-3-2:rc2=10:dfltwt=20:thr=60
```

```
ent-mrn:pc=1-1-0:pc1=2-2-2:rc1=20:pc2=1-1-10:rc2=30:pc3=1-3-2:rc3=10:wt3=20:
dfltwt=30
```

```
ent-mrn:pc=1-1-0:pc1=2-2-2:rc1=20:wt1=10:pc2=1-1-10:rc2=20:wt2=40:thr=30
```

```
ent-mrn:pc=1-1-0:pc1=2-2-2:rc1=20:wt1=40:pc2=1-1-10:rc2=20:pc3=1-3-2:rc3=20:
dfltwt=25:thr=30
```

```
ent-mrn:pc=1-1-0:pc1=2-2-2:rc1=20:wt1=10:pc2=1-1-10:rc2=30:wt2=40

ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=20:pc2=1-1-10:rc2=30:mapset=1:
mappc=2-1-1:mapssn=*

ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=20:pc2=1-1-10:rc2=30:mappc=2-1-1:mapssn=*

ent-mrn:pci=1-001-0:rc=10:pci1=1-001-1:rc1=20:pci2=1-001-10:rc2=30:mapset=1:
mappcn=00126:mapssn=12

ent-mrn:pcn16=1-14-0:rc=10:wt=30:pcn161=40-2-3:rc1=10:wt1=10:mrnset=dflt
```

Dependencies

The Intermediate Global Title Translation Loadsharing feature must be turned on before this command can be entered.

The apca and pcn24/pcn16 parameters cannot be specified for the same MRN set.

When a point code parameter is specified, its relative cost parameter must be specified.

Point codes cannot have the same value as the EAGLE SID.

The same point code value cannot be entered more than once in the MRN table.

ITU-N point codes must be in the format set by the npcfmti parameter of the `chg-stpopts` command. (Use the `rtrv-stpopts` command to display the STP option settings.)

Remote point codes must already exist as destinations in the Ordered Route entity set or reside in a cluster destination for which ordered routes are specified.

One or more point codes in the command will exceed the maximum number of point codes that can be entered into the MRN table (3000 if the IGTTLS feature is turned on and 6000 if the IGTTLS and FGTTLS features are turned on)..

The Flexible GTT Load-Sharing feature must be enabled before the mrnset parameter can be specified.

If the Flexible GTT Loadsharing feature is enabled, then the specified PC must already exist in the specified MRN set.

The specified MRN set must already exist in the MRN table.

When creating a new weighted entity set, the mrnset=new or mrnset=dflt parameter must be specified.

Each point code group can contain a maximum of 32 point codes.

The Weighted GTT Loadsharing feature must be turned on before the wt/wt1/wt2/wt3/wt4, thr, and dfltwt parameters can be specified.

If the wt/wt1/wt2/wt3/wt4 parameter is specified, the corresponding pc/pc1/pc2/pc3pc4 parameter must be specified.

When creating or modifying a weighted entity set, the dfltwt parameter must be specified, or an individual weight must be specified for each PC.

Entity sets in a solitary or dominant loadsharing mode cannot have weights assigned to the PCs. When creating an entity set, if all of the RC values are unique, the wt/wt1/wt2/wt3/wt4 and thr parameters cannot be specified.

If the thr parameter is specified, the rc1, rc2, rc3, and rc4 parameters must be of equal value.

If the thr parameter is specified, the associated wt/wt1/wt2/wt3/wt4 parameter or the dfltwt parameter must be specified.

At least one additional point code must be specified.

Any specified point code must be a full point code.

If the `chg-sid:pctype=ansi` command is entered, a value of *ni=000* cannot be specified.

If the `chg-sid:pctype=ansi` command is entered, and a value of *ni=001 – 005* is specified, a value of *nc=000* cannot be specified

If a new point code is being added to the MRN table, the pc and rc parameters must be specified together in the command.

If the Flexible GTT Loadsharing feature is enabled, and the mrnset=new parameter is specified, the pc and rc parameters must be specified together in the command.

If the pc1/pc2/pc3/pc4 parameter is specified, the pc parameter value must already exist in the MRN table.

A new point code that is specified in the command must not already exist in the MRN table.

If the rc parameter is not specified, the wt parameter cannot be specified.

If PCs are being added to a weighted entity set, the wt/wt1/wt2/wt3/wt4 parameter or the dftwt parameter must be specified.

If PCs are being added to a non-weighted entity set, the wt/wt1/wt2/wt3/wt4 and the dfltwt parameters cannot be specified.

At least one optional parameter must be specified.

If the wt/wt1/wt2/wt3/wt4 parameters are specified, the dfltwt parameter cannot be specified.

The value specified for the pc/pc1/pc2/pc3/pc4 parameter cannot be associated with a proxy point code.

The GTT LS ARI feature must be enabled before the mapset, mappc, or mapssn parameter can be specified.

The value specified for the mappc/mappca/mappci/mappcn/mappcn24/mappcn16 parameter must be a full point code.

The point codes and alternate RI Mate point codes must have the same network type as shown:

- ITUI, ITU-N, ITU-I spare, ITU-N-spare—ITUI, ITU-N, ITU-I spare, ITU-N-spare
- ANSI—ANSI
- ITUN-24—ITUN-24
- ITUN-16---ITUN-16

The specified MAPSET must already exist in the MAP table.

If the mapset parameter is specified, then the mappc and mapssn parameters must be specified.

The mappc and mapssn parameters must be specified together in the command.

The values specified for the mappc and mapssn parameters must already exist in the specified MAP Set.

The values specified for the mapset and mappc parameters must already exist in the MAP table.

The value specified for the mappc parameter cannot match an STP point code.

The ent-mrn command cannot be used to change an Alternate RI Mate that has already been specified for an MRN Set. Use the chg-mrn command to modify the Alternate RI Mate.

Notes

For the -mrn commands, an entity set consists of a group of PCs that are used for traffic distribution, and an RC group consists of PCs within an entity set that have the same RC. In loadsharing mode, an entity set contains 1 RC group. In combined/dominant loadsharing mode, an entity set can contain multiple loadsharing groups.

The EAGLE supports the following modes for nodes and subsystems:

- A group of replicated PCs are in *dominant* mode if each PC in the group has a unique RC. The specified subsystem with the lowest RC acts as the primary subsystem, while the mate subsystem acts as a backup. In the event of congestion, messages route to the mate subsystem. When the congestion subsides, messages are again routed to the primary (dominant) subsystem.
- A group of replicated PCs are in *load sharing* mode if each PC in the group has the same RC. All messages are evenly distributed at the SCCP level to all nodes/subsystems in the group. In the event of congestion or failure, the non-affected subsystem assumes the load of its failed or congested mate.
- The *combined load sharing/dominant* mode supports a combination of load sharing and dominant mode. A group of PCs are in combined load sharing/dominant mode when at least two of the PCs have the same RC and another node subsystem in the group has a different RC. A combination of node accessibility and RC determines the preferred PC.

The ent-mrn command cannot be used to change the relative cost value for a point code; the chg-mrn command must be used.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

If the ent-mrn command is used to add PCs to an existing weighted entity set, and the threshold is specified, all RC group values specified with rc/rc1/rc2/rc3/rc4 parameters for the alternate post-GTT-translated point codes must be equal.

The following rules apply when the ent-mrn command is used to add PCs to RC groups:

- If a threshold value is specified and the PCs are being added to an existing RC group in the existing entity set, the RC group threshold is changed to the specified threshold value and both pre-existing and new PCs in the RC group assume the new threshold value.
- If a threshold value is specified and the PCs are creating a new RC group in the existing entity set, the new RC group assumes the specified threshold value.
- If a threshold value is not specified and the PCs are being added to an existing RC group in the existing entity set, the RC group threshold does not change and the PC assumes the threshold value of the existing RC group.

When the Weighted GTT Loadsharing feature is turned on, weighted entity sets and RC groups are supported, and threshold values can be assigned to each PC.

Entries cannot be provisioned in the MRN table unless routes are also provisioned for corresponding point codes. However, an entry without a configured route may result from upgrading to a new EAGLE release. If such an entry occurs, then traffic will not be routed to the corresponding point code. The entry can be deleted, or a route for the entry can be configured.

When a node is marked congested in the MRN or MAP table, traffic continues to be routed to that node. When the congested node becomes prohibited, traffic is diverted to another node.

Output

```
ent-mrn:pc=1-1-1:rc=10:pc1=1-1-2:rc1=20:pc2=1-1-3:rc2=30:apc3=1-1-4:rc3=40:apc4=1-1-5:
rc4=50: mrnset=new
```

```
    tekelecstp 11-03-04 12:59:14 EST  EAGLE 44.0.0

ent-mrn:pc=1-1-1:rc=10:pc1=1-1-2:rc1=20:pc2=1-1-3:rc2=30:apc3=1-1-4:rc3=40:apc4=1-1-5:
 rc4=50:mrnset=new
    Command entered at terminal #4.
    ENT-MRN: MASP A - MESSAGE: EXTENDED PROCESSING REQUIRED

    New MRNSET Created : MRNSETID = 112
    ENT-MRN: MASP A – COMPLTD
;
```

```
ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=10:mrnset=dflt:mapset=dflt:mappc=1-1-2:mapssn=10
```

```
    tekelecstp 11-03-04 12:15:32 EST  EAGLE 44.0.0

ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=10:mrnset=dflt:mapset=dflt:mappc=1-1-2:mapssn=10

    Command entered at terminal #4.
    ENT-MRN: MASP A - MESSAGE: EXTENDED PROCESSING REQUIRED
    ENT-MRN: MASP A - COMPLTD
;
```

Related Commands

chg-mrn, *dlt-mrn*, *rtrv-mrn*

ent-na

Enter Network Appearance

Use this command to enter a new network appearance in the Network Appearance table.

Parameters

na (mandatory)

Network appearance.

Range:

0 - 4294967295

type (mandatory)

Type of the network appearance.

Range:

ansi

itui

ituis

itun

ituns

itun24

itun16

gc (optional)

Group Code of the network appearance.

Range:

yy

Example

```
ent-na:type=ansi:na=10
ent-na:type=itun:na=11:gc=fr
```

Dependencies

The value specified for the na parameter cannot already exist in the Network Appearance table.

The Network Appearance table can contain a maximum of 45 entries.

The value specified for the gc or na parameter cannot already be equipped.

A value of *itun* or *ituns* must be specified for the type parameter before the gc parameter can be specified.

If the ITUDUPPC feature is turned on, and a value of *itun* or *ituns* is specified for the type parameter, then the gc parameter must be specified.

If the ITUDUPPC feature is turned off, then the gc parameter cannot be specified.

The value specified for the gc parameter must already exist in the SID or SPC table.

The Spare Point Code Support feature must be enabled before the ituis or ituns network type can be specified.

The J7 Support feature must be enabled before the type=itun16 parameter is specified.

If the J7 support feature is enabled then the type=(ansi or itun24) parameter can not be specified.

Notes

Network Appearance identifies the SS7 network context of the message, for the purposes of logically separating signaling traffic between the SGP and ASP over a common SCTP association. A unique network appearance value can be associated with ANSI, ITUI, 14-bit ITU-N or 24-bit ITU-N networks.

When the ITUDUPPC (ITU National Duplicate Point Code) feature is turned on, network appearance can be associated with a specific 14-bit ITU-N group code.

Output

```
ent-na:type=ansi:na=10
```

```
   rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
   ENT-NA: MASP A - COMPLTD
;
```

Related Commands

dlt-na, *rtrv-na*

ent-npp-as

Enter an NPP Action Set

Use this command to enter a Numbering Plan Processor (NPP) Action Set (AS). An AS is a collection of Conditioning Actions (CAs), Service Actions (SAs), and Formatting Actions (FAs).

Parameters

Note: CAs and FAs are processed in the order that they are specified in the comma-separated list.

Note: CAs and FAs are processed in consecutive order.

Note: SAs are processed in order of high-to-low precedence and must be specified in high-to-low precedence order in the comma-separated list. The SAs cannot be duplicated in the list. If multiple SAs in the list have the same precedence, then those SAs are processed in the order in which they appear in the list.

Note: The ac*, dn*, sn*, and cc* values refer to all CAs that begin with *ac, dn, sn*, or *cc*, respectively.

Note: Refer to the *Numbering Plan Processor (NPP) Overview* and to the Feature Manual for the feature of interest for more information on provisioning Action Sets and for definitions for the CA, FA, and SA values.

Note: The sa(X)dgts parameters are currently not supported by any feature.

Note: The sa(X)val parameters are used by the TIF Range CgPN Blacklist, TIF Subscriber CgPN Blacklist, and TIF Selective Screening features. Up to 2 numerical values can be specified in each list.

Note: Support of a numerical values list (sa(X)val parameter) is specific to the Service and Service Action.

asn (mandatory)

Action set name. The name of the AS.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

ca (optional)

Conditioning Action list. A comma-separated CA list that can be applied to an incoming digit string. Up to 12 CAs can be specified in the list. The CAs are processed in the order in which they are specified in the list.

Range:

ac1, ac2, ac3, ac4, ac5, ac6, ac7, ac8, accgpn, accgpn1, accgpn2, accgpn3, accgpn4, accgpn5, accgpn6, accgpn7, accgpn8, acdef, aclac, cc1, cc2, cc3, ccdef, cccgpn, dn1, dn2, dn3, dn4, dn5, dn6, dn7, dn8, dn9, dn11, dn12, dn13, dn14, dn15, dnx, fpfx, ign1, ign2, ign3, ign4, ign5, ign6, ign7, ign8, ign9, ign10, pfxa1, pfxa2, pfxa3, pfxa4, pfxa5, pfxa6, pfxa7, pfxa8, pfxb1, pfxb2, pfxb3, pfxb4, pfxb5, pfxb6, pfxb7, pfxb8, pfxc1, pfxc2, pfxc3, pfxc4, pfxc5, pfxc6, pfxc7, pfxc8, pfxd1, pfxd2, pfxd3, pfxd4, pfxd5, pfxd6, pfxd7, pfxd8, pfxe1, pfxe2, pfxe3, pfxe4, pfxe5, pfxe6, pfxe7, pfxe8, pfxf1, pfxf2, pfxf3, pfxf4, pfxf5, pfxf6, pfxf7, pfxf8, sn1, sn2, sn3, sn4, sn5, sn6, sn7, sn8, sn9, sn10, sn11, sn12, sn13, sn14, sn15, snx, znx

fa (optional)

Formatting Action list. A comma-separated FA list that can be applied to the outgoing digit string. Up to 12 FAs can be specified in the list. The FAs are processed in the order they are specified in the list and cannot be duplicated.

Range:

ac, asd, asdother, cc, dlma, dlmb, dlmc, dlmd, dlme, dlmf, dlmg, dlmh, dlmi, dlmj, dlmk, dlml, dlmm, dlmn, dlmo, dlmp, dn, fpfx, grn, grnother, orig, pfxa, pfxb, pfxc, pfxd, pfxe, pfxf, rn, rnospodn, rnosposn, rnospozn, sn, sp, sfrimsi, vmid, zn

Default:

orig

ofnai (optional)

Outgoing filter nature of address indicator. This parameter specifies the filter nature of address indicator (FNAI) class of the outgoing digit string.

Range:

intl

intl value provisioned in the `chg-npp-serv` command

natl

natl value provisioned in the `chg-npp-serv` command

nai1

nai1 value provisioned in the `chg-npp-serv` command

nai2

nai2 value provisioned in the `chg-npp-serv` command

nai3

nai3 value provisioned in the `chg-npp-serv` command

unkn

unkn value provisioned in the `chg-npp-serv` command

inc

NAI of the incoming digit string

Default:

inc

sa (optional)

Service Action list. A comma-separated SA list that can be applied to an incoming digit string. Up to 8 SAs can be specified in the list. The SAs must be specified in high-to-low precedence order in the list, and cannot be duplicated in the list.

Note: SAs are service-specific.

Range:

asdlkup, blklstqry, blklstrly, blnfndrls, blrls, cdial, ccncchk, cdpnnp, cgpnasdrqd, cgpngrnrqd, cgpnnp, cgpnrtg, cgpnsvcrqd, crp, fpfxrls, fraudchk, fwdscs, grnlkup, inprtg, lacck, migrate, nocgpnrls, npnrls, nprelay, nprls, nscgpn, nscdpn, pprelay, rtdbtrn, rtdbtsp, rtdbtrnsp, skgtartg, snscgpn, selscr

sa1dgts (optional)

Service Action 1 digit string. This parameter specifies a digit string that can be used with the first SA.

Range:

1 - 8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

sa1val (optional)

Service Action 1 numerical values list. A comma-separated numerical values list that can be used with the first SA.

Range:

0 - 65534

sa2dgts (optional)

Service Action 2 digit string. A digit string that can be used with the second SA.

Range:

1 - 8 hexadecimal digits Valid digits are *0-9, a-f, A-F*.

sa2val (optional)

Service Action 2 numerical values list. A comma-separated numerical values list that can be used with the second SA.

Range:

0 - 65534

sa3dgts (optional)

Service Action 3 digit string. A digit string that can be used with the third SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

sa3val (optional)

Service Action 3 numerical values list. A comma-separated numerical values list that can be used with the third SA.

Range:

0 - 65534

sa4dgts (optional)

Service Action 4 digit string. A digit string that can be used with the fourth SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

sa4val (optional)

Service Action 4 numerical values list. A comma-separated numerical values list that can be used with the fourth SA.

Range:

0 - 65534

sa5dgts (optional)

Service Action 5 digit string. A digit string that can be used with the fifth SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

sa5val (optional)

Service Action 5 numerical values list. A comma-separated numerical values list that can be used with the fifth SA.

Range:

0 - 65534

sa6dgts (optional)

Service Action 6 digit string. A digit string that can be used with the sixth SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

sa6val (optional)

Service Action 6 numerical values list. A comma-separated numerical values list that can be used with the sixth SA.

Range:

0 - 65534

sa7dgts (optional)

Service Action 7 digit string. a digit string that can be used with the seventh SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

sa7val (optional)

Service Action 7 numerical values list. A comma-separated numerical values list that can be used with the seventh SA.

Range:

0 - 65534

sa8dgts (optional)

Service Action 8 digit string. A digit string that can be used with the eighth SA.

Range:

1-8 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

sa8val (optional)

Service action 8 numerical values list. A comma-separated numerical values list that can be used with the eighth SA.

Range:

0 - 65534

Example

```
ent-npp-as:asn=asn1:ca=ign1,ign2,ign4,znx:fa=zn
ent-npp-as:asn=asn4:ca=fpfx,cc2,ign3,dn4:fa=dn,cc
ent-npp-as:asn=asn5:ca=ac8,sn8,cc3:fa=sn,ac,cc:
sa=rtdbtrn,rtdbtsp,rtdbtrnsp,cdial
ent-npp-as:asn=asn1:ca=znx:fa=asd:sa=asdlkup
ent-npp-as:asn=asn10:ca=cc2,ac2,snx:sa=migrate,cdpnnp:fa=cc,rnosposn
ent-npp-as:asn=asn9:ca=fpfx,cc2,dnx:sa=fraudchk,pprelay:fa=cc,dn
ent-npp-as:asn=set10:ca=znx:sa=blrls,blnfndrls,nscgpn:
sa1val=10,20:sa2val=31,41:fa=zn:ofnai=intl
ent-npp-as:asn=asn7:ca=cc2,ac3,sn5:sa=inprtg,skgtartg
ent-npp-as:asn=set32:ca=cc2,accgpn5,snx
ent-npp-as:asn=tifcd7:ca=znx:sa=selscr,cgpnnp:sa1va1=12,none:fa=zn
```

Dependencies

The value specified for the asn parameter cannot already exist in the NPP AS table.

One of the following combinations of Conditioning Actions must be specified for the AS:

- znx
- cc*, dn*
- cc*, ac*, sn*

The Formatting Actions specified for the AS must contain the corresponding Formatting Action that a Conditioning Action will populate or load.

The AS must contain a CA that can load or populate the specified FA.

The CAs within an AS cannot condition more than 32 digits.

The AS cannot contain CAs that load or populate the same FA.

Conditioning Actions must be specified for inclusion in an individual Action Set using valid number conditioning rules:

- If the ZNX Conditioning Action is specified, then the CC*, AC*, SN*, DN*, and DNX Conditioning Actions cannot be specified.
- If the CC* AND DN* or DNX Conditioning Actions are specified, then the AC*, SN*, SNX, and ZNX Conditioning Actions cannot be specified.
- If the CC*, AC*, AND SN* or SNX Conditioning Actions are specified, then the DN*, DNX, and ZNX Conditioning Actions cannot be specified.

The AS cannot contain the following combinations of FAs:

- If the DN FA is specified, then the AC, SN, and ZN FAs cannot be specified.
- If the ZN FA is specified, then the AC, CC, SN, and DN FAs cannot be specified.
- If the SN FA is specified, then the ZN and DN FAs cannot be specified.
- If the RNOSPODN, RNOSPOSN, or RNOSPOZN FA is specified, then the RN, SP, SN, DN, and ZN FAs cannot be specified.
- The RNOSPODN, RNOSPOSN, and RNOSPOZN FAs cannot be specified together in the command.

If specified, the FPFX CA must be the first value (*fpfx*) in the ca list.

If specified, the ZNX, SNX, or DNX CA must be the final value (*znx, snx*, or *dnx*) in the ca list.

A maximum of 1024 (1K) AS entries can be specified in the NPP system.

If no Service Actions are provisioned, then the sa1val parameter cannot be specified.

If less than 2 Service Actions are provisioned, then the sa2val parameter cannot be specified.

If less than 3 Service Actions are provisioned, then the sa3val parameter cannot be specified.

If less than 4 Service Actions are provisioned, then the sa4val parameter cannot be specified.

If less than 5 Service Actions are provisioned, then the sa5val parameter cannot be specified.

If less than 6 Service Actions are provisioned, then the sa6val parameter cannot be specified.

If less than 7 Service Actions are provisioned, then the sa7val parameter cannot be specified.

If less than 8 Service Actions are provisioned, then the sa8val parameter cannot be specified.

If no Service Actions are provisioned, then the sa1dgts parameter cannot be specified.

If less than 2 Service Actions are provisioned, then the sa2dgts parameter cannot be specified.

If less than 3 Service Actions are provisioned, then the sa3dgts parameter cannot be specified.

If less than 4 Service Actions are provisioned, then the sa4dgts parameter cannot be specified.

If less than 5 Service Actions are provisioned, then the sa5dgts parameter cannot be specified.

If less than 6 Service Actions are provisioned, then the sa6dgts parameter cannot be specified.

If less than 7 Service Actions are provisioned, then the sa7dgts parameter cannot be specified.

If less than 8 Service Actions are provisioned, then the sa8dgts parameter cannot be specified.

Notes

Note: When a new Action Set is entered using the `ent-npp-as` command, the FANF, FASP, FARN, FANE, FASCRCD, and FASCRCG FA lists are unpopulated. These lists are populated using the `chg-npp-as` command.

Output

`ent-npp-as:asn=asn6:ca=znx:sa=nscdpn,nscgpn:fa=zn:ofnai=intl`

```
    tekelecstp 09-08-18 11:25:31 EAGLE 41.1.0
    NPP-AS   table is (5 of 1024) 1% full.

    ENT-NPP-AS: MASP A - COMPLTD
;
```

Related Commands

chg-npp-as, *dlt-npp-as*, *rtrv-npp-as*

ent-npp-srs — Create a NPP Service Rule Set

Use this command to enter a Numbering Plan Processor (NPP) Service Rule Set entry. A Service Rule Set (SRS) is a collection of NPP Rules that are associated with a NPP Service. A NPP Rule is an association between a single NPP filter and a single NPP Action Set.

Parameters

asn (mandatory)

Action set name. The name of the AS.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

fdl (mandatory)

Filter digit length. This parameter specifies the number of digits on the incoming digit string that is filtered by the NPP.

Range:

*1 - 32, **

* —multiple lengths of digit strings can be filtered

fnai (mandatory)

Filter nature of address indicator. The filter Nature of Address Indicator (NAI) class.

Range:

intl

filter messages with NAI=INTL

natl

filter messages with NAI=NATL

nai1

filter messages with NAI=NAI1

nai2

filter messages with NAI=NAI2

nai3

filter messages with NAI=NAI3

unkn

filter messages when NAI=UNKN

The `chg-npp-serv` command is used to assign values to the various FNAI classes.

fpfx (mandatory)

Filter prefix. The prefix used to filter incoming digit strings.

Range:

1-16 digits *, ?

1 - 16 hexadecimal digits inclusive of single digit wildcard (?); or wildcard (*) matching the entire digit string; valid digits are *?, 0-9, a-f, A-F*.

srvn (mandatory)

Service name. The name of the NPP service.

Range:

nppt

NPP Test Service

idprcdpn

IDPRCDPN Service

idprcgpn

IDPRCGPN Service

tif

TIF Service

tif2

TIF2 Service

tif3

TIF3 Service

mosmsicgpn
MOSMSICGPN Service

mosmsicdpn
MOSMSICDPN Service

mosmsgcgpn
MOSMSGCGPN Service

mosmsgcdpn
MOSMSGCDPN Service

iarcdpn
IARCDPN Service

iarcgpn
IARCGPN Service

idprcdpn2
IDPRCDPN2 Service

idprcdpn3
IDPRCDPN3 Service

idprcdpn4
IDPRCDPN4 Service

tifcgpn
TIFCGPN Service

tifcgpn2
TIFCGPN2 Service

tifcgpn3
TIFCGPN3 Service

invkserv (optional)
Invoke service name. The name of the NPP service to be invoked.

Note: As of Release 44.0, only the *tifcgpn*, *tifcgpn2*, *tifcgpn3*, and *none* values are supported.

Range:

nppt
NPP Test Service

idprcdpn
IDPRCDPN Service

idprcgpn
IDPRCGPN Service

tif
TIF Service

tif2
TIF2 Service

tif3
TIF3 Service

mosmsicgpn
MOSMSICGPN Service

mosmsicdpn
MOSMSICDPN Service

mosmsgcgpn
MOSMSGCGPN Service

mosmsgcdpn
MOSMSGCDPN Service

iarcdpn
IARCDPN Service

iarcgpn
IARCGPN Service

idprcdpn2
IDPRCDPN2 Service

idprcdpn3
IDPRCDPN3 Service

idprcdpn4
IDPRCDPN4 Service

tifcgpn
TIFCGPN Service

tifcgpn2
TIFCGPN2 Service

tifcgpn3
TIFCGPN3 Service

none
no additional NPP services are invoked

Default:
none

Example

```
ent-npp-srs:srvn=nppt:fpfx=a:fdl=10:fnai=intl:asn=asn2
ent-npp-srs:srvn=tif:fnai=INTL:fpfx=9090:fdl=*:asn=set1:invkserv=tifcgpn
```

```
ent-npp-srs:srvn=nppt:asn=testzn1:fnai=nai2:fdl=*:fpfx=1?2?3
ent-npp-srs:srvn=tif:fpfx=12:fdl=*:fnai=intl:asn=set32
```

Dependencies

The value specified for the asn parameter must exist in the NPP AS table.

The AS specified by the asn parameter cannot contain Conditioning Actions that are not supported by the service specified by the srvn parameter.

The AS specified by the asn parameter cannot contain Service Actions that are not supported by the service specified by the srvn parameter.

The AS specified by the asn parameter cannot contain Formatting Actions that are not supported by the service specified by the srvn parameter.

The AS specified by the asn parameter cannot contain Service Actions that do not conform to the precedence order supported by the service specified by the srvn parameter.

The Conditioning Actions in the AS specified by the asn parameter cannot condition more digits than allowed by the fdl parameter.

If the fdl=* parameter is specified, then the AS specified by the asn parameter must contain Conditioning Actions that support variable digit string conditioning.

A maximum of 8192 (8K) rules can be specified in the NPP system.

A maximum of 4096 (4K) service rules can be specified in the NPP system.

The NPP Rule cannot already exist within the NPP Rule table.

If a values other than * is specified for the fpfx and fdl parameters, then the value specified for the fpfx parameter cannot be greater than the value specified for the fdl parameter.

All of the features that are associated with the Service Actions in the AS specified by the asn parameter must be turned on before the AS can be used.

The Service Actions in the AS specified by the asn parameter cannot violate mutual exclusivity rules defined by the service specified by the srvn parameter.

The AS specified by the asn parameter cannot contain an OFNAI class with a value of *none*.

At least one TIF feature must be turned on before an AS containing the CDIAL Service Action can be specified as a value for the asn parameter.

The TIF SCS Forwarding feature must be turned on before an AS containing the FWDSCS Service Action can be specified.

The TIF Simple Number Substitution feature must be turned on before an AS containing the SNSCGPN Service Action can be specified as a value for the asn parameter.

The TIF Number Portability feature must be turned on before an AS containing the CRP, NPNRLS, CGPNNPRQD, NPRELA, or NPRLS Service Action can be specified as a value for the asn parameter.

The IDPR ASD feature must be enabled before an AS containing the ASDLKUP or CGPNASDRQD Service Action can be specified as a value for the asn parameter with the IDPRCDPN(X) or IDPRCGPN service.

The IDPR GRN feature must be enabled before an AS containing the GRNLKUP or GPNGRNRQD Service Action can be specified as a value for the asn parameter with the IDPRCDPN(X) or IDPRCGPN service.

An AS containing the ASDLKUP and CGPNASDRQD and SAs cannot be specified as a value for the asn parameter.

An AS containing the GRNLKUP and CGPNGRNRQD Service Actions cannot be specified as a value for the asn parameter.

The TIF GRN feature must be enabled before an AS containing the GRNLKUP or CGPNGRNRQD SAs can be specified as a value for the asn parameter with the TIF services.

The TIF ASD feature must be enabled before an AS containing the ASDLKUP or CGPNASDRQD SA can be specified as a value for the asn parameter with the TIF services.

If a value of *mosmsgcdpn*, *mosmsgcgpn*, *mosmsicdpn*, or *mosmsicgpn* is specified for the srvn parameter, then the MO SMS ASD feature must be enabled before an AS containing the ASDLKUP or CGPNASDRQD Service Action can be specified as a value for the asn parameter.

If a value of *mosmsgcdpn*, *mosmsgcgpn*, *mosmsicdpn*, or *mosmsicgpn* is specified for the srvn parameter, then the MO SMS GRN feature must be enabled before an AS containing the CGPNGRNRQD or GRNLKUP Service Action can be specified as a value for the asn parameter.

If the fpfx=* parameter is specified, then an AS containing the FPFX Conditioning Action cannot be specified as value for the asn parameter.

The value specified for the fpfx parameter cannot have a *?* as the final character.

The TIF Number Substitution feature must be enabled before an AS containing the NSCGPN or NSCDPN Service Action can be specified.

The AS specified by the asn parameter cannot contain both the NSCGPN and SNSCGPN Service Actions.

If a value of *mosmsgcdpn* or *mosmsgcgpn* is specified for the srvn parameter, then the Prepaid SMS Intercept Ph1 feature must be enabled before an AS containing the PPRELAY Service Action can be specified as a value for the asn parameter.

If the srvn=mosmsgcgpn parameter is specified, then the Portability Check for MO SMS feature must be enabled before an AS containing the FRAUDCHK Service Action can be specified as a value for the asn parameter.

If the srvn=mosmsicdpn parameter is specified, then the MO SMS IS41-to-GSM Migration feature must be enabled before an AS containing the MIGRATE Service Action can be specified as a value for the asn parameter.

If the srvn=mosmsicdpn parameter is specified, then the MO-based IS41 SMS NP feature must be enabled before an AS containing the CDPNNP Service Action can be specified as a value for the asn parameter.

If the srvn=mosmsgcdpn parameter is specified, then the MO-based GSM SMS NP feature must be enabled before an AS containng the CDPNNP Service Action can be specified as a value for the asn parameter.

The IDP A-Party Routing feature must be enabled before the AS specified by the asn parameter can contain the CGPNRTG Service Action.

The IDP A-Party Blacklist feature must be enabled before the AS specified for the asn parameter can contain the BLKLSTQRY or BLKLSTRLY Service Action.

If the AS specified by the asn parameter contains the BLKLSTQRY Service Action, then the AS cannot contain any other Service Actions.

The NPP Unlimited SDWC Characters feature must be turned on before a single digit wildcard (*?*) can be specified as a value for the fpfx parameter more than 25 times across all of the rules for an NPP service.

If the srvn=idprcdpn(X) parameter is specified, then the Action Set specified by the asn parameter cannot contain both the ACCGPN* and the CCCGPN Conditioning Actions.

If a value of *iarcdpn* or *iargcpn* is specified for the srvn parameter, then the IAR ASD feature must be enabled before an AS containing the ASDLKUP or CGPNASDRQD Service Action can be specified as a value for the asn parameter.

If a value of *iarcdpn* or *iargcpn* is specified for the srvn parameter, then the IAR GRN feature must be enabled before an AS containing the GRNLKUP or CGPNGRNRQD Service Action can be specified as a value for the asn parameter.

If a value of *iarcdpn* or *iargcpn* is specified for the srvn parameter, then the IAR Base feature must be enabled before an AS containing the CCNCCHK, CDIAL, or CGPNSRVRQD Service Action can be specified as a value for the asn parameter.

If a value of *iarcdpn* or *iargcpn* is specified for the srvn parameter, then the IAR NP feature must be enabled before an AS containing the CDNNP or CGNNP Service Action can be specified as a value for the asn parameter.

If the NPP Service specified by the srvn parameter does not support invoking another NPP Service, then only a value of *none* can be specified for the invkserv parameter.

If the NPP Service specified by the srvn parameter can invoke the TIFCGPN NPP Service, then only a value of *tifcgpn* or *none* can be specified for the invkserv parameter.

If the NPP Service specified by the srvn parameter can invoke the TIFCGPN2 NPP Service, then only a value of *tifcgpn2* or *none* can be specified for the invkserv parameter.

If the NPP Service specified by the srvn parameter can invoke the TIFCGPN3 NPP Service, then only a value of *tifcgpn3* or *none* can be specified for the invkserv parameter.

If the AS specified by the asn parameter contains the ASDOTHER or GRNOTHER Formatting Action, then the invkserv=none parameter cannot be specified.

If the AS specified by the asn parameter contains the CGPNASDRQD, CGPNGRNQD, CGPNSVCRQD, NSCGPN, or SNSCGPN Service Action, then only a value of *none* can be specified for the invkserv parameter.

The TIF Range CgPN Blacklist feature must be enabled before:

- an AS containing the NOCGPNRLS Service Action can be specified as a value for the asn parameter and a value of *tif, tif2*, or *tif3* can be specified for the srvn parameter
- an AS containing the FPFXRLS Service Action can be specified as a value for the sn parameter and a value of *tifcgpn, tifcgnp2*, or *tifcgpn3* can be specified for the srvn parameter.

If the AS specified by the asn parameter contains the FPFXRLS Service Action, then no other Service Action can be specified in the AS.

If the AS specified by the asn parameter contains the FPFXRLS Service Action, then the AS must also contain a numerical values list with 2 numerical values.

If the AS specified by the asn parameter contains the FPFXRLS Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127.

If the AS specified by the asn parameter contains the NOCGPNRLS Service Action, then the AS must also contain a numerical values list with 2 numerical values.

If the AS specified by the asn parameter contains the NOCGPNRLS Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127.

The TIF Subscr CgPN Blacklist feature must be enabled before an AS containing the BLRLS or BLNFNDRLS Service Action can be specified as a value for the asn parameter, and a value of *tifcgpn, tifcgpn2*, or *tifcgpn3* can be specified as a value for the srvn parameter.

If the AS specified by the asn parameter contains the BLRLS Service Action, then the AS must also contain a numerical values list with 2 numerical values.

If the AS specified by the asn parameter contains the BLRLS Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127.

If the AS specified by the asn parameter contains the BLNFNDRLS Service Action, then the AS must also contain a numerical values list with 2 numerical values.

If the AS specified by the asn parameter contains the BLNFNDRLS Service Action, then the 2 numerical values specified by the numerical values list must each be between 0-127.

If the Service specified by the srvn parameter does not support a numerical value list for the first Service Action in the AS specified by the asn parameter, then the sa1val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the second Service Action in the AS specified by the asn parameter, then the sa2val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the third Service Action in the AS specified by the asn parameter, then the sa3val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the fourth Service Action in the AS specified by the asn parameter, then the sa4val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the fifth Service Action in the AS specified by the asn parameter, then the sa5val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the sixth Service Action in the AS specified by the asn parameter, then the sa6val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the seventh Service Action in the AS specified by the asn parameter, then the sa7val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a numerical value list for the eighth Service Action in the AS specified by the asn parameter, then the sa8val parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the first Service Action in the AS specified by the asn parameter, then the sa1dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the second Service Action in the AS specified by the asn parameter, then the sa2dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the third Service Action in the AS specified by the asn parameter, then the sa3dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the fourth Service Action in the AS specified by the asn parameter, then the sa4dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the fifth Service Action in the AS specified by the asn parameter, then the sa5dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the sixth Service Action in the AS specified by the asn parameter, then the sa6dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the seventh Service Action in the AS specified by the asn parameter, then the sa7dgts parameter in the AS can only have a value of *none*.

If the Service specified by the srvn parameter does not support a digit string for the eighth Service Action in the AS specified by the asn parameter, then the sa8dgts parameter in the AS can only have a value of *none*.

If the NPP Unlimited SDWC Characters feature is turned on, then the value specified for the fpfx parameter cannot contain more than three single digit wildcards (*?*).

If the NPP Unlimited SDWC Characters feature is turned on, then the value specified for the fpfx parameter can contain single digit wildcards (*?*) within only the first six digits.

The TIF Selective Screening feature must be enabled before an AS containing the SELSCR, FPFXRLS, BLRLS, or BLNFNDRLS Service Action can be specified as a value for the **asn** parameter, and a value of *tif*, *tif2*, or *tif3* can be specified as a value for the **srvn** parameter.

If the AS specified by the **asn** parameter contains the SELSCR Service Action, then no TIF Number Substitution (NSCGPN or NSCDPN) Service Action can be specified in the AS.

If the AS specified by the **asn** parameter contains the SELSCR Service Action, then the 2 numerical values specified by the numerical values list must be none or between 0-127.

Only one call type can be specified for the SELSCR SA. If the AS specified by the **asn** parameter contains the SELSCR SA, the corresponding SA Digit String specified must be none or between 1-FF.

The CGPNSVCRQD and NPNRLS Service Actions cannot exist within the same Action Set.

Notes

None.

Output

```
ent-npp-srs:srvn=nppt:fpfx=abc:fdl=16:fnai=intl:asn=asn3
```

```
    tekelecstp 09-02-19 13:57:09 EST  EAGLE 40.1.0
    NPP-SRS  table is (1 of 8192) 1% full.

    ENT-NPP-SRS: MASP A - COMPLTD
;
```

Related Commands

chg-npp-as, *chg-npp-srs*, *dlt-npp-srs*, *ent-npp-as*, *rtrv-npp-as*, *rtrv-npp-srs*

ent-pct

Enter a Point Code and CIC Translation entry

Use this command to enter Point Code and CIC Translations.

Parameters

epc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

epca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

epci (mandatory)

ITU international destination point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

epcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

realpc (mandatory)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

realpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

realpci (mandatory)

ITU international destination point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

realpcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

ecice (optional)

The end of the Emulated Circuit Identification Code range.

Range:

0-4095

ITU TUP/ISUP

0-16383

ANSI ISUP

0-4294967295

ANSI Q.BICC

*****

Default:

*

ecics (optional)

The start of the Emulated Circuit Identification Code range.

Range:

0-4095

ITU TUP/ISUP

0-16383

ANSI ISUP

0-4294967295

ANSI Q.BICC

*****

Default:

*

filtpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

filtpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

filtpci (optional)

ITU international destination point code with subfields *zone-area-id*.

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

filtpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

rcice (optional)

The end of the Real Circuit Identification Code range.

Range:

0-4095

ITU TUP/ISUP

0-16383

ANSI ISUP

0-4294967295

ANSI Q.BICC

*

Default:

*

rcics (optional)

The start of the Real Circuit Identification Code range.

Range:

0-4095

ITU TUP/ISUP

0-16383

ANSI ISUP

0-4294967295

ANSI Q.BICC

*

Default:

*

relcause (optional)

Release Cause

Range:

0 - 127

Default:

0

si (optional)

Service Indicator

Range:

0

NM

3

SCCP

5

ISUP

4

TUP

13

ANSI Q. BICC

*****

Default:

*

ssn (optional)

SCCP Subsystem number

Range:

0 - 255

Default:

*

Example

```
ent-pct:epc=1-1-1:realpc=2-2-2:si=5:ecics=100:ecice=200
ent-pct:epc=1-1-2:realpc=2-2-3:si=3:ssn=10:filtpc=5-5-5
```

Dependencies

If the ecice or rcice parameter is specified, then the ecics or rcics parameter must be specified, respectively.

The value specified for the ecice/rcice parameter must be equal to or greater than the value specified for the ecics/rcics parameter, respectively.

Full point codes must be specified as the values for the realpc/realpca/realpci/realpcn and epc/epca/epci/epcn parameters.

The PCT table cannot contain more entries than the amount specified by the FAK for the PCT quantity feature.

The si=3 parameter must be specified before the ssn parameter can be specified.

The values specified for the realpc/realpca/realpci/realpcn and filtpc/filtpca/filtpci/filtpcn parameters must already exist in the Route table.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters must have the same domain.

A PCT quantity feature must be enabled before this command can be specified.

If the ssn or ecics parameter is specified, then the si parameter must be specified.

Duplicate values for the following Key combinations are not allowed:

- epc/epca/epci/epcn + filtpc/filtpca/filtpci/filtpcn + si + ssn/(ecics/ecice)
- realpc/realpca/realpci/realpcn + filtpc/filtpca/filtpci/filtpcn + si + ssn/(rcics/rcice)

The values specified for the realpc/realpca/realpci/realpcn and filtpc/filtpca/filtpci/filtpcn parameters must have at least one route for each value defined in the Route table.

If the ITUDUPPC feature is turned on, and ITU-N Point codes are specified, then the values specified for the epcn, realpcn, and filtpcn parameters must have the same group code.

A total of 250 unique epc and rpc values are supported in the PCT table.

A total of 100 PCT Translations with a single epc and realpc value are supported in the PCT table.

A spare point code cannot be specified as a value for the epci/epcn, filtpci/filtpcn, and realpci/realpcn parameters.

The ecics parameter must be specified before the relcause parameter can be specified.

A value of 4, 5, or 13 must be specified for the si parameter before the ecice/ecics and rcice/rcics parameters can be specified.

If the rcics parameter is specified, then the ecics parameter must be specified.

If the ecics, ecice, and rcics parameters are specified, then the rcice parameter must be specified.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters cannot be the same as the STP point code.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters cannot be the same as the STP capability point code.

The value specified for the ecics/ecice and rcics/rcice parameters must be within the range specified by the parameter definition.

The difference between the values specified for the ecice and ecics parameters must be equal to the difference between the values specified for the rcice and rcics parameters.

A value of 5 or 13 must be specified for the si parameter before the relcause parameters can be specified.

The ssn and cic parameters cannot be specified together in the command.

If the ecics, rcics, and rcice parameters are specified, then the ecice parameter must be specified.

If the same value is specified for the epc and realpc parameters, then the values specified for the ecics/ecice and rcics/rcice parameters cannot indicate the same range.

Only one of the filtpc/filtpca/filtpci/filtpcn parameters can be specified in the command.

The value specified for the epc/epci/epcn parameter cannot be the same as a secondary point code.

Output

```
ent-pct:epc=1-1-1:realpc=5-5-5:si=13:ecics=10:ecice=20:relcause=15
```

```
tekelecstp 10-08-10 18:29:41 EST  EAGLE 43.0.0
ent-pct:epc=1-1-1:realpc=5-5-5:si=13:ecice=10:ecics=20:relcause=15
Command entered at terminal #4.
```

```
    ENT-PCT: MASP A - COMPLTD
;
```

Related Commands

dlt-pct , *rtrv-pct*

ent-rmt-appl

Enter Remote Application

Use this command to assign user parts to an internal point code that, in turn, assigns user parts to an End Office node.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

ipc (mandatory)

ANSI point code with subfields network indicator-network cluster-network cluster member (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (prefix-ni-nc-ncm).

Synonym:

ipca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

ipc/ipca/ipci/ipcn/ipcn24/ipcn16 (mandatory)

End Node's internal point code.

ipci (mandatory)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

ipcn (mandatory)

ITU national point code with subfield ITU number (*nnnnn*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

ipcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

ipcn16 (mandatory)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix- un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127
sna---000---15
mna---000---31

si (mandatory)
Service indicator value that designates which user part is assigned to the IPC.

Range:
3 - 15

ssn (optional)
SCCP subsystem number. Valid only if si=3. Use ssn as the starting value of the range if ssne is specified.

Range:
0 - 255

ssne (optional)
The end of the range of subsystem sumbers.

Range:
1 - 255

Example

```
ent-rmt-appl:ipc=0-0-1:si=3:ssn=5
ent-rmt-appl:ipc=0-0-1:si=3:ssn=5:ssne=100
ent-rmt-appl:ipc=0-0-1:si=5
ent-rmt-appl:ipcn24=1-100-1:si=5
ent-rmt-appl:ipc=p-1-1-1:si=3:ssn=5:ssne=102
ent-rmt-appl:ipci=ps-2-2-2:si=5
ent-rmt-appl:ipcn16=1-2-1:si=5
```

Dependencies

Partial point codes are not allowed.

The ssn parameter is required if si=3.

The ssn and ssne parameters are not allowed unless si=3.

The ssne parameter value must be greater than the ssn parameter value.

The specified IPC must be previously defined in the destination table.

The new entry cannot conflict with an existing entry.

Notes

To specify a range of subsystem numbers, specify the ssn parameter value as the start of the range and the ssne parameter value as the end of the range.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Output

```
ent-rmt-appl:ipc=0-0-1:si=3:ssn=5
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    ENT-RMT-APPL:  MASP A - COMPLTD
;
```

Related Commands

dlt-rmt-appl, *rtrv-rmt-appl*

ent-rte Enter Route

Use this command to add a route to the system.

Caution: When using the Network Routing feature, limited network management is provided for point codes not covered by full point code routing, Cluster Routing, or Nested Cluster Routing.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

lsn (mandatory)

The linkset name associated with this route.

Range:

ayyyyyyyyy

1 alphabetic character followed by 9 alphanumeric characters

rc (mandatory)

The relative cost of the route

Range:

0 - 99

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

force (optional)

This parameter allows a route to be added to the database even if the linkset to be assigned to the route does not have any signaling links in it.

Range:

yes

Example

Adds route for DPC 1 to linkset WE123642:

```
ent-rte:dpc=1-1-1:lsn=we123642:rc=25
```

Adds route for DPC 21-*-* to linkset WE123642:

```
ent-rte:dpc=21-*-*:lsn=we123642:rc=25
```

Adds route for DPCN24 10-100-14 to linkset WE123624:

```
ent-rte:dpcn24=10-100-14:lsn=we123624:rc=10
```

Adds route for private DPC p-1-1-1 to linkset WE123642:

```
ent-rte:dpc=p-1-1-1:lsn=we123642:rc=25
```

Adds route for private and spare DPCN ps-4082-ge to linkset E1NITUN:

```
ent-rte:dpc=ps-4082-ge:lsn=e1ntitun:rc=10
```

Adds route for private DPCN24 p-10-100-14 to linkset WE123642:

```
ent-rte:dpcn24=p-10-100-1:lsn=we123642:rc=10
```

Adds route for private and spare DPCI s-1-100-1 to linkset UE123642:

```
ent-rte:dpci=s-10-100-1:lsn=ue123642:rc=10
```

Adds route for DPCN16 121-10-15 to linkset WE123642:

```
ent-rte:dpcn16=121-10-15:lsn=we123642:rc=10
```

Dependencies

The value of the lns parameter must exist in the STP database.

The DPC must be in the Destination Point Code table.

The destination point code of a route must be a full point code (*ni-nc-ncm*), a cluster point code (*ni-nc*-*), or a network point code (*ni*-*-*).

If the specified destination address is a full point code address (*ni-nc-ncm*) and is a member of a provisioned cluster (*ni-nc*-*), whether ordered routes can be assigned is determined by the destination address's NCAI (nested cluster allowed indicator). The ncai=yes/no parameter is set with the ncai parameter of the `ent/chg-dstn` commands.

- If the ncai=no parameter is specified, destinations comprising a cluster inherit their ordered routes from the cluster.
- If the ncai=yes parameter is specified, then the destination address is a member of a provisioned nested cluster where ordered routes can be assigned to a provisioned member.

If the specified destination address is a network cluster address (*ni-nc*-*), the assignment of the specified ordered route attributes is determined by the setting of the destination address's NCAI (nested cluster allowed indicator). The ncai=yes/no parameter is set with the ncai parameter of the `ent/chg-dstn` commands.

- If the ncai=no parameter is specified, the collection of signaling point codes having the same network identifier (the ni parameter) and network cluster (the nc parameter) code are assigned the specified ordered route.
- If the ncai=yes parameter is specified, then the specified destination is a network cluster address where provisioned members's signaling point codes can be assigned the same or different ordered routes from the cluster.

If the dpcn parameter is specified, the format of the point code(s) must match the format that was assigned with `chg-stpopts:npcfmti`.

The dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot be specified with a private point code (-p) unless the route is an IPGW route.

The route destination's type must match the route's linkset adjacent point code or the route's linkset secondary adjacent point code type.

If the ipgwapc=yes parameter is specified for the linkset, then the associated dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot have a cluster route assigned.

The linkset must be defined with at least one link. To override this requirement, specify force=yes.

The 6-Way Loadsharing on Routesets feature must be turned on before more than 2 routes can be provisioned with the same relative cost.

A linkset can be entered only once as a route for each destination or for a routeset.

If the specified destination address is a network address (*ni*-*-*), or network cluster address (*ni-nc*-*), the linkset type (see the `chg-ls` command) used in the route must be *b*, *c*, or *d*.

All routes with ANSI DPCs must use ANSI linkset APCs. A route with an ITU-I DPC can go over an ITU-N APC and an ITU-N DPC can go over an ITU-I APC.

If the link set name (the lsn parameter) references a link set that has the ipgwapc=yes parameter specified, the DPC must not be a cluster route.

The NRT feature must be turned on before the dpc/dpca parameter can be specified using the asterisk (*) in the nc or ncm subfields.

When using network routing, if the DPC has a value of * in the *nc* field, the *ncm* field must also be * (for example, dpc=21-*-*).

The value of the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot be the same as the EAGLE point code.

The value of the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot be the same as the EAGLE capability point code.

The value of the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter cannot have already been assigned to an APC or SAPC for an IPGWx linkset. The entered route must include the APC or SAPC's linkset with the destination equal to the APC or SAPC.

If dpcn is specified then the format of dpcn must match the format dictated by the `chg-stpopts:npcfmti` command

The STP shall ensure that the ITU-N ordered route destination's group code must match the route's Link Set Adjacent PC's group code for all linksets other than IPGWI and IPLIMI.

The group code must match for all linksets because the ITU Duplicate Point Code feature is on.

All linksets in a routeset must have the same network type. The network type of the routeset must be the same as the network type of the destination point code.

If multiple routes are defined for the destination point code, and if a proxy point code is assigned to the destination point code, then the first route defined in the `ent-rte` command must use the proxy linkset.

If the dpc parameter has a network cluster address (*ni-nc*-*) or network address (*ni*-*-*), then the lst=prx parameter cannot be specified.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Output

```
ent-rte:dpc=1-1-1:lsn=we123642:rc=25
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    ENT-RTE: MASP A - COMPLTD
;
```

Related Commands

chg-dstn, *chg-rte*, *dlt-dstn*, *dlt-rte*, *ent-dstn*, *rept-stat-dstn*, *rept-stat-rte*, *rtrv-dstn*, *rtrv-rte*

ent-rtx

Enter Exception Route

Use this command to enter an exception route entry. An exception route is associated with an entry in the Routing table. When the Origin-Based MTP Routing feature is enabled and turned on, the least cost route available for an MSU to be routed to a Destination Point Code over a specified linkset is used.

Up to 6 routes can be defined to a single entry in the Routing table. Up to 8000 routesets can be defined for an STP. This total must include at least one normal route (not an exception route). The remaining 7999 routesets can include any combination of normal and exception routes.

Note: A routeset is a collection of routes to a destination. Each routeset can have up to 6 routes, with 16 links on each route. An exception routeset is a collection of up to 6 exception routes that have the same DPC, exception class, and criteria.

Parameters

dpc (mandatory)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (mandatory)

Destination point code.

dpci (mandatory)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmiti` flexible point code option. A group code must be specified when the ITUDUPPDC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (mandatory)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

lsn (mandatory)

Linkset Name. The name of the linkset that is associated with the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

rc (mandatory)

Relative Cost. The relative cost associated with the specified exception route.

Range:

0 - 99

cic (optional)

Starting Circuit Identification Code. This parameter is used alone or together with the ecic parameter as exception routing criteria for the specified exception route.

Range:

0 - 16383

ecic (optional)

Ending Circuit Identification Code. This parameter, together with the cic parameter, defines the CIC range that is used as exception routing criteria for the specified exception route.

Range:

0 - 16383

force (optional)

The force=yes parameter must be specified when the ilsn parameter value is the same as the lsn parameter value.

Range:

yes

ilsn (optional)

Incoming Link Set Name. The name of the originating linkset. This value is used as part of the exception routing criteria for the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

opc (optional)

ANSI origination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

opca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Originating Point Code

opci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

opcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmit` flexible point code option. A group code must be specified when the ITUDUPPDC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bt ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (--).

prefix---p

un--000---127

sna--000--15

mna--000--31

si (optional)

Service Indicator. This parameter is used as part of the exception routing criteria for the specified exception route.

Range:

3 - 15

Example

```
ent-rtx:dpca=1-1-1:opca=2-3-3:lsn=lset1:rc=30
ent-rtx:dpca=1-3-1:ilsn=lset2:lsn=lset3:rc=20
ent-rtx:dpca=2-100-1:si=5:lsn=lset5:rc=50
```

Dependencies

Only one of the opc, ilsn, cic, or si parameters can be specified for a exception route entry.

For an ANSI origination point code that is defined using asterisks (*nnn*-*-*), the value of the *network identifier* subfield (*nnn*) must be greater than 5.

If the ecic parameter is specified, the cic parameter must also be specified.

The ecic parameter value cannot be less than the cic parameter value.

The opc/opca/opci/opcn/opcn24/opcn16 parameter value cannot be the same as the dpc parameter value.

The Origin-Based MTP Routing feature must be enabled and turned on before this command can be entered.

The point code specified by the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must already exist in the Route table.

The value specified for the dpc parameter cannot already be used as an adjacent point code (APC).

The linkset name, as defined by the ilsn or lsn parameter, must exist.

An exception route entry cannot already exist with the same input parameter values, other than the relative cost.

The 6-Way Loadsharing on Routesets feature must be turned on before more than 2 routes can be provisioned with the same relative cost for a given exception route criteria.

A maximum of 6 exception routes can be associated with the specified DPC and criteria.

A maximum total of 8000 exception routes and normal routes can be defined for the EAGLE. At least one route must be a normal (not exception) route. The remaining routes (up to 7999) can be all normal routes, all exception routes, or any combination of normal and exception routes.

The network domain of the adjacent point code in the linkset or of the routes in the specified routeset must be the same as the network domain of the specified destination point code or its alias.

The adjacent or secondary point code type and group code of the linkset or linksets in the specified routeset must match the point code type and group code of the destination point code.

The specified CIC/ECIC range must not overlap an existing range.

If the ilsn and lsn parameters have the same value, or if the value specified for the opc/opca/opci/opcn/opcn24/opcn16 parameter is the same as the APC of the linkset specified by the lsn parameter, then the force=yes parameter must be specified.

The opcn parameter must be in the same ITU-N group as the dpcn parameter.

The Group Code of the APCN in the ilsn parameter must be the same as the Group Code of the dpcn parameter.

ANSI network routing and cluster point codes as OPC exception route criteria are not allowed for ITU destinations.

ITU point codes as OPC exception route criteria are not allowed for ANSI Network and Cluster destination.

If the lsn parameter is specified, then the rc parameter must be specified.

If a proxy destination is used, then this command cannot be entered.

The value specified for the destination point code must be a full point code and not a cluster or network point code.

The destination point code specified by the dpc parameter must have routes provisioned.

The Nested Cluster Routing feature must be turned on before an exception route can be assigned to cluster members.

The value specified for the opc/opca/opci/opcn/opcn24/opcn16 parameter cannot be the same as the adjacent point code of the linkset specified by the lsn parameter.

The J7 Support feature must be enabled before the dpcn16/opcn16 parameter can be specified.

Output

```
ent-rtx:dpci=2-100-1:si=5:lsn=lset5:rc=50
```

```
    stdcfg2b 06-05-19 18:20:11 EST  EAGLE 35.0.0
    ENT-RTX: MASP A - COMPLTD
```

Related Commands

chg-rtx, *dlt-rtx*, *rept-stat-rtx*, *rtrv-rtx*

ent-scr-aftpc Enter Allowed Affected Point Code

Use this command to add a specific allowed affected point code (AFTPC) screening reference in the AFTPC entity set.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

nsfi (mandatory)

The next screening category that is used in the gateway screening process.

Range:

stop

The gateway screening process ends and the message proceeds through normal routing.

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number.

Range:

*0 - 255, **

*—the full range of values from 0–255

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–255

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0---31, **

*---the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the ncm of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No change to the current value

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0---15, **

**---the full range of values from 0--15*

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0---127, **

**---the full range of values from 0--127*

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–255

Example

```
ent-scr-aftpc:sr=iec:ni=240:nc=010:ncm=010:ssn=012:nsfi=stop
ent-scr-aftpc:sr=iec:ni=240:nc=010:ncm=010:ssn=012:nsfi=stop:actname=copy
ent-scr-aftpc:nsfi=stop:sr=af01:ssn=1:msa=255:ssa=255:sp=255
ent-scr-aftpc:sr=aft1:zone=1:area=2:id=3:nsfi=stop:ssn=1:pcst=s
ent-scr-aftpc:nsfi=stop:sr=af02:ssn=1:un=10:sna=2:mna=5
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set *will* be performed at the end of the screening process.

A complete point code must be specified, and must be one, and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

The character *c* is not a valid value for the ni, nc, ncm, zone, area, id, msa, ssa, sp, un, sna, mna, and npc parameters.

If zone=* is specified, area=* and id=* must be specified.

If area=* is specified, id=* must be specified.

If msa=* is specified, ssa=* and sp=* must be specified.

If ssa=* is specified, sp=* must be specified.

If un=* is specified, sna=* and mna=* must be specified.

If sna=* is specified, mna=* must be specified.

If specified, the nsfi parameter value must be *stop*.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

If the screening reference exists, the new affected point code and subsystem number to be added cannot already exist in the AFTPC entity set.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N24 and ITU-N16 point codes.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The J7 support feature must be enabled before the un, sna, or mna parameters can be specified.

The J7 support feature must not be enabled before the msa, ssa, or sp parameters can be specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

If the screening reference is valid, but does not exist, a new AFTPC screen is created.

If the screening reference exists, a new rule is added to the AFTPC screening table.

If asterisks or ranges are specified for the allowed AFTPCs, nothing that matches the specified range of AFTPCs can already exist in the AFTPC screen for the screening reference.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to an LIM. Ensure that screen sets do not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-aftpc` command.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix to has the spare point code prefix.

There is no feature dependency on ANSI point code parameters, i.e., ni, nc, ncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
ent-scr-aftpc:sr=iec:ni=240:nc=010:ncm=010:ssn=012:nsfi=stop
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCR-AFTPC:  SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-AFTPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-aftpc, *dlt-scr-aftpc*, *rtrv-scr-aftpc*

ent-scr-blkdpc Enter Blocked DPC

Use this command to add a specific blocked destination point code (BLKDPC) screening reference, and associated attributes, to the BLKDPC's table. The associated attributes are: destination point code, next screening function identifier, and next screening reference. The destination point codes listed on this screen are prohibited from sending SS7 messages to the network.

Parameters

nsfi (mandatory)

The next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

cgpa

Allowed CGPA is the next screening category.

destfld

Allowed destination field (DESTFLD) is the next screening category.

fail

Discard the received message.

isup

ISUP message type (ISUP) is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–7

C—continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0---31, *, C*

*---the full range of values from 0--31

C -- continue

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

nc (optional)

Network cluster value. This parameter specifies one or morencvalues for the network indicator and network cluster member values specified in the ni andncmparameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ncm (optional)

Network cluster member value. This parameter specifies one or morencmvalues for the network indicator and network cluster values identified in the ni andncparameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ni (optional)

Network indicator value. This parameter specifies one or more ni values for the network cluster and network cluster member values identified in thencandncmparameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A for information on converting the point code format.

Range:

*0 - 16383, *, C*

*—the full range of values from 0–16383

C—continue

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No value given

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0---15, *, C*

*---the full range of values from 0--15

C -- continue

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0---127, *, C*

*---the full range of values from 0--127

C --continue

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–7

C—continue

Example

```
ent-scr-blkdpc:sr=iec:ni=c:nc=c:ncm=c:nsfi=cgpa:nsr=wrd5
ent-scr-blkdpc:sr=iec:ni=c:nc=c:ncm=c:nsfi=stop
ent-scr-blkdpc:sr=iec:ni=c:nc=c:ncm=c:nsfi=stop:actname=copy
ent-scr-blkdpc:sr=iec:ni=240:nc=*:ncm=*:nsfi=fail
ent-scr-blkdpc:sr=bdp1:zone=1:area=2:id=3:nsfi=fail:pcst=none
ent-scr-blkdpc:sr=bdp1:zone=2:area=2:id=3:nsfi=fail:pcst=s
ent-scr-blkdpc:sr=bdp1:npc=128:nsfi=fail:pcst=s
ent-scr-blkdpc:sr=bl01:un=1:sna=2:mna=3:nsfi=fail
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, un-sna-mna, msa-ssa-sp, or npc combination unless a value of *c* is specified.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

When a blocked screening reference is created, the first entry for the ni-nc-ncm, zone-area-id, msa-ssa-sp, or un-sna-mna must be *c-c-c* or npc=c must be specified. Subsequent entries can be specific point codes.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the msa=c parameter is specified, then the ssa and the sp parameters must have a value of *c* or cannot be specified. If the msa=c parameter is specified, and the ssa and the sp parameters are not specified, then the ssa and sp parameters default to a value of *c*.

If the un=c parameter is specified, then the sna and the mna parameters must have a value of *c* or cannot be specified. If the un=c parameter is specified, and the sna and the mna parameters are not specified, then the sna and mna parameters default to a value of *c*.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the ni=c parameter is specified, then the nc and ncm parameters must have a value of *c* or cannot be specified. If the ni=c parameter is specified, and the nc and the ncm parameters are not specified, then the nc and ncm parameters default to a value of *c*.

If the specified ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp is not equal to *c-c-c*, or if the npc=c parameter is not specified, then the nsfi=fail parameter must be specified, and the nsr parameter cannot be specified.

If the nsfi parameter has a value other than *stop* or *fail*, the nsr parameter must be specified and must exist.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the sr does not exist, then the ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp parameters must equal *c-c-c*, or the npc=c parameter must be specified, and the nsfi=fail parameter cannot be specified.

If the specified screening reference exists:

- The ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp must equal *c-c-c* or npc cannot equal *c*.
- The nsfi parameter must have a value of *fail*.
- The nsr parameter cannot be specified.
- The blocked DPC, given by ni-nc-ncm, zone-area-id, or npc, to be added to the BLKDPC screening table for the blocked DPC screening reference cannot exist as defined or within an existing range of DPCs.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The pcst parameter cannot be specified with *c* for a blocked screen reference (sr).

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 and ITU-N24 point codes.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the zone=* parameter is specified, then the area=* and the id=* parameters must be specified.

If the zone=c parameter is specified, then the area and id parameters must have a value of *c* or cannot be specified. If the zone=c parameter is specified, and the area and id parameters are not specified, then the area and id parameters default to a value of *c*.

The value of the nsfi parameter must be valid for the BLKDPC entity type.

If a blocked screening reference exists, then the ni, zone, msa, un, and npc parameters cannot have a value of *c*.

The J7 support feature must be enabled before the un/sna/mnaparameters are specified.

The J7 support feature must not be enabled before the msa,ssa,sp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

When a blocked DPC screening reference is created, the first entry for a point code must be *c-c-c*, or *c* for the npc parameter. Subsequent entries must be specific point codes.

The character *c* is used in the blocked DPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the blocked DPC screens. When screening for a blocked DPC and the point code being screened does not match any of the point codes in the blocked DPC screens, the message is not rejected and the screening process continues.

There must be an entry in the blocked DPC screens to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr. The point code is in the form of npc=c, or of subfields equal to *c-c-c*. When the character *c* is specified, the nsfi and nsr parameters must be specified.

If the character *c* is specified for the parameters ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp, the character *c* is the only value that can be specified for all three parameters. No other values can be used. For example, a point code *c-c-255* is not allowed. The point code must be *c-c-c*. The asterisk value cannot be used with the character *c* (for example, a point code *c-c-** is not allowed).

When the point code does not match any entries in the blocked DPC screens, the screening process is directed to the screening reference with the point code *c-c-c* or npc=c. The nsfi and nsr in this entry are examined to determine the next step in the screening process.

If the current ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp is equal to *c-c-c* or npc=c, only the nsfi and nsr parameters can be changed. Otherwise, only the blocked DPC can be changed.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-blkdpc` command.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to an LIM. Ensure that screen sets do not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters, i.e., ni, nc, ncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
ent-scr-blkdpc:sr=iec:ni=c:nc=c:ncm=c:nsfi=cgpa:nsr=wrd5
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCR-BLKDPC:  SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-BLKDPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-blkdpc, *dlt-scr-blkdpc*, *rtrv-scr-blkdpc*

ent-scr-blkopc

Enter Blocked OPC

Use this command to add a specific blocked originating point code (BLKOPC) screening reference and associated attributes OPC, nsfi, and nsr to the BLKOPC entity set. Any messages received on the link assigned to this screening reference that match the attributes in this table are blocked from entering the network.

Parameters

nsfi (mandatory)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

cgpa

Allowed CGPA is the next screening category.

dpc

Allowed DPC is the next screening category.

fail

Discard the received message.

sio

Allowed SIO is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

area (optional)

ITU international area. The *area* of the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

id (optional)

ITU international ID. This parameter specifies the *ID* of the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–255

C—continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0---31, *, C*

*---the full range of values from 0--31

C ---continue

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, *, C*

*—the full range of values from 0–255

C—continue

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0---15, *, C*

*---the full range of values from 0--15

C ---continue

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0---127, *, C*

*---the full range of values from 0--127

C ---continue

zone (optional)

ITU internationalzone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–255

C—continue

Example

```
ent-scr-blkopc:sr=iec:ni=c:nc=c:ncm=c:nsfi=cgpa:nsr=wrd5
ent-scr-blkopc:sr=iec:ni=c:nc=c:ncm=c:nsfi=stop
ent-scr-blkopc:sr=iec:ni=c:nc=c:ncm=c:nsfi=stop:actname=copy
ent-scr-blkopc:sr=iec:ni=240:nc=*:ncm=*:nsfi=fail
ent-scr-blkopc:sr=bo30:nsfi=stop:msa=c:ssa=c:sp=c
ent-scr-blkopc:sr=bo30:nsfi=fail:msa=1:ssa=2:sp=3
ent-scr-blkopc:sr=bo30:nsfi=fail:msa=3:ssa=*:sp=*
ent-scr-blkopc:sr=bop1:zone=1:area=2:id=3:nsfi=fail:pcst=none
ent-scr-blkopc:sr=bop1:npc=128:nsfi=fail:pcst=s
ent-scr-blkopc:sr=bl01:un=1:sna=2:mna=3:nsfi=fail
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, un-sna-mna, msa-ssa-sp, or npc combination unless a value of *c* is specified.

The ANSI point code value 000-000-000 and the ITU-International point code value 0-000-0 cannot be specified.

At least one optional parameter must be specified.

When a blocked screening reference is created, the first entry for the ni-nc-ncm, zone-area-id, msa-ssa-sp or un-sna-mna must be *c-c-c* or npc=c must be specified. Subsequent entries can be specific point codes.

If asterisks or ranges are specified for the blocked OPCs, nothing that matches the specified range of blocked OPCs can already exist in the BLKOPC screening table for the screening reference.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

The value of the actname parameter must exist in the Gateway Screening Stop Action table.

If area=* is specified, id=* must be specified.

If msa=* is specified, ssa=* and sp=* must be specified.

If un=* is specified, sna=* and mna=* must be specified.

If the msa=c parameter is specified, then the ssa and sp parameters must have a value of *c* or cannot be specified. If the msa=c parameter is specified, and the ssa and the sp parameters are not specified, then the ssa and sp parameters default to a value of *c*.

If the un=c parameter is specified, then the sna and mna parameters must have a value of *c* or cannot be specified. If the un=c parameter is specified, and the sna and the mna parameters are not specified, then the sna and mna parameters default to a value of *c*.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the ni=c parameter is specified, then the nc and the ncm parameters must have a value of *c* or cannot be specified. If the ni=c parameter is specified, and the nc and the ncm parameters are not specified, then the nc and ncm parameters default to a value of *c*.

If the specified ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp is not equal to *c-c-c*, or if the npc=c parameter is not specified, then the nsfi=fail parameter must be specified, and the nsr parameter cannot be specified.

If the value of the nsfi parameter is not *stop* or *fail*, then the nsr parameter must be specified.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the sr does not exist, then the ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp parameters must equal *c-c-c*, or the npc=c parameter must be specified, and the nsfi=fail parameter cannot be specified.

If the specified screening reference exists:

- The ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp must equal *c-c-c* or npc=c cannot be specified.
- The nsfi parameter must be *fail.*
- The nsr parameter cannot be specified.
- The blocked OPC, specified by ni-nc-ncm, zone-area-id, un-sna-mna, msa-ssa-sp, or npc, to be added to the BLKOPC screening table for the blocked OPC screening reference cannot exist as defined or within an existing range of OPCs.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The pcst parameter cannot be specified with *c* for a blocked screen reference (sr).

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, sna). The pcst parameter cannot be specified for ANSI, ITU-N16 and ITU-N24 point codes.

If ssa=* is specified, sp=* must be specified.

If sna=* is specified, mna =* must be specified.

If zone=* is specified, area=* and id=* must be specified.

If the zone=c parameter is specified, then the area and id parameters must have a value of *c* or cannot be specified. If the zone=c parameter is specified, and the area and the id parameters are not specified, then the area and id parameters default to a value of *c*.

The specified nsfi parameter value must be valid for the BLKOPC entity type.

If a blocked screening reference exists, then the ni, zone, msa, un and npc parameters cannot have a value of *c*.

The J7 support feature must be enabled before the un/ sna/ mna parameters are specified.

The J7 support feature must not be enabled before the msa, ssa, sp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

When a blocked DPC screening reference is created, the first entry for a point code must be *c-c-c*, or the npc=c parameter must be specified. Subsequent entries must be specific point codes.

The character *c* is used in the blocked DPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the blocked DPC screens. When

screening for a blocked DPC and the point code being screened does not match any of the point codes in the blocked DPC screens, the message is not rejected and the screening process continues.

There must be an entry in the blocked DPC screens to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr. The point code is in the form of npc=c or subfields equal to *c-c-c*. When the character *c* is specified, the nsfi and nsr parameters must be specified.

If the character *c* is specified for the parameters ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp, the character *c* is the only value that can be specified for all three parameters. For example, a point code *c-c-255* is not allowed. The point code must be *c-c-c*. The asterisk value cannot be used with the character *c* (for example, a point code *c-c-** is not allowed).

When the point code does not match any entries in the blocked DPC screens, the screening process is directed to the screening reference with the point code *c-c-c* or npc=c. The nsfi and nsr in this entry are examined to determine the next step in the screening process.

If the current ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp is equal to *c-c-c* or npc=c, only the nsfi and nsr can be changed. Otherwise, only the blocked DPC can be changed.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-blkopc` command.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to an LIM. Ensure that screen sets do not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix ot has the spare point code prefix.

There is no feature dependency on ANSI point code parameters, i.e., ni, nc, ncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

`ent-scr-blkopc:sr=iec:ni=c:nc=c:ncm=c:nsfi=cgpa:nsr=wrd5`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCR-BLKOPC:  SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-BLKOPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-blkopc, *dlt-scr-blkopc*, *rtrv-scr-blkopc*

ent-scr-cdpa Enter Allowed Called Party Address

Use this command to add a specific allowed called party address (CDPA) screening reference in the CDPA entity set.

Parameters

nsfi (mandatory)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

aftpc

Allowed affected point code is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

sr (mandatory)

Screening reference. This parameter specifies the screening reference name for the CdPA.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number

Range:

*0 - 255, **

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0---31, **

*---the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies theniof the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No value given

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

scmgfid (optional)

SCMG Format ID. The following SCCP message types are screened against the Allowed CDPA table and all others are passed: UDT, UDTS, XUDT, XUDTS.

Range:

*1 - 255, **

*—the full range of values from 1–255

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0---15, **

*---the full range of values from 0--15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0---127, **

*---the full range of values from 0--127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
ent-scr-cdpa:sr=iec:ni=240:nc=010:ncm=*:ssn=224:nsfi=aftpc:nsr=wrd5
ent-scr-cdpa:sr=iec:ni=240:nc=010:ncm=*:ssn=224:nsfi=stop:actname=copy
ent-scr-cdpa:sr=cdp1:zone=1:area=2:id=3:ssn=1:nsfi=stop:scmgfid=1:pcst=s
ent-scr-cdpa:sr=cdp2:un=1:sna=2:mna=1:ssn=1:nsfi=stop
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set *will* be performed at the end of the screening process.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

A complete point code must be specified, and must be one and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, un-sna-mna, msa-ssa-sp, or npc.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

At least one optional parameter must be specified.

The new CDPA entry to be added cannot match any specific, range, or asterisk entry already existing in the specified screening table.

The character c is not a valid value for the ni, nc, ncm, zone, area, id, msa, ssa, sp, una, sna, mna, and npc parameters.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

When the actname parameter is specified, the nsfi=stop parameter must be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and the nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

If the nnc parameter is specified as a range, the nncm parameter must be specified as an asterisk or as the full range.

When nsfi=aftpc is specified, the ssn=1 parameter must be specified.

When nsfi is a value other than *stop*, the nsr parameter must be specified.

When nsfi=stop is specified, the nsr parameter cannot be specified.

When ssn=1 is specified, the scmgfid parameter must be specified.

When ssn is not 1, the scmgfid parameter cannot be specified.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

The specified value for the nsfi parameter is not valid for cdpa screen.

The next screening function identifier (nsfi) and the next screening reference (nsr) must point to an existing screen, or the nsfi=stop parameter must be specified and the nsr parameter cannot be specified.

The J7 support feature must be enabled before the un/sna/mna parameters are specified.

The J7 support feature must not be enabled before the msa/ssa/sp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

If the screening reference is valid, but does not exist, a new CDPA screen is created.

If the screening reference exists, a new rule is added to the CDPA screening table.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to a LIM. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-cdpa` command.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix ot has the spare point code prefix.

There is no feature dependency on ANSI point code parameters, i.e., ni, nc, ncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
ent-scr-cdpa:sr=iec:ni=240:nc=010:ncm=*:ssn=224:nsfi=aftpc:nsr=wrd5
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCR-CDPA:  SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-CDPA:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-cdpa, *dlt-scr-cdpa*, *rtrv-scr-cdpa*

ent-scr-cgpa Enter Allowed Calling Party Address

Use this command to add a specific allowed calling party address (CGPA) screening reference in the CGPA entity set.

Parameters

nsfi (mandatory)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

cdpa

Allowed called party address is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

tt

Allowed translation type is the next screening category.

ri (mandatory)

Routing indicator. This parameter provides routing instructions to the receiving signaling point. In gateway screening, messages may be screened based on the value of the routing indicator.

Range:

dpc

Allow a called party address with a routing indicator value of "DPC/SSN."

gt

Screening stops and gateway screening is bypassed as a forced pass.

****

A full range of values.

sr (mandatory)

Screening reference. The screening reference name for the CgPA.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

ssn (mandatory)

Subsystem number

Range:

*1 - 255, **

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0---31, **

*---the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more ni values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

0 - 16383

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sccpmt (optional)

SCCP message type

Range:

9

UDT

10

UDTS

17

XUDT

18

XUDTS

***

Default:

*

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0---15, **

*---the full range of values from 0--15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0---127, **

*---the full range of values from 0--127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–255

Example

```
ent-scr-cgpa:sr=iec:ni=240:nc=010:ncm=*:ssn=224:nsfi=aftpc:nsr=wrd5:ri=dpc
ent-scr-cgpa:sr=iec:ni=240:nc=010:ncm=*:ssn=224:nsfi=stop:ri=dpc:actname=copy
ent-scr-cgpa:sr=cdp1:ni=5:nc=5:ncm=5:ssn=1:ri=dpc:sccpmt=9:nsfi=sdpa:nsr=cdp1
ent-scr-cgpa:sr=cgpa:zone=1:area=2:id=3:ssn=1:sccpmt=9:ri=*:nsfi=stop:pcst=s
ent-scr-cgpa:sr=cgp1:un=1:sna=2:mna=1:ssn=1:sccpmt=9:nsfi=stop:ri=*
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

A complete point code must be specified, and must be one, and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, un-sna-mna, msa-ssa-sp, or npc.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

The new CGPA point code, ri, sccpmt, and ssn to be added can not already exist in the CGPA entity set.

The character *c* is not a valid value for the ni, nc, ncm, zone, area, id, msa,ssa, sp, un, sna, mna, and npc parameters.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

When the actname parameter is specified, the nsfi=stop parameter must be specified.

If area=* is specified, id=* must be specified.

If msa=* is specified, ssa=* and sp=* must be specified.

If un=* is specified, sna=* and mna=* must be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa,ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

The screen referenced by nsfi and nsr must already exist.

The nsr parameter must be specified, if nsfi is not equal to *stop*.

When nsfi=stop is specified, the nsr parameter cannot be specified.

The nsfi=tt parameter can be specified only if the ri=gt parameter or the ri=* parameter is specified.

The nsfi=cdpa parameter can be specified only if the ri=dpc parameter or the ri=* parameter is specified.

If ssa=* is specified, sp=* must be specified.

If sna=* is specified, mna=* must be specified.

If zone=* is specified, area=* and id=* must be specified.

The specified value for the nsfi parameter is not valid for cgpa screen.

Valid values must be specified for the nsccpmt and sccpmt parameters.

The J7 Support feature must be enabled before the un/ sna/ mna parameters are specified.

The J7 Support feature must not be enabled before the msa/ ssa/ sp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100 .

If the screening reference is valid, but does not exist, a new CGPA screening table is created.

If the screening reference exists, a new rule is added to the CGPA screening table. Only one rule may exist for a given ni-nc-ncm/ssn/ri/sccpmt (or zone-area-id or npc) combination. This implies that for a given combination, only one value of ri may be specified. The ri for a given combination can be *dpc*, *gt*, or *, but not *dpc* and *gt* independently.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to a LIM. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-cgpa` command.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix of has the spare point code prefix.

There is no feature dependency on ANSI point code parameters, i.e., ni, nc, ncm. The command can be entered successfully whether the J7 Support feature is enabled or not enabled.

Output

```
ent-scr-cgpa:sr=iec:ni=240:nc=010:ncm=*:ssn=224:nsfi=aftpc:nsr=wrd5:ri=dpc
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCR-CGPA:  SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-CGPA:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-cgpa, *dlt-scr-cgpa*, *rtrv-scr-cgpa*

ent-scr-destfld

Add an Allowed DESTFLD

Use this command to add an allowed affected destination field (DESTFLD) screening reference and associated attributes (destination point code, next screening function identifier, and next screening reference) to the allowed DESTFLD entity set. One or more point codes can be associated with the allowed DESTFLD screening reference. MTP Network Management messages regarding the DESTFLDs listed in this entity set are accepted from another network.

Parameters

nsfi (mandatory)

This parameter indicates that the gateway screening process should stop.

Range:

stop

The gateway screening process ends and the message proceeds through normal routing.

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters.

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, **

*—the full range of values from 0–255

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0---31, **

*---the full range of values from 0--31

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm* .

Range:

*0 - 255, **

*—the full range of values from 0–255

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ni (optional)

Network indicator value. This parameter specifies one or more ni values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, **

*—the full range of values from 0–16383

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0---15, **

*---the full range of values from 0--15

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

*—the full range of values from 0–255

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

0 - 255

*—the full range of values from 0–255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0---127, **

*---the full range of values from 0--127

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

0 - 7

*—the full range of values from 0–7

Example

```
ent-scr-destfld:sr=iec:ni=240:nc=010:ncm=010-012:nsfi=stop
ent-scr-destfld:sr=iec1:ni=1:nc=1:ncm=1:nsfi=stop:actname=copy
ent-scr-destfld:sr=dst1:zone=1:area=2:id=3:nsfi=stop:pcst=s
ent-scr-destfld:sr=iec:un=120:sna=10:mna=15:nsfi=stop
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

The destination point code specified by ni-nc-ncm, zone-area-id, un-sna-mna, msa-ssa-sp, or the npc parameter must not already exist in the screening reference or within an existing range of DPCs.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The nsfi=stop parameter must be specified in the command.

If the nsfi=stop parameter is specified, then the nsr parameter cannot be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the zone=* parameter is specified, then the area=* and the id=* parameters must be specified.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

The J7 support feature must be enabled before the un/ sna/ mna parameters are specified.

The J7 support feature must not be enabled before the msa/ ssa/ sp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25-100.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-destfld` command.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix ot has the spare point code prefix.

There is no feature dependency on ANSI point code parameters, i.e., ni, nc, ncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
ent-scr-destfld:sr=iec:ni=240:nc=010:ncm=010-012:nsfi=stop
```

```
    rlghncxa03w 04-02-13 11:49:47 EST  EAGLE 31.3.0
    ENT-SCR-DESTFLD: SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-DESTFLD: MASP A - COMPLTD
;
```

Related Commands

chg-scr-destfld, *dlt-scr-destfld*, *rtrv-scr-destfld*

ent-scr-dpc Enter Allowed DPC

Use this command to add an allowed DPC screening reference and associated attributes (destination point code, next screening function identifier, next screening function reference) to the allowed DPC entity set. One or more DPCs may be associated with the allowed DPC screening reference. The DPCs listed in this entity set are allowed to receive SS7 messages from another network.

Parameters

nsfi (mandatory)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

cgpa

Allowed CGPA is the next screening category.

destfld

Allowed destination field (DESTFLD) is the next screening category.

isup

ISUP message type (ISUP) is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

sr (mandatory)

Allowed DPC screening reference name. A set of one or more allowed destination point codes.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–7

C—continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0---31, *, C*

*---the full range of values from 0--31

C ---continue

msa (optional)

24-bit ITU-national main signaling area value. The *msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

nc (optional)

Network cluster value. This parameter specifies one or more *nc* values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the*nc* of the point code represented by*ni-nc-ncm*.

Range:

*000 - 255, *, C*

*—the full range of values from 0–255

C—continue

ncm (optional)

Network cluster member value. This parameter specifies one or more *ncm* values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ni (optional)

Network indicator value. This parameter specifies one or more *ni* values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the *ni* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, *, C*

*—the full range of values from 0–16383

C—continue

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No value given

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

0---15, *, C

*---the full range of values from 0--15

C ---continue

sp (optional)

24-bit ITU national signaling point. This parameter specifies the*sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0---127, *, C*

*---the full range of values from 0--127

C ---continue

zone (optional)

ITU international zone. This parameter specifies the *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—the full range of values from 0–7

C—continue

Example

```
ent-scr-dpc:sr=iec:ni=240:nc=010:ncm=010:nsfi=stop:actname=cncf
ent-scr-dpc:sr=iec:ni=240:nc=010:ncm=010:nsfi=blkdpc:nsr=bdp1
ent-scr-dpc:sr=dpc1:zone=1:area=2:id=3:nsfi=fail:pcst=none
ent-scr-dpc:sr=dpc1:zone=2:area=2:id=3:nsfi=fail:pcst=s
ent-scr-dpc:sr=dpc1:npc=128:nsfi=fail:pcst=s
ent-scr-dpc:sr=dpc2:un=1:sna=2:mna=1:nsfi=stop
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by thegwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

The destination point code specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or the npc parameter must not already exist in the screening reference or within an existing range of DPCs.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the nsfi=stop parameter is not specified, then the nsr parameter must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the zone=* parameter is specified, then the area=* and id=* parameters must be specified.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the nsfi=fail parameter is specified, then the ni, nc, ncm, area, zone, id, msa, ssa, sp, un, sna, mna, and npc parameters cannot have a value of *c*.

The value of the nsfi parameter must be valid for the BLKDPC entity type.

The J7 support feature must be enabled before the un/ sna/ mna parameters are specified.

The J7 support feature must not be enabled before the msa/ ssa/ sp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

When a DPC screening reference is created, the first entry for a point code must be *c-c-c*, or *c* for the npc parameter. Subsequent entries must be specific point codes.

The character *c* is used in the DPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the DPC screens. When screening for a DPC and the point code being screened does not match any of the point codes in the DPC screens, the message is not rejected and the screening process continues.

There must be an entry in the DPC screens to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr . The point code is in the form of npc=c or subfields equal to *c-c-c*. When the character *c* is specified, the nsfi and nsr parameters must be specified.

If the character *c* is specified for the parameters ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp, the character *c* is the only value that can be specified for all three parameters. For example, a point code *c-c-255* is not allowed. The asterisk (*) value cannot be used with the character *c* (for example, a point code *c-c-** is not allowed).

When the point code does not match any entries in the blocked DPC screens, the screening process is directed to the screening reference with the point code *c-c-c* or npc=c. The nsfi and nsr in this entry are examined to determine the next step in the screening process.

If the current ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp is equal to *c-c-c* or npc=c, only the nsfi and nsr can be changed. Otherwise, only the blocked DPC can be changed.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100 .

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-dpc` command.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to an LIM. Ensure that screen sets do not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters, i.e., ni, nc, ncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

```
ent-scr-dpc:sr=iec:ni=240:nc=010:ncm=010:nsfi=stop:actname=cncf
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCR-DPC:  SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-DPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-dpc, *dlt-scr-dpc*, *rtrv-scr-dpc*

ent-scr-isup

Enter Allowed ISUP Screening Reference

Use this command to add an allowed ISUP or TUP screening reference to the Allowed ISUP entity set. One or more message types can be associated with the allowed ISUP screening reference. The ISUP message types listed in this entity set are accepted from another network.

Parameters

isupmt/tupmt (mandatory)

ISUP or TUP message type.

Range:

*0 - 255, **

*—the full range of values from 0–255

sr (mandatory)

Individual ISUP screening reference to which this rule will be added. If the specified sr does not exist, it will be created.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process.

Range:

stop

The gateway screening process ends and the message proceeds through normal routing.

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Example

```
ent-scr-isup:sr=iec:isupmt=1:nsfi=stop
ent-scr-isup:sr=ibig:isupmt=1&&128:nsfi=stop
ent-scr-isup:sr=iall:isupmt=*:nsfi=stop
ent-scr-isup:tupmt=20:sr=tu01:nsfi=stop
```

Dependencies

If the actname parameter is specified, the nsfi-stop parameter must be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

The specified isupmt parameter or tupmt parameter value must not already exist in the specified sr.

If the nsfi parameter is specified, the value must be *stop*.

The nsr parameter cannot be specified if the nsfi=stop parameter is specified.

The GWSOA parameter combination should be known and valid.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

Notes

A range of values can be specified for the isupmt or tupmt parameter by separating the values that define the range by two ampersands (*&&*); for example, isupmt=025&&100 specifies all ISUP message types from 25-100. The value to the left of the*&&*must be less than the value to the right of the *&&* in the range.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-isup` command.

TUP does not apply to SEAS. ISUP Message Type is the default.

To use TUP message type screening, an SIO screening reference with si=04 (TUP) must exist in the SIO table. The TUP screening reference specifies the SIO screening reference as the next screening reference parameter (nsr) value.

To use ISUP message type screening, an SIO screening reference with si=05 (ISUP) must exist in the SIO table. The ISUP screening reference specifies the ISUP SIO screening reference as the next screening reference parameter (nsr) value.

To screen for TUP and ISUP message types using a combined ISUP/TUP screen set, the SIO screening reference with si=4 and the SIO screening reference with si=5 must be two different screening references. The TUP screening reference specifies the SIO screening reference as the next screening reference parameter (nsr) value, and the ISUP screening reference specifies the SIO ISUP screening reference as the next screening reference parameter (nsr) value.

Output

When a screen reference is specified that is not yet associated with a screen set, the following output appears:

```
ent-scr-isup:sr=iec:isupmt=1:nsfi=stop
```

```
    tekelecstp 04-09-02 09:39:13 EST  EAGLE 31.3.0
    ENT-SCR-ISUP: MASP A - COMPLTD
;
```

When a screen reference is specified that is already associated with one or more screen sets, the following output appears:

```
ent-scr-isup:tupmt=20:sr=tu01:nsfi=stop
```

```
    tekelecstp 04-11-17 16:22:27 EST  EAGLE 31.4.0
    Extended Processing Time Required -- Please Wait
    Notice: The number of screensets affected is   2.
    ENT-SCR-ISUP: SCREEN SET AFFECTED - ist1    1% FULL
    ENT-SCR-ISUP: SCREEN SET AFFECTED - ist2    1% FULL
    ENT-SCR-ISUP: MASP A - COMPLTD
;
```

Related Commands

chg-scr-isup, *dlt-scr-isup*, *rtrv-scr-isup*

ent-scr-opc Enter Allowed OPC

Use this command to add an allowed OPC screening reference and associated attributes (originating point code, next screening function identifier, next screening function reference) to the allowed OPC entity set. One or more OPCs may be associated with the allowed OPC screening reference. Each OPC listed in this entity set is allowed to send SS7 messages to the customer's network.

Parameters

nsfi (mandatory)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

blkopc

Blocked OPC is the next screening category.

cgpa

Allowed CGPA is the next screening category.

dpc

Allowed DPC is the next screening category.

sio

Allowed SIO is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

sr (mandatory)

Screening reference. A set of one or more allowed OPCs.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

id (optional)

ITU international ID. The *ID* in the point code represented by *zone-area-id*. A

Range:

*0 - 7, *, C*

*—the full range of values from 0–7

C—continue

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0---31, *, C*

*---the full range of values from 0--31

C—continue

msa (optional)

24-bit ITU-national main signaling area value. The*msa* of the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

nc (optional)

Network cluster value. This parameter specifies one or more nc values for the network indicator and network cluster member values specified in the ni and ncm parameters. It specifies the *nc* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ncm (optional)

Network cluster member value. This parameter specifies one or more ncm values for the network indicator and network cluster values identified in the ni and nc parameters. It specifies the *ncm* of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—the full range of values from 0–255

C—continue

ni (optional)

Network indicator value. This parameter specifies one or more ni values for the network cluster and network cluster member values identified in the nc and ncm parameters. It specifies the*ni* of the point code represented by*ni-nc-ncm*.

Range:

*0 - 255, *, C*

*—full range of values from 0-255

C—continue

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* for information on converting the point code format.

Range:

*0 - 16383, *, C*

*—full range of values from 0-255

C—continue

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No value given

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0---15, *, C*

*---the full range of values from 0--15

C—continue

sp (optional)

24-bit ITU national signaling point. The *sp* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—full range of values from 0-255

C—continue

ssa (optional)

24-bit ITU national sub signaling area. The *ssa* in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, *, C*

*—full range of values from 0-255

C—continue

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0---127, *, C*

*---the full range of values from 0--127

C—continue

zone (optional)

ITU international zone. The *zone* in the point code represented by *zone-area-id*.

Range:

*0 - 7, *, C*

*—full range of values from 7

C—continue

Example

```
ent-scr-opc:sr=iec:nsfi=stop
ent-scr-opc:sr=iec:ni=240:nsfi=sio:nsr=iec
ent-scr-opc:sr=iec:ni=240:nc=010:ncm=010:nsfi=stop:actname=copy
ent-scr-opc:sr=iec:ni=240:nc=010:ncm=010:nsfi=dpc:nsr=iec
ent-scr-opc:sr=opc1:zone=1:area=2:id=3:nsfi=fail:pcst=none
ent-scr-opc:sr=opc1:zone=2:area=2:id=3:nsfi=fail:pcst=s
ent-scr-opc:sr=opc1:npc=128:nsfi=fail:pcst=s
ent-scr-opc:sr=opc2:un=1:sna=2:mna=1:nsfi=stop
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or npc combination unless a value of *c* is specified.

The OPC specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna or the npc parameter must already exist in the screening reference or within an existing range of OPCs.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range.

If the ncm parameter is specified as a single value, or a range other than the full range of 0–255, the ni and nc parameters must be specified with a single value.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the nsfi=stop parameter is not specified, then the nsr parameter must be specified.

The nsr parameter must be specified if nsfi is not equal to *stop*.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the zone=* parameter is specified, then the area=* and id=* parameters must be specified.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point

codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

The value of the nsfi parameter must be valid for the OPC entity type.

The J7 support feature must be enabled before the un/ sna/ mna parameters are specified.

The J7 support feature must not be enabled before the msa/ ssa/ sp parameters are specified.

The GWSOA parameter combination should be known and valid.

Notes

When an OPC screening reference is created, the first entry for a point code must be *c-c-c* or *c* for the npc parameter. Subsequent entries must be specific point codes.

The character c is used in the OPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the OPC screens. When screening for a DPC and the point code being screened does notmatch any of the point codes in the DPC screens, the message is not rejected and the screening process continues.

There must be an entry in the OPC screens to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr . The point code is in the form of npc=c or subfields equal to *c-c-c*. When the character *c* is specified, the nsfi and nsr parameters must be specified.

If the character *c* is specified for the parameters ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp, the character *c* is the only value that can be specified for all three parameters. For example, a point code *c-c-255* is not allowed. The point code must be *c-c-c* . The asterisk value cannot be used with the character *c* (for example, a point code *c-c-** is not allowed).

When the point code does not match any entries in the blocked OPC screens, the screening process is directed to the screening reference with the point code *c* or npc=c. The nsfi and nsr in this entry are examined to determine the next step in the screening process.

If the current ni-nc-ncm, zone-area-id, un-sna-mna or msa-ssa-sp is equal to *c-c-c* or npc=c, only the nsfi and nsr can be changed. Otherwise, only the OPC can be changed.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-opc` command.

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system allows subsequent entries. An error occurs, however, when downloading the screen set to an LIM. Ensure that screen sets do not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

There is no feature dependency on ANSI point code parameters, i.e., ni, nc, ncm. The command can be entered successfully whether the J7 feature is enabled or not enabled.

Output

`ent-scr-opc:sr=iec:nsfi=stop`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCR-OPC:  SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-OPC:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-opc, *dlt-scr-opc*, *rtrv-scr-opc*

ent-scr-sio Enter Allowed SIO

Use this command to add an allowed SIO screening reference and associated attributes (network indicator, service indicator, message priority, H0 heading code, H1 heading code, next screening function identifier, next screening function reference) to the allowed SIO entity set.

Note: To use TUP message type screening, an SIO screening reference with si=04 (TUP) must be defined in the SIO table. This SIO screening reference is specified in the `ent-scr-isup` command as the next screening reference (nsr) value in a screening reference for TUP message types

Parameters

nic (mandatory)

Network indicator code. NIC for the SIO screening reference specified in the sr parameter. The NIC is the last 2 bits of the subservice field of an SIO.

Range:

*0 - 3, **

*—full range of values from 0-3

nsfi (mandatory)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

cdpa

cgpa

Allowed CGPA is the next screening category.

destfld

Allowed destination field (DESTFLD) is the next screening category.

dpc

Allowed DPC is the next screening category.

isup

ISUP message type (ISUP) is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

pri (mandatory)

Message priority. A single priority, or the beginning of a range of priorities for the SIO screening reference specified by the sr parameter .

Range:

*0 - 3, **

*—full range of values from 0-3

si (mandatory)

Service indicator. SI for the SIO screening reference specified in the sr parameter. The SI is the first 4 bits of an SIO. The SS7 code directs the message to the MTP-user at the destination code.

Range:

00 - 15

sr (mandatory)

The allowed SIO screening reference name. This parameter specifies a set of one or more si/nic/pri combinations.

Range:

ayyy

1 alphabetic character followed by up to 5 alphanumeric characters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

h0 (optional)

H0 heading code. New H0 heading code for the screening reference specified in the sr parameter.

Range:

*0 - 15, **

*—full range of values from 0-15

Default:

Value given if si value is *00, 01, 02*

h1 (optional)

H1 Heading Code. H1 heading code for the screening reference specified in the sr parameter.

Range:

*0 - 15, **

*—full range of values from 0-15

Default:

Value given if si value is *00, 01, 02*

nsr (optional)

Next screening reference. This parameter specifies which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Example

```
ent-scr-sio:sr=iec:nic=1:si=1:h0=01&&03:h1=*:pri=*:nsfi=dpc:nsr=abc
ent-scr-sio:sr=iec:nic=1:si=3:pri=2:nsfi=stop
ent-scr-sio:sr=iec:nic=1:si=4:pri=3:nsfi=stop:actname=cncf
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the si parameter is equal to 00, 01, or 02, the h0 and h1 parameters must be specified. Otherwise, the h0 parameter cannot be specified.

Valid combinations for the h0/h1 and nh0/nh1 parameters are:

- h0 is a single value—h1 can be a single value, range, or an asterisk
- h0 is a range— h1 can be an asterisk

- h0 is an asterisk— h1 can be an asterisk

If the screening reference exists, the nic, si, h0/h1, and priorities to be added to the allowed SIO entity set for the SIO screening reference cannot exist in that allowed SIO entity set.

If asterisks or ranges are specified for the heading codes, nothing that matches the combination of nic, si, and the specified heading codes can already exist in the allowed SIO entity set for the screening reference.

If the screening reference does not exist, a new screening reference for the allowed SIO entity set is created.

The nsfi and nsr parameters must point to an existing screen, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

The values specified for the nsfi and si parameters must meet the mapping requirements as shown:

- nsfi=destfld — si=00
- nsfi=cdpa — si=03
- nsfi=cgpa — si=03
- nsfi=isup — si=05

Use *Table 33: Additional Valid ent-scr-sio Parameter Combinations* to determine the acceptable combination of the specified parameter values:

Table 33: Additional Valid ent-scr-sio Parameter Combinations

si value:	nic value	pri value	h0 value:	h1 value:
00	s, *	s, *, r	s	s, *, r
00	s, *	s, *, r	*, r	*
01, 02	s, *	s, *, r	s	s, *, r
01, 02	s, *	s, *, r	*, r	*
03-15	s, *	s, *, r	u	u
Legend • s = single value • r = range • * = asterisk • u = unspecified				

If the nsfi parameter has a value other than *stop* or *fail*, the nsr parameter must be specified and must exist.

If the nsfi=stop parameter is specified, then the nsr parameter must be specified.

If the si parameter is greater than 2, the h0 and h1 parameters must not be specified.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

The GWSOA parameter combination should be known and valid.

For SEAS commands, the pri parameter specified must be in the range 0-3, *.

For SEAS commands, the h0 parameter specified must be in the range 0-15, *.

For SEAS commands, the h1 parameter specified must be in the range 0-15, *.

Notes

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, pri=0&&2 specifies all message priorities for the range 0 - 2.

If the screen set reaches 100% capacity (indicated by the **100% Full** message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to a LIM. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

To use TUP message type screening, an SIO screening reference with si=04 (TUP) must be defined in the SIO table. To use ISUP message type screening, a rule with si=05 (ISUP) must be defined in the SIO table. To use a combined ISUP/TUP screen set for TUP and ISUP message screening, the SIO screening reference with si=4 and the SIO screening reference with si=5 must be two different screening references.

The h0 and h1 parameters cannot be specified if si is not equal to 00, 01, or 02.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-sio` command.

Output

```
ent-scr-sio:sr=iec:nic=1:si=1:h0=01&&03:h1=*:pri=*:nsfi=dpc:nsr=abc
```

```
    rlghncxa03w 04-02-14 16:45:50 EST  EAGLE 31.3.0
    ENT-SCR-SIO: SCREEN SET AFFECTED - SS01  25% FULL
    ENT-SCR-SIO: SCREEN SET AFFECTED - SS04  35% FULL
    ENT-SCR-SIO: MASP A - COMPLTD
;
```

Related Commands

chg-scr-sio, *dlt-scr-sio*, *rtrv-scr-sio*

ent-scr-tt

Enter Allowed Translation Type

Use this command to add a specific allowed translation type (TT) screening reference in the TT entity set.

Parameters

nsfi (mandatory)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

cdpa

Allowed CDPA is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

sr (mandatory)

Screening reference. The point code's unique screening reference name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

type (mandatory)

Translation type. The GTT type value in the CdPA. This value is the decimal representation of the 1-byte field used in SS7.

Range:

*000 - 255, **

*—full range of values from 0-255

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No value given

Example

```
ent-scr-tt:sr=iec:type=012:nsfi=cdpa:nsr=wrd5
ent-scr-tt:sr=iec:type=012:nsfi=stop:actname=copy
```

Dependencies

Caution: Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsm=on parameters, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

If the screening reference is valid, but does not exist, a new TT screen is created.

If the screening reference exists, a new rule is added to the TT screening table.

An asterisk cannot not be specified for a parameter value in this command unless an asterisk was specified for the parameter value in the original `ent-scr-tt` command.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

If the nsfi parameter has a value other than *stop*, the nsr parameter must be specified.

If the nsr parameter is specified, the specified screening reference must exist.

If the screening reference (sr) exists, the single value or range specified for the allowed type to be added to the TT screen for the allowed TT screening reference must not already exist in that TT screen.

If an asterisk is specified for the allowed type, nothing can already exist in the TT screen for the screening reference.

The specified value for the nsfi parameter is not valid for TT screen.

The screen referenced by sfi and nsr must already exist.

The Gateway Screening Rules table can contain a maximum of 360,600 rules.

The value specified for the type parameter must be within the allowed range.

The GWSOA parameter combination should be known and valid.

Notes

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to a LIM. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

Output

```
ent-scr-tt:sr=iec:type=012:nsfi=cdpa:nsr=wrd5
```

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCR-TT:  SCREEN SET AFFECTED - IEC  25% FULL
    ENT-SCR-TT:  MASP A - COMPLTD
;
```

Related Commands

chg-scr-tt, *dlt-scr-tt*, *rtrv-scr-tt*

ent-scrset

Enter Screen Set

Use this command to create a new screen set and point it to its first screen. A screen set is a set of screens (filters) that can be assigned to a linkset. SS7 messages transmitted on a linkset assigned to a screen set require screening by the system, if screening is enabled.

Parameters

nsfi (mandatory)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

blkopc

Blocked OPC is the next screening category.

dpc

Allowed DPC is the next screening category.

opc

Allowed OPC is the next screening category.

sio

Allowed SIO is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

scrn (mandatory)

Screenset name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using the *actname* parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy 1 alphabetic character followed by up to 5 alphanumeric characters.

destfld (optional)

This parameter turns on and off the automatic allowed affected destination screening for network management messages against the routing table, self point codes, and capability point codes. When this parameter is ON, the automatic screening is applied at the end of the provisioned screen set.

Range:

yes

no

Default:

yes

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No value given

Example

```
ent-scrset:scrn=ss01:nsfi=opc:nsr=iec
ent-scrset:scrn=ss02:nsfi=stop
ent-scrset:scrn=empt:nsfi=stop:destfld=yes
ent-scrset:scrn=scr1:nsfi=stop:actname=copy
```

Dependencies

Even though gateway screening is in the screen test mode, as defined by the parameters gwsa=off and gwsm=on, the gateway screening action in the stop action set specified by the actname parameter of the screen set will be performed at the end of the screening process.

The nsfi=stop parameter must be specified before the actname parameter can be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the *ACT NAME* field of the `rtrv-gws-actset` command output.

If the nsfi=stop parameter is specified, then the nsr parameter cannot be specified.

The specified screen set name cannot be in use by another screen set.

A maximum of 63 user-defined screen sets can be defined in the database.

The nsfi and nsr parameters must point to one or more existing entities in another entity set, or the nsfi=stop parameter must be specified, and the nsr parameter cannot be specified.

If the nsfi=stop parameter is not specified, then the nsr parameter must be specified.

The nsfi parameter must be valid for the SCRSET entity.

The Gateway Screening (GWS)/Global Title Translation (GTT) shared database resource (DBMM.TBL) cannot be full.

The GWSOA parameter combination should be known and valid.

Notes

Entering a new screen set may take a few minutes of processor time. The following message appears in the scroll area:

```
Extended processing time required-please wait
```

If the screen set reaches 100% capacity (indicated by the 100% Full message), the system will allow subsequent entries. An error will occur, however, when downloading the screen set to a LIM. Screen sets should not exceed 100% capacity. Remove screen set entries until the capacity is below 100%.

Output

`ent-scrset:scrn=ss01:nsfi=opc:nsr=iec`

```
    rlghncxa03w 04-01-07 11:43:04 EST  EAGLE 31.3.0
    ENT-SCRSET:  SCREEN SET AFFECTED - SS01  25% FULL
    ENT-SCRSET:  MASP A - COMPLTD
;
```

Related Commands

chg-scrset, *dlt-scrset*, *rtrv-scrset*

ent-serial-num Enter Serial Number

Use this command to enter and lock the NT serial number into the database for an EAGLE STP.

You must enter the serial number at least once without specifying the *lock* parameter. As long as you enter the command without the *lock* parameter, you can enter the system serial number as many time as needed. After the correct serial number is entered, you must use the *lock=yes* parameter to lock the serial number table. You cannot change the serial number with administration commands after the table is locked.

Parameters

serial (mandatory)

The system NT Serial Number.

Range:

aayyyyyyyy

Up to 10 alphanumeric characters; mixed case is allowed.

The first two characters (the prefix) must be letters. The remaining characters must be numbers. The serial number cannot contain spaces or special characters.

lock (optional)

This parameter is used to lock the Serial Number table when the serial number is entered for the system.

Caution: After the serial number is locked, you cannot enter it again or change it in the database. You can use the command without the lock parameter to enter the serial number as many times as needed; then enter the command with the lock parameter and the correct serial number to lock the serial number table.

Range:

yes

Default:

Not locked

Example

```
ent-serial-num:serial=nt00000123
```

```
ent-serial-num:serial=nt00000123:lock=yes
```

Dependencies

The serial number must be entered at least once without specifying the lock parameter.

The system serial number that is entered when the lock parameter is specified must match the serial number that was previously entered in the Serial Number table by using the command without the lock parameter.

The system serial number cannot be entered again after the Serial Number table is locked.

The system serial number must start with two alphabetical characters.

The format of the serial number should be AANNNNNNNN where NNNNNNNN must be numeric digits (0 - 9).

The format of the serial number needs to be 2 alphabetical letters followed by 8 numbers (e.g., NT01234567.)

Notes

None

Output

```
ent-serial-num:serial=nt00000123
```

```
    rlghncxa03w 04-01-05 16:40:40 EST  EAGLE 31.3.0
    ENT-SERIAL-NUM:  MASP A - COMPLTD
;
```

Related Commands

rtrv-serial-num

ent-shlf

Enter Shelf

Use this command to add an equipment shelf to the database.

Parameters

loc (mandatory)

The location of the shelf.

Range:

1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300, 5100, 5200, 5300, 6100, 6200, 6300

type (mandatory)

The type of equipment shelf to be configured.

Range

ext, fpb

fan (optional)

This parameter turns ON/OFF the FAN option. If it is turned ON, the FAN power for this shelf will be added to the Frame Power Budget.

Range

off,

on

Example

```
ent-shlf:type=ext:loc=1200
```

```
ent-shlf:type=fpb:loc=6200:fan=on
```

Dependencies

The frame and shelf values of the shelf location parameter (loc) must be within the valid range (*xyzz*, where *x*=frame and *y*=shelf; *zz* is always 00 for this command).

The specified shelf location must not have been configured previously.

A shelf cannot be provisioned at location 1100. This location is reserved for the control shelf.

The shelf locations 6200 and 6300 are reserved for shelf type FPB only. However, shelf with type=fpb can be provisioned in any shelf location from 1200 to 6300.

Notes

None

Output

`ent-shlf:type=ext:loc=1200`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    ENT-SHLF: MASP A - COMPLTD
;
```

`ent-shlf:type=fpb:loc=6300:fan=on`

```
tekelecstp 03-09-12 11:11:28 EST EAGLE 45.0.0
ENT-SHLF: MASP A - COMPLTD
;
```

Related Commands

dlt-shlf, *rtrv-shlf*

ent-sid

Enter Self Identification

Use this command to define additional true point codes for an STP. This command allows newly defined true point codes to be distributed to the cards without requiring system initialization.

Parameters

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (optional)

STP true point code.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp).*

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Example

To create a site identification STP PC for ITU-N and ITU-I:

```
ent-sid:pcn=123:pci=1-1-1
```

To create a site identification STP PC for ITU-N Spare and ITU-I Spare:

```
ent-sid:pcn=s-123:pci=s-1-1-1
```

To create a site identification STP PC for ITU-N16:

```
ent-sid:pcn16=125-1-6
```

Dependencies

At least one optional parameter must be specified.

The Spare Point Code Support feature must be enabled before an ITU-I or ITU-N spare point code can be specified.

If the system is configured for ANSI format point codes, the specified network indicator value (*ni*) of the pc parameter must be 6 or greater when the specified cluster value is 0 (*nc*).

The pcn and pcn24 parameters cannot be specified together in the command.

The specified STP point code must not have been previously defined as a capability point code.

An STP point code cannot exist that is the same type (ANSI, ITU-I, ITU-N, ITU-N24, ITU-N16, ITU-ISpare, or ITU-NSpare) as the specified STP point code or must not have been previously defined as a capability point code.

The value of the pc/pca/pci/pcn/pcn24/pcn16 parameter must be a full point code.

ITU-N STP destination point codes can be specified only as full point codes.

Invalid parameter was specified.

ANSI or ITUN-24 SID cannot be provisioned if the J7 feature is enabled.

2802 E2801 Cmd Rej: J7 Support feature must not be Enabled

Notes

The SID Table can simultaneously contain the node's true point codes of any following point code types: ANSI, ITU-I, ITU-N or ITU-N24, ITU-ISpare, and ITU-NSpare. (Only ITU-N or ITU-N24, not both, can be defined in the SID Table.)

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (*s-*).

Feature 53120 introduces Spare Point Code Support.

When the J7 feature is enabled, ANSI and ITUN-24 point codes are not allowed for the SID table.

Output

```
ent-sid:pcn=123:pci=1-1-1
```

```
    rlghncxa03w 05-01-07 11:11:28 EST  EAGLE 31.12.0
    ENT-SID: MASP A - COMPLTD
;
```

```
ent-sid:pcn16=125-1-5
```

```
    tekelecstp 13-02-26 11:52:41 EST  45.0.0-64.56.0
    ent-sid:pcn16=125-1-5
    Command entered at terminal #4.
    ENT-SID: MASP A - COMPLTD
;
```

Related Commands

chg-sid, *rtrv-sid*

ent-sip-npp

Enter SIP NPP

Use this command to configure number normalization rules (SIPPHCXT and SIPNNPFX). SIPPHCXT table will be used to provision the phone-context. SIPNNPFX table will be used to configure the prefixes against each phone context and it will also contain number of digits to be deleted (NPDD) and new prefix to be added (NPDS).

Parameters

phctxt (mandatory)

Phone Context

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of 1 to 64 characters. Valid values are (0-9, A-Z), +, *, #, .(period), @ or DFLT (default).

npdd (optional)

Number of prefix digits to be deleted from the incoming digit string. If NPDD is zero then no digits are deleted.

Range:

zzzzzzzzzzzzzzz

An integer in the range of 0 to 15.

Default:

No change to the current value.

System Default:

0

npds (optional)

New prefix digits to be substituted to digit string after deleting the NPDD. If NPDS is NONE then no digits are prepended.

Range:

zzzzzzzzzzzzzzz

A string of 1 to 15 characters. Valid values are hex digits (0-9, A-F) and NONE.

Default:

No change to the current value

System Default:

none

pfx (optional)

Prefix

Range:

zzzzzzzzzzzzzzz

A string of 1 to 15 characters. Valid values are hex digits (0-9, A-F), +, *, -, #.

Example

```
ent-sip-npp:phctxt=abc.com:pfx=101
ent-sip-npp:phctxt=abc.com:pfx=121:npdd=5:npds=2f
ent-sip-npp:phctxt=a*bc.com:pfx=91*:npdd=5:npds=af1
ent-sip-npp:phctxt=dflt:pfx=*121#
```

Dependencies

SIPNP Feature must be enabled before entering any number normalization rules.

SIP Phone Context table (SIPPHCXT) should be accessible.

SIP Prefix table (SIPNNPFX) should be accessible.

SIP DBMM 2 table should be accessible.

A maximum of 101 entries can be added in the SIP Phone Context table (SIPPHCXT).

A maximum of 50 prefixes for each phone context can be added in the SIP Prefix table (SIPNNPFX).

Prefixes must be unique. Duplicate Prefix entries are not allowed.

Phone Contexts must be unique. Duplicate Phone Context entries are not allowed.

At least one NPDD or NPDS must be specified with non-default (other than 0, NONE) value.

SIPPHCXT table can have a maximum of 101 Phone Contexts which includes 100 Unique and 1 DFLT.

A valid Phone Context/Prefix value should be given.

The PHCTXT parameter value must contain no more than 64 characters and the PFX parameter value must contain no more than 15 characters.

Notes

None.

Output

This example displays the output when all the parameters are specified:

```
ent-sip-npp:phctxt=a*bc.com:pfx=91:npdd=5:npds=af1
```

```
tekelecstp 12-07-16 10:05:45 EST EAGLE 45.0.0
ent-sip-npp:phctxt=a*bc.com:pfx=91:npdd=5:npds=af1
Command entered at terminal #4.
PHCTXTID table is (2 of 101) 2% full.
ENT-SIP-NPP: MASP A - COMPLTD
;
```

This example displays the output when just the phctxt and pfx parameters are specified:

```
ent-sip-npp:phctxt=linea.com:pfx=*121#
```

```
tekelecstp 12-07-09 18:59:31 EST  45.0.0-64.35.0
ent-sip-npp:phctxt=linea.com:pfx=*121#
Command entered at terminal #4.
PHCTXTID table is (1 of 101) 1% full.
ENT-SIP-NPP: MASP A - COMPLTD
;
```

Related Commands

dlt-sip-npp, *rtrv-sip-npp*, *chg-sip-npp*

ent-slk

Enter Signaling Link

Use this command to add a low-speed or high-speed (ATM or IP) signaling link to a linkset in the database.

Signaling links are the only elements in the database directly supported by a hardware device. When a link is added to a linkset, the link remains in the state OOS-MT-DSBLD (out of service maintenance disabled) until it is activated.

For HC-MIM, E5-E1T1 or E5-E1T1-B cards, use this command to associate a signaling link and a timeslot with the E1, T1 or J1 interface that will service the timeslot.

For HC-MIM or E5-E1T1-B cards used for SE-HSL links, use this command to assign links A and B on any 2 of the 8 HC-MIM/E5-E1T1-B card ports. For E5-E1T1 cards used for SE-HSL links, use this command to assign link A on any 1 of the 8 card ports.

Up to 64 signaling links can be assigned to one HC-MIM/E5-E1T1-B card, allowing links A, A1 - A31, B, and B1 - B31 to be provisioned. Up to 32 signaling links can be assigned to one E5-E1T1 card, allowing links A, A1 - A15, B, and B1 - B15 to be provisioned.

Up to 3 signaling links can be assigned to an E5-ATM or E5-ATM-B card, allowing links A, A1, and B to be provisioned.

Note: The link parameter has been added as a synonym for the port parameter. Either port or link can be used for a few more EAGLE releases; then the port parameter will be removed.

Parameters

link (mandatory)

The signaling link on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108,

3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

lsn (mandatory)

Linkset name. The linkset name must be unique.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

slc (mandatory)

Signaling link code. The SLC must be unique within the linkset. It must be the same at both the system location and the distant node.

Range:

0 - 15

aname (optional)

Association name. The association assigned to the signaling link added in an IPSG linkset.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

atmtsel (optional)

ATM timing selector. The timing source for the ATM signaling link—internal, line, or external. Internal timing is derived from an internal clock source operating at 1.544 MHz ± 200 Hz for ANSI links and 2.048 MHz ± 103 Hz for ITU links. External timing is derived from the High-Speed Master Clock (T1 or E1). Line timing is derived from its received data stream, if present.

Caution: The internal timing source is used for debug purposes only, and is not to be used for production operation.

If you are using the 2.048 MHz reference clock as the timing source for E1 signaling links, the atmtsel=external parameter must be specified for high-speed ATM signaling links. The atmtsel parameter is not valid in the command when the e1loc or e1port parameter is specified for an E1 signaling link. For information on the E1 interface, see the *Database Administration - SS7 User's Guide*.

Range:

external

internal

line

Default:

line

bps (optional)

Transmission rate for the link in bits per second.

Note: Links with different speeds can be mixed within a linkset. Mixing of high speed links and low speed links in a linkset is supported for migration purposes and is not recommended for standard provisioning.

Range:

1536000, 1544000, 1984000, 2048000, 56000, 64000

The value specified for the bps parameter must be supported for the associated card application:

- SS7ANSI—56000 or 64000
- CCS7ITU—56000 or 64000
- ATMANSI—1544000
- SS7ANSI, CCS7ITU (E1 SE-HSL cards)—1984000
- SS7ANSI, CCS7ITU, (T1 SE-HSL-A cards)—1536000
- ATMITU—2048000
- CCS7ITU, (J1 cards) --- 64000

Default:

56000

Default: (For J1 links)

64000

e1atmcrc4 (optional)

CRC4 multi-frame structure enable/disable indicator.

Range:

on

off

Default:

on

e1atmsi (optional)

Value of two Spare International bits of NFAS data.

Range:

0 - 3

Default:

3

e1atmsn (optional)

Value of five Spare National bits of NFAS data.

Range:

0 - 31

Default:

0

e1loc (optional)

Card location of an E1 card with an E1 interface that will service the link assigned for a Channel card. This parameter cannot be specified for an HC-MIM card.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

e1port (optional)

Port for the E1 interface on the E1 card where a signaling link and timeslot or an SE-HSL link is being assigned.

Range:

1 - 8

Any 2, but no more than 2, of the 8 ports on an HC-MIM/E5-E1T1-B card can be specified when the card is used as an SE-HSL card. Any 1, but no more than 1, of the 8 ports on an E5-E1T1 card can be specified when the card is used as an SE-HSL card.

Default:

1

ecm (optional)

Error correction method.

Range:

basic

pcr

Default:

basic

ipliml2 (optional)

IPLIM level 2 stack.

Range:

m2pa

Default:

m2pa

j1port (optional)

Port for the J1 interface on the J1 card where a signaling link and timeslot is being assigned.

Range:

1-8

Ports 1 through 8 can be specified for E5-E1T1 or E5-E1T1B cards.

Default:

1

l2tset (optional)

Level 2 timer set

A signaling link can be assigned to any of the thirty-five timer sets.

Range:

1 - 40

1–10 —ANSI low speed links

11-20 —ITU low speed links

21-25 —ITUN China high speed links

26-30 —ITUN Q703.A high speed links

31-35 —Unchannelized T1 high speed links

36 --40---- ITUN16 Japan low speed links

Default:

1 — ANSI low speed links

11 — ITU low speed links

21 — ITUN China high speed links (SE-HSL link in a linkset defined with the apcntype=ituchina parameter)

26 — ITUN Q703.A high speed links (SE-HSL link in a linkset defined with the apcntype=itun parameter)

31 — Unchannelized T1 high speed links

36----ITUN16 Japan low speed links

ll (optional)

ATM line length in feet.

Range:

0 - 7

0 —0-110 feet

1 —110-220 feet

2 —220-330 feet

3 —330-440 feet

4 —440-550 feet

5 —550-660 feet

6 —More than 660 feet

7 —Allows use of external line buildout networks

Default:

0

lpset (optional)

Link parameter set identifier

Range:

1 - 30

Default:

1 — ANSI

21 — ITU

pcrn1 (optional)

Threshold of the number of MSUs available for retransmission. If the error correction method being used is PCR and this threshold is reached, no new MSUs or FISUs are sent. The retransmission cycle is continued up to the last MSU entered into the retransmission buffer in the order in which they were originally transmitted.

Range:

1 - 1023

low speed E1/T1 links: *1 - 127*

unchannelized T1 links: *1 - 1023*

Default:

76 — low speed E1/T1 links.

608 — unchannelized T1 links.

pcrn2 (optional)

Threshold of the number of MSU octets available for retransmission. If the error correction method being used is PCR, and this threshold is reached, no new MSUs or FISUs are sent. The retransmission cycle is continued up to the last MSU entered into the retransmission buffer in the order in which they were originally transmitted.

Range:

300 - 287744

low speed E1/T1 links: *300 -35500*

unchanelized T1 links: *7200 -287744*

Default:

3800 — low speed E1/T1 links.

32224 — unchannelized T1 links.

t1loc (optional)

Card location of a T1 card with a T1 interface that will service the signaling link assigned for a Channel card. This parameter cannot be specified for an HC-MIM card.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

t1port (optional)

Port for the T1 interface on the T1 card where a signaling link and timeslot or an ST-HSL-A link is being assigned.

Range:

1 - 8

Any 2, but no more than 2, of the 8 ports on an HC-MIM/E5-E1T1-B card can be specified when the card is used as an ST-HSL-A card.

Any 1, but no more than 1, of the 8 ports on an E5-E1T1 card can be specified when the card is used as an ST-HSL-A card.

Default:

1

ts (optional)

E1 or T1 timeslot for the assigned signaling link.

Range:

1 - 31

E1 range:

1-31

T1 range:

1 - 24

J1 range:

1-24

vci (optional)

Virtual channel identifier.

Range:

5, 32 - 65535

0–4 and *6–31* are reserved values; they cannot be specified in the command.

Default:

5

vpi (optional)

Virtual path identifier.

Range:

0 - 4095

Default:

0

Example

```
ent-slk:loc=1201:link=a:slc=3:lsn=c1201001:l2tset=3:bps=64000:ecm=basic
```

```
ent-slk:loc=1201:link=a:slc=3:lsn=c1201001:l2tset=3:ecm=pcr:pcrn1=50:pcrn2=4000
```

This example adds signaling link A to linkset LSHCAP:

```
ent-slk:loc=1304:link=a:slc=0:lsn=lshcap:lpset=3:vci=5:vpi=15
```

```
ent-slk:loc=1302:link=a:slc=5:lsn=atm1302a:lpset=3:vci=10:vpi=15:ll=0:atmtsel=external
```

This example adds a link to linkset LS1 at 56 KB:

```
ent-slk:loc=1205:link=a1:slc=0:lsn=ls1
```

This example assigns a timeslot for the signaling link on an E1 card that uses E1 port 1:

```
ent-slk:loc=1206:link=a:slc=0:lsn=e1jwk:ts=1
```

This example assigns a timeslot for a signaling link on an E1 card that uses E1 port 2:

```
ent-slk:loc=1205:link=b:slc=0:lsn=e1typ:ts=1:e1port=2
```

This example adds a timeslot for a signaling link using E1 port 2 and signaling link B2:

```
ent-slk:loc=1205:link=b2:slc=0:lsn=e1typ:ts=1:e1port=2
```

This example adds a timeslot for a signaling link using signaling link A2. The T1 interface defaults to the interface defined for T1 port 1 (t1port parameter not specified):

```
ent-slk:loc=1207:link=a2:slc=0:lsn=t1jwk:bps=64000:ts=1
```

This example adds a timeslot for a signaling link using T1 port 2 and signaling link B2:

```
ent-slk:loc=1207:link=b2:slc=0:lsn=t1typ:ts=1:t1port=2
```

This example adds a signaling link to linkset LS1 at 2048000 bps for an ATM card that will use the CRC4 multi-frame structure:

```
ent-slk:loc=1205:link=a:slc=0:lsn=ls1:bps=2048000:atmsel=line:e1atmcrc4=on
```

This example adds a link to linkset LS1 at 56 Kbps for a card that is provisioned as an E1 card:

```
ent-slk:loc=1205:link=a31:slc=0:lsn=ls1:e1port=4:ts=4
```

This example adds a link to linkset LS2 at 64 Kbps for a card provisioned as a T1 card:

```
ent-slk:loc=1207:link=b27:slc=3:lsn=ls2:t1port=8:ts=6:bps=64000
```

This example adds signaling link B to linkset LSE5ATM on an E5-ATM or E5-ATM-B card:

```
ent-slk:loc=1305:link=b:slc=1:lsn=lse5atm:lpset=3:vci=5:vpi=15
```

This example adds a signaling link to an IPSG linkset for an E5-ENET card running the IPSG application and hosting an association:

```
ent-slk:loc=1204:port=b:lsn=lsipsg:slc=3:aname=assocsg1204
```

This example adds signaling link A1 to linkset L2E5ATM on an E5-ATM or E5-ATM-B card:

```
ent-slk:loc=1303:link=a1:slc=1:lsn=l2e5atm:lpset=3:vci=5:vpi=15
```

This example assigns a timeslot for the signaling link on a J1 card that uses the J1 port:

```
ent-slk:lsn=ls2:j1port=2:slc=9:port=a3:loc=1102:ts=5:bps=64000:ecm=basic
```

Dependencies

Card locations 1113 - 1118 cannot be specified.

The ecm=pcr parameter must be specified before the pcrn1 and pcrn2 parameters can be specified for the SS7ANSI and CCS7ITU applications.

The value specified for the bps parameter must be supported for the associated card application.

If the card application is SS7ANSI or CCS7ITU, then a value of 56000 or 64000, respectively, must be specified for the bps parameter. If SE-HSL or ST-HSL-A cards are used, then a value of 1984000 or 1536000, respectively, must be specified for the bps parameter.

The value of the bps parameter must be 56000 if the card type is LIMDS0.

A value of 1544000 must be specified for the bps parameter if the card application is ATMANSI.

A value of 56000 must be specified for the bps parameter if the card is a multi-port LIM.

A value 2048000 must be specified for the bps parameter if the card type is LIME1ATM.

The card application must be ATMANSI before the bps=1544000 parameter can be specified. The card application must be ATMITU before the bps=2048000 parameter can be specified.

A value of 1984000 or 1536000 must be specified for the bps parameter if the card is an HC-MIM, E5-E1T1, E5-E1T1-B card used for SE-HSL or ST-HSL-A links (the linkclass=unchan parameter is specified in the `ent-e1` or `ent-t1` command) respectively.

The values 0 - 4 and 6 - 31 cannot be specified for the vci parameter; these values are reserved system values.

The linkset type must be valid for the card:

- The linkset adjacent point code (APC) type must be the same as the card application type (ANSI or ITU).
- IPSG-M2PA linksets cannot contain IPGWx and IPSG-M3UA link types. During migration to an IPSG-M2PA linkset, link types other than IPGWx or IPSG-M3UA can be added to the linkset. After the linkset is transitioned to IPSG-M2PA, only IPSG-M2PA and IPLIMx links can be added.
- IPSG-M3UA linksets cannot contain SS7IPGW, IPGWI, and IPGHC link types. After the linkset is transitioned to IPSG-M3UA, only IPSG-M3UA links can be added to the linkset.

The specified linkset name must exist in the database.

The value of the slc parameter cannot be used by more than one link in the linkset.

A card must be equipped in the specified card location.

The card in the specified card location must be a LIM or MIM and must exist.

A link cannot be already assigned to the specified port.

The parameters that are specified for the command must be valid for the type of card in the specified card location.

If a low-speed link is assigned to a card (card application is not ATMANSI or ATMITU), then the ATM high-speed link and E1 ATM parameters (atmtsel, e1atmcrc4, etatmsi, e1atmsn, ll, lpset, vci, and vpi) cannot be specified.

If an ATM high-speed link is assigned to a card (card application is ATMANSI), then the low-speed link parameters (ecm, l2tset, pcrn1, and pcrn2) cannot be specified.

If an IP link is assigned to a card (card application is SS7IPGW, IPGWI, IPLIM, or IPLIMI), then the following low-speed link parameters, ATM high-speed link parameters, and E1 ATM high-speed link parameters cannot be specified: lpset, vci, vpi, ll, atmtsel, e1atmcrc4, e1atmsi, e1atmsn, ecm, l2tset, pcrn1, and pcrn2.

The value specified for the link parameter must be valid for the specified card type and application:

- A4 - A-15 and B4 - B15—card type is LIME1 or LIMT1 for an E5-E1T1/E5-E1T1-B card or for an HC-MIM card used as an E1 or T1 card, and the card application is SS7ANSI or CCS7ITU
- A16 - A31 and B16 - B31 --- card type is LIME1 or LIMT1 for an HC-MIM/E5-E1T1-B card used as an E1 or T1 card, and the card application is SS7ANSI or CCS7ITU. HC-MIM cards cannot be specified for even-numbered card locations. HC-MIM cards are dual-slot cards. For HC-MIM, these links are assigned only to cards in odd-numbered locations.
- A4 - A31 and B4 - B31—cannot be specified for an SE-HSL or an ST-HSL-A card.
- A - A7 and B - B7—E5-ENET, or E5-ENET-B cards running the IPLIM or IPLIMI application
- A - A15 and B - B15—E5-ENET or E5-ENET-B cards running the IPSG application

HIPR2 cards must be in card locations *xy*09 and *xy*10 on any shelf that contains one or more HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, or E5-ENET-B cards. When links A4 - A31 or B4 - B31 are specified, the system verifies that HIPR2 cards are in card locations *xy*09 and *xy*10 on the same shelf with the specified HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, or E5-ENET-B card.

If the card application is SS7IPGW or IPGWI, then the link=a parameter must be specified.

If an HC-MIM/E5-E1T1-B card is used for SE-HSL or ST-HSL-A links, then only the link=a parameter or link=b parameter can be specified.

If an E5-E1T1 card is used for SE-HSL or ST-HSL-A links, then only the link=a parameter can be specified.

If the specified linkset has a mate linkset, only 1 SS7IPGW or IPGWI signaling link can be assigned to the specified linkset. The assigned link must be an SS7IPGW or IPGWI link.

Up to 8 IPGWx signaling links can be assigned to one linkset if the linkset is not mated.

The associated location must be empty, or an E5-ATM or E5-ATM-B card must be provisioned in the location before the link=b parameter can be specified. Upon initialization, the card is in ***boot phase-0*** for up to 30 seconds. During this period, the hardware is not detected, which may result in a lack of support for signaling link B.

If an IP link is assigned to a card running the SS7IPGW application, then the lsn parameter must reference a linkset that specifies an IP gateway adjacent point code.

If an IP link is assigned to a card running the IPGWI application, then the lsn parameter must reference a linkset that specifies an IP gateway adjacent point code.

If the multgc=yes parameter is specified, then all links assigned to the linkset must be of the same type.

If multgc=yes parameter is specified, then the card in the specified location must be running the IPGWI, IPLIMI, or IPSG application.

The ipliml2 parameter can be specified only for IPLIM cards.

Linksets with 14-bit ITU-N and 24-bit ITU-N APCs or SAPCs can contain only IPGWI or IPLIMI M3UA links. These links support 14-bit ITU-N and 24-bit ITU-N traffic simultaneously.

Linksets containing 24-bit ITU-N APCs or SAPCs cannot contain E1 ATM links. These links do not support 24-bit ITU-N traffic.

A maximum of 1200, 1500, 2000, or 2800 links is allowed in the system. The maximum depends on the enabled Large System # Links quantity (see the `rtrv-ctrl-feat` command output). A FAK is required to enable support for more than 1200 links. A mixture of T1 ATM high-speed, E1 ATM high-speed, SE-HSL, IP, and low-speed signaling links is supported.

HC-MIM, E5-E1T1, or E5-E1T1-B cards cannot be used as or with Channel cards. The e1loc and t1loc parameters cannot be specified for HC-MIM, E5-E1T1, or E5-E1T1-B cards.

If a card location is specified for a Channel card (card type LIMCH) assigned to an E1 or T1 interface, then the e1loc or t1loc parameter, respectively, must be specified.

If a card location is specified for an E1, T1, or Channel card (card type LIME1, LIMT1, or LIMCH), then the ts parameter must be specified.

A specific timeslot can be assigned in the ts parameter to only one E1 signaling link for the E1 interface that services that timeslot.

A specific timeslot can be assigned in the ts parameter to only one T1 signaling link for the T1 interface that services that timeslot.

The ts parameter value for a T1 link must be in the range 1-24.

The ts parameter cannot be specified for HC-MIM, E5-E1T1, or E5-E1T1-B cards that are used for SE-HSL or ST-HSL-A links (the linkclass=unchan parameter is specified in the `ent-e1` or `ent-t1` command).

If the E1 interface has CAS multi-framing enabled for an E1 card or a Channel card, timeslot 16 cannot be specified.

If the card is an IPSG card, then then the ipsg=yes parameter must be specified (see the `ent-ls` command).

If an IPSG linkset and card are used, then the aname parameter must be specified.

If the aname=m3ua parameter is specified, then a maximum of 16 signaling links can be assigned.

If the aname=m2pa parameter is specified, then only one signaling link can be assigned.

The total TPS of all signaling links configured for an IPSG card cannot exceed 5000 TPS for an E5-ENET card. The total TPS of all signaling links configured for an IPSG card cannot exceed 6500 TPS for an E5-ENET-B card when the type=enetb parameter is specified (see the `ent-card` command).

If the HIPR2 High Rate Mode feature is turned off, then the sum of the TPS values assigned to all linksets in the system must be less than or equal to 500,000. If the HIPR2 High Rate Mode feature is turned on, then the sum of the TPS values must be less than or equal to 750,000. If the HIPR2 High Rate Mode and 1M System TPS features are turned on, then the sum of the TPS values assigned to all

linksets in the system must be less than or equal to 1,000,000. The total provisioned system TPS is equal to SIGTRAN TPS + ATM TPS.

The value specified for the aname parameter must already exist in the database.

The adapter assigned to the association must be the same as the adapter assigned to the linkset.

The value specified for the aname parameter must be associated with the value specified for the loc parameter.

Linksets must have same routing context to share an association.

The aname parameter can be specified only for IPSG links.

The e1loc/t1loc or the e1port/t1port/j1port parameters cannot be specified together in the command.

The specified parameter must be valid for the card type and use:

- e1port —HC-MIM, E5-E1T1, or E5-E1T1-B cards used as E1 cards
- t1port — HC-MIM, E5-E1T1, or E5-E1T1-B cards used as T1 cards
- j1port---E5-E1T1 or E5-E1T1-B cards used as J1 cards
- e1loc and t1loc —E1/T1 MIM cards used as E1/T1 channel cards
- ts —HC-MIM, E5-E1T1, or E5-E1T1-B cards used as E1/T1 cards
- lsn, slc, loc, port, bps, lpset, atmsel, vci, vpi, e1atmcrc4, e1atmsi, and e1atmsn —E5-ATM and E5-ATM-B cards. Low-speed link parameters (ecm, l2tset, pcrn1, and pcrn2) cannot be specified.
- e1port and l2tset —HC-MIM, E5-E1T1, or E5-E1T1-B cards used as SE-HSL cards
- t1port and l2tset—HC-MIM, E5-E1T1, or E5-E1T1-B cards used as ST-HSL-A cards

The E1 interface for the card at the location specified by the loc parameter must be defined (see the `ent-e1` command) before a signaling link can be assigned to the port.

If an E1/T1 MIM card is used as an E1 channel card, then the e1port=1 parameter must be specified.

If an E1/T1 MIM card is used as a T1 channel card, then the t1port=1 parameter must be specified.

The same value must be specified for the e1loc or t1loc parameter for all provisioned links on an E1 or T1 channel card, respectively.

The card location specified by the e1loc parameter must contain an HC-MIM, E5-E1T1, or E5-E1T1-B card that is used as an E1 card.

The specified card slot must be equipped with the valid card type.

If the value specified for the loc parameter indicates a Channel card, then the Channel card must be installed on the same shelf as the E1 card that is specified by the e1loc parameter

The E1 interface for the E1 port specified by e1loc parameter must already be defined (see the `ent-e1` command) before a signaling link can be assigned to the card.

A channel bridged slave port (see the `chg-e1` or `chg-t1` command) cannot be specified as a value for the e1port or t1 port parameter.

The value specified for the ts parameter cannot already be in use by the E1 card.

The T1 interface of the T1 card specified by the t1loc parameter must already be defined (see the `ent-t1` command) before a signaling link can be assigned to the card.

If the value specified for the loc parameter indicates a Channel card, then the card must be installed on the same shelf as the T1 card that is indicated by the t1loc parameter.

The T1 interface for the T1 port specified by t1loc parameter must already be defined (see the `ent-t1` command) before a signaling link can be assigned to the card.

All available links on the specified IPLIM card have already been provisioned.

If a multi-port LIM card is used, then the bps=56000 parameter must be specified.

If the loc parameter indicates an ST-HSL-A card, then the t1port parameter must be specified.

For provisioning links A16 - A31 and B16 - B31 on HC-MIM card, shelf FAN bit must be turned on for the shelf on which HC-MIM card is provisioned and present.

If the loc parameter indicates an SE-HSL card, then the e1port parameter must be specified.

If the link is In-Service, then this command cannot be entered.

Links must be available in the linkset that is specified by the lsn parameter.

The domain of the linkset specified by the lsn parameter must match the domain of the link specified by the link parameter.

The link capacity cannot exceed the maximum allowed by the SE-HSL or ST-HSL-A FAK.

The L2 timer range must be valid for the type of signaling link being provisioned as shown:

- ANSI LSL—1 - 10
- ITU LSL—11 - 20
- E1-HSL (China)—21 - 25
- E1-HSL (ITUN)—26 - 30
- T1-HSL-A—31 - 35
- J1 LSL ---- 36-40

The same value cannot be specified for the aname parameter for multiple links in the same linkset.

The same value must be specified for the ecm parameter for all links in a linkset.

The T1 interface on the card at the location specified by the loc parameter must be defined (see the `ent-t1` command) before a signaling link can be assigned to the port.

The N1/N2 thresholds for PCR Error Correction Mode (ECM) specified by the pcrn1 and pcrn2 parameters must be within the range specified for the link type. Only low speed E1/T1 (LSL) and Unchannelized T1 links support PCR ECM.

E5-ATM and E5-ATM-B cards must be inhibited before the card can support an A1 link.

If a 3 Links per E5-ATM Card feature quantity is enabled, and an E5-ATM or E5-ATM-B card is used, then the value specified for the vci parameter must be less than or equal to 16383.

A 3 Links per E5-ATM Card feature quantity must be enabled before the link=a1 parameter can be specified for an E5-ATM or E5-ATM-B card.

The maximum number of E5-ATM or E5-ATM-B cards with 3 links cannot exceed the value that is set by the 3 Links per E5-ATM Card quantity feature.

The value specified for the link parameter when an ATM card is used must be valid:

- a-a1, b—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

The BPS parameter value must be 64000 for J1 links. By default, BPS is 64000 for J1 links.

The Time Slot parameter value must not be greater than 24 for J1 links. The range for the Time Slot is 1 - 24.

The ECM parameter value must be BASIC for J1 links. By default, ECM is BASIC for J1 links.

The J1 table must be accessible.

A specific timeslot can be assigned in the ts parameter to only one J1 signaling link for the J1 interface that services that timeslot.

The value specified for the SLC parameter must be in the range of 0 to 15.

The value specified for TS parameter must be in the range of 0 to 15.

Notes

The ll parameter is not available in the SEAS database.

If a signaling link is assigned to a card that is running the ATMANSI or ATMITU application, and the bps, vci, vpi, e1atmcrc4, e1atmsi, e1atmsn, ll, atmsel, and lpset parameters are not specified, then the ATM default values are assigned for these parameters.

The MTP Level 2 timers (l2tset parameter) are not valid for IP links or for ATM links.

A link is equipped when it is physically operational, that is, when the hardware is in place that is needed to support the link.

Signaling Links for HC-MIM Cards

An HC-MIM card can be used for E1 card functions or T1 card functions but not both at the same time. E1 cards or T1 cards can coexist in the same EAGLE.

Each signaling link for an E1 card or T1 card must be associated with a timeslot assigned using the ent-slk command. Each signaling link and timeslot assigned for an E1 card or T1 card must be associated with an E1 or T1 interface that has been defined for one of the ports on the HC-MIM card (see the ent-e1 command or ent-t1 command).

Timeslots and signaling links are defined in this command by a combination of card location (loc parameter), the signaling link that uses the timeslot (A, A1-A31, B, B1-B31), the timeslot number (ts), and the port for the servicing E1 or T1 interface on the E1 or T1 card (e1port or t1port parameter). Timeslot numbers must be unique to the E1 or T1 interface that services the timeslot; that is, the same timeslot cannot be assigned to the same E1 or T1 interface for more than one signaling link.

Each HC-MIM used as an E1 card can have up to 64 signaling links assigned to the card. Each E1 interface on an HC-MIM card can service 1-31 timeslots.

Each HC-MIM used as a T1 card can have up to 64 signaling links assigned to the card. Each T1 interface on an HC-MIM card can service 1-24 timeslots.

Signaling Links for E5-E1T1 Cards

An E5-E1T1 card can be used for E1, T1, or J1 card functions, but only one function per card. E1 cards, T1 cards, and J1 cards can coexist in the same EAGLE.

Each signaling link for an E1, T1, or J1 card must be associated with a timeslot assigned using this command. Each signaling link and timeslot assigned for an E1, T1, or J1 card must be associated with an E1, T1, or J1 interface that has been defined for one of the ports on the card (see the ent-e1 or ent-t1, respectively).

Timeslots and signaling links are defined in the ent-slk command by a combination of card location (loc parameter), the signaling link that uses the timeslot (A, A1-A15, B, B1-B15), the timeslot number (ts), and the port for the servicing E1, T1 or J1 interface on the E1, T1, or J1 card (e1port, t1port, or

j1port parameter). Timeslot numbers must be unique to the E1, T1 or J1 interface that services the timeslot; that is, the same timeslot cannot be assigned to the same E1, T1, or J1 interface for more than one signaling link.

Each E5-E1T1 card used as an E1 card can have up to 32 signaling links assigned to the card. Each E1 interface on the card can service 1-31 timeslots.

Each E5-E1T1 card used as a T1 card can have up to 32 signaling links assigned to the card. Each T1 interface on the card can service 1-24 timeslots.

Each E5-E1T1 card used a J1 card can have up to 32 signaling links assigned to the card. Each J1 interface on the card can service 1-24 timeslots.

Signaling Links for E5-E1T1-B Cards

An E5-E1T1-B card can be used for E1, T1, or J1 card functions, but not both at the same time. E1 cards and T1 cards can coexist in the same EAGLE.

Each signaling link for an E1, T1, or J1 card must be associated with a timeslot assigned in this command. Each signaling link and timeslot assigned for an E1, T1, or J1 card must be associated with an E1, T1, or J1 interface that has been defined for one of the ports on the card (see the ent-e1 or ent-t1 command, respectively).

Timeslots and signaling links are defined in the ent-slk command by a combination of card location (loc parameter), the signaling link that uses the timeslot (A, A1-A31, B, B1-B31), the timeslot number (ts), and the port for the servicing E1, T1, or J1 interface on the E1, T1, or J1 card (e1port or t1port parameter). Timeslot numbers must be unique to the E1, T1, or J1 interface that services the timeslot; that is, the same timeslot cannot be assigned to the same E1, T1, or J1 interface for more than one signaling link.

Each E5-E1T1-B card used as an E1 card can have up to 64 signaling links assigned to the card. Each E1 interface on the card can service 1-31 timeslots.

Each E5-E1T1-B card used as a T1 card can have up to 64 signaling links assigned to the card. Each T1 interface on the card can service 1-24 timeslots.

Each E5-E1T1-B card used as a J1 card can have up to 64 signaling links assigned to the card. Each J1 interface on the card can service 1-24 timeslots.

Signaling Links for E5-ATM/E5-ATM-B Cards

An E5-ATM or E5-ATM-B card can support E1 or T1 card functions: however, the card cannot support both functions at the same time. Cards running E1 and T1 functions can coexist in the same EAGLE.

Each E5-ATM or E5-ATM-B card can have up to 3 signaling links assigned to the card. Only the A, A1, or B link can be used. The card must be inhibited, a 3 Links per E5-ATM Card feature quantity must be enabled, and the value specified for the vci parameter must be less than or equal to 16383 before the A1 link can be provisioned.

The A, A1, and B links can be provisioned for a location if a card is not seated in that location. However, if a card other than an E5-ATM or E5-ATM-B card is inserted in this location, then the card is auto-inhibited.

Signaling Links for IPSG Cards

An IPSG card supports both M2PA and M3UA signaling links.

The card supports up to 32 signaling links per card, 16 M3UA links per association, and 32 associations per card.

Multiple M3UA signaling links with routing context (different linksets/AS, up to 16) can use a single association.

Each M3UA AS-ASP instance maps to a signaling link. Signaling link state depends upon AS-ASP state, as well as administrative action.

The IPSG card can share M2PA linksets with IPLIM, IPLIMI, and IPLHC cards, but the card cannot share M3UA linksets with SS7IPGW, IPGWI, and IPGHC cards.

The IPSG card supports ANSI and ITU and ITUN/ITUN24 signaling links simultaneously on one card and on one association. Each signaling link resides in a set of networks determined by the APC and SAPCs of the assigned linkset.

The slktps parameter specified for the IPSG linkset (see the `ent/chg-ls` command) specifies the TPS for each link provisioned for that linkset.

HSL and LSL in same linkset

Mixing of high speed links and low speed links in a linkset is supported for migration purposes and is not recommended for standard provisioning.

Signaling links and scheduled UI measurement reports

If the Integrated Measurements feature is turned on, then the measurements subsystem automatically disables the scheduled UI measurements reports, including the daily scheduled reports, if the entered link causes the provisioned link count to exceed 700.

Output

```
ent-slk:loc=1303:link=a1:slc=7:lsn=l2e5atm:lpset=3:vci=5:vpi=15
```

```
    eagle1 10-10-11 13:15:03 EST  EAGLE 43.0.0
    ent-slk:loc=1303:port=a1:slc=7:lsn=l2e5atm:ts=1:e1port=1
    Command entered at terminal #4.
    ENT-SLK: MASP A - COMPLTD
;
```

J1 links output:

```
ent-slk:lsn=ls2:j1port=2:slc=9:port=a3:loc=1102:ts=5:bps=64000:ecm=basic
```

```
    tekelecstp 13-12-20 11:11:40 EST  46.0.0-65.3.0
    ent-slk:lsn=ls2:j1port=2:slc=9:port=a3:loc=1102:ts=5:bps=64000:ecm=basic
    Command entered at terminal #4.
    ENT-SLK: MASP A - COMPLTD
;
```

Related Commands

act-slk, *blk-slk*, *canc-slk* , *dact-slk*, *dlt-slk*, *inh-slk*, *rept-stat-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

ent-snmp-host

Enter SNMP Host

Use this command to write an entry into the SNMP Host table to configure an SNMP northbound interface.

Parameters

host (mandatory)

Host name. This parameter specifies the logical name of the device associated with the specified IP address.

Special characters, such as hyphens, can be used in the host name if the host name is enclosed in double quotes (" ").

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 32 characters in length. Valid values are a..z, A..Z, 0..9, or .

ipaddr (mandatory)

The IP address associated with the host name. This is a TCP/IP address expressed in standard dot notation.

Range

4 numbers separated by dots, with each number in the range of 0-255.

cmdport (optional)

SNMP interface command port ID.

Range:

161, 1024..65535

This is the port that the SNMP agent will monitor for commands such as GET and SET.

Default:

161

hb (optional)

Heartbeat notification interval

Range:

0, 60, 120, 300, 600, 900, 1800, 3600, 5400, 7200

Default:

60

trapcomm (optional)

The value used in the community name field when SNMP traps are generated.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string up to 32 characters in length.

If the string contains characters other than alphanumeric characters, the entire string must be enclosed in double quotes (" ").

The string can be entered in upper and lower case; however, the system converts upper case alphabetic characters to lower case.

Default:

public

trapport (optional)

SNMP interface trap port ID.

Range:

162, 1024..65535

This is the port through which the SNMP agent will transmit traps to the Manager.

Default:

162

Example

```
ent-snmp-host:host=snmpmgr:ipaddr=192.168.54.100
ent-snmp-host:host="linux-server":
ipaddr=10.25.60.99:hb=300:trapcomm="password"
```

Dependencies

An entry for the specified IPADDR cannot already exist.

An entry for the specified HOST cannot already exist.

A maximum of two SNMP Hosts can be configured.

The specified heartbeat value must be within the range for the HB parameter.

The SNMP feature must be enabled before an SNMP Host can be configured.

The specified PORT value must be within the allowed range.

Notes

None.

Output

```
ent-snmp-host:host=snmphost1:ipaddr=192.168.54.100
```

```
tekelecstp 12-06-13 10:31:11 EST 45.0.0-64.66.0
ent-snmp-host:host=snmphost1:ipaddr=192.168.54.100
Command entered at terminal #4.
SNMP HOST table is (1 of 2) 50% full
```

```
ENT-SNMP-HOST: MASP A-COMPLTD
;
```

```
ent-snmp-host:host="snmp-srvr":ipaddr=10.25.55.25:hb=300:trapcomm="passwd"
```

```
tekelecstp 12-06-13 10:33:31 EST 45.0.0-64.66.0
ent-snmp-host:host="snmp-srvr":ipaddr=10.25.55.25:hb=300:trapcomm="passwd"
Command entered at terminal #4
SNMP HOST table is (2 of 2) 100% full
ENT-SNMP-HOST: MASP A - COMPLTD
;
```

Related Commands

chg-snmp-host, *dlt-snmp-host*, *rtrv-snmp-host*

ent-spc

Enter Secondary Point Code

Use this command to enter an SPC (secondary point code) into the database.

Parameters

spc (mandatory)

ANSI point code with subfields network indicator-network cluster-network cluster member (*ni-nc-ncm*).

Synonym:

spca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

spc/spca/spci/spcn/spcn24/spcn16 (mandatory)

Secondary point code.

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

spci (mandatory)

ITU international secondary point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

spcn (mandatory)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmt` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

spcn24 (mandatory)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

spcn16 (mandatory)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Example

This example adds a secondary point code:

```
ent-spc:spc=10-20-30
```

This example adds a 24-bit ITU-N secondary point code:

```
ent-spc:spcn24=99-99-99
```

This example adds a spare ITU-N secondary point code:

```
ent-spc:spcn=s-12345
```

This example adds a 16-bit ITU-N secondary point code:

```
ent-spc:spcn16=121-5-10
```

Dependencies

The Spare Point Code Support feature must be enabled before a spare point code (prefix s-) can be specified in the command.

The value specified for the spc parameter must be a full point code.

The ANSI point code range requirements have been violated for an ANSI SID. For the ANSI secondary point code with subfields *ni-nc-ncm*, the *ni* component cannot equal 000, the *nc* component cannot equal 000 if the *ni* component is 001 - 005

The specified secondary point code to be added must not already exist as a secondary point code.

A maximum of 40 secondary point codes may be defined.

The MPC feature must be turned on before a secondary point code can be added using this command.

The value specified for the spc parameter cannot already exist in the Destination table as a destination point code, true point code, or concerned point code.

The specified secondary point code cannot match an existing true point code or capability point code in the Site Identification table.

The value specified for the spc/spca/spci/spcn/spcn24/spcn16 parameter cannot be the same as any Emulated Point Code value in the PCT table.

The J7 support feature must be enabled before the spcn16 parameter can be specified.

The SPC/SPCA/SPCN24 parameters are not allowed if the J7 support feature is enabled.

Notes

If the spcn parameter is specified, its format must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

`ent-spc:spc=10-20-30`

```
    rlghncxa03w 04-02-18 08:50:12 EST  EAGLE 31.3.0
    Secondary Point Code table is (7 of 40) 17% full
    ENT-SPC: MASP A - COMPLTD
;
```

`ent-spc:spcn16=121-2-15`

```
tekelecstp 13-02-27 17:01:18 EST EAGLE 45.0.0-64.56.0
Secondary Point Code table is (3 of 40) 8% full.
ENT-SPC: MASP A - COMPLTD
;
```

Related Commands

dlt-spc, *rtrv-spc*

ent-srvsel

Enter Service Selector

Use this command to assign the applicable service selectors required to specify a service entry for DSM services.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

Note: The nature of address indicator parameters (naiv or nai) and the numbering plan parameters (npv or np) can be specified using a mnemonic or an explicit value. Either the mnemonic or the explicit value can be specified; however, both values cannot be specified at the same time for the same parameter. *Table 60: NAIV/NAI Mapping* shows the mapping between the naiv and nai values. *Table 61: NPV/NP Mapping* shows the mapping between the npv and np values.

gti/gtia/gtii/gtin/gtin24 (mandatory)

Global title indicator. For all service selector commands, the domain is defined as GTI and GTIA (ANSI), GTI (ITU international), and GTIN (ITU national). For the service selector commands, GTI and GTIA are equivalent.

Range:

Supported value for ANSI: gti=2 and gtia=2

Supported values for ITU: gtii= 2, 4; gtin=2, 4; gtin24= 2, 4

serv (mandatory)

DSM service.

Note: The gport service cannot be used for the Prepaid SMS Intercept Phase 1 (PPSMS) or the Portability Check for Mobile Originated SMS feature; use the smsmr service. The mnp service includes the G-Port, A-Port, and IS41 GSM Migration services.

Range:

eir

Equipment Identity Register

gflex

GSM flexible numbering

gport

GSM number portability

inpq

INP query

inpmr

INP message relay

smsmr

MO SMS ASD, MO SMS B-Party Routing, MO SMS GRN, MO-based GSM SMS NP, MO-based IS41 SMS NP, MO SMS IS41-to-GSM Migration, Portability Check for MO SMS, Prepaid SMS Intercept Phase 1

idps

IDP Screening for Prepaid

idpr

Prepaid IDP Query Relay

mnp

Mobile Number Portability

vflex

Voice Mail Router

atinp

ATI Number Portability Query (ATINP)

ttr

Triggerless TCAP Relay

aiq

ANSI41 Analyzed Information Query

ssn (mandatory)

Subsystem number.

Range:

0 - 255

tt (mandatory)

Translation type.

Range:

0 - 255

dfltact (optional)

This parameter specifies the default Action ID associated with the service selector entry.

Range:

ayyyyyyyy

1 leading alphabetic followed by up to 8 alphanumeric characters

The dfltact parameter can have one of the following values:

- a GTT Action ID that exists in the GTT Action table and has an associated GTT Action of *disc/udts/tcaperr*
- *fallback* —Fallback to the Relay data. The relayed MSU is routed as per routing data provided by the service.
- *falltogtt* —Fallback to GTT. If the gttselid parameter has a value other than *none*, and the GTT selector search fails, then the GTT selector search is performed again using gttselid=none.

Default:

fallback

gttselid (optional)

The GTT Selector ID used for performing GTT on messages relayed by the service.

Range:

0 - 65534

nai (optional)

Nature of Address indicator.

Range:

sub

rsvd

natl

intl

naiv (optional)

Nature of Address indicator value.

Range:

0 - 127

np (optional)

Numbering Plan.

Range:

e164

generic

x121

f69

e210

e212

e214

private

npv (optional)

Numbering Plan value.

Range:

0 - 15

off (optional)

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 10 feature options can be specified in the list.

Range:

gttrqd

on (optional)

Enables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 10 feature options can be specified in the list.

Range:

gttrqd

rqdtblnop (optional)

The action performed if a message arrives at an SCCP card that does not have the necessary RTDB table, and the current message routing is GT.

Range:

udts

generate UDTS for the processed MSU

gtt

fall through to GTT for the processed MSU

disc

discard the processed MSU

snai (optional)

Service nature of address indicator.

Range:

natl

National significant number

intl

International number

rnidn

Routing number prefix and international dialed/directory number

rnndn

Routing number prefix and national dialed/directory number

rnsdn

Routing number prefix and subscriber dialed/directory number

ccrndn

Country code, routing number, and national directory number

sub

Subscriber number

snp (optional)

Service numbering plan.

Range:

e164

e212

e214

Example

```
ent-srvsel:gtii=4:tt=20:np=e164:nai=intl:serv=eir:ssn=*
ent-srvsel:gtin24=4:tt=4:np=e164:nai=intl:serv=gport:snp=e164:snai=intl:ssn=9
ent-srvsel:gtii=4:tt=4:np=e164:nai=intl:serv=eir:ssn=11
ent-srvsel:gtin=4:tt=9:np=e214:nai=natl:snp=e164:snai=intl:serv=gflex:ssn=250
ent-srvsel:gtii=2:tt=6:snai=intl:snp=e164:serv=smsmr:ssn=10
```

```
ent-srvsel:gtii=2:tt=6:snai=intl:snp=e164:serv=gport:ssn=10:on=gttrqd:gttselid=4:
dfltact=act2
```

```
ent-srvsel:gtii=4:tt=20:np=e164:nai=intl:serv=eir:ssn=*:rqdtblnop=disc
```

Dependencies

The Service Selector table cannot contain more than 1024 entries.

The G-Flex feature must be turned on before the serv=gflex parameter can be specified.

The INP feature must be turned on before the serv=inpmr or serv=inpq parameter can be specified.

The G-Port feature must be turned on before the serv=gport parameter can be specified.

The Equipment Identity Register (EIR) feature must be turned on before the serv=eir parameter can be specified.

The np and npv parameters cannot be specified together in the command.

The nai and naiv parameters cannot be specified together in the command.

The gtia=4 parameter cannot be specified.

The values 1 and 3 are not valid for the gti/gtia/gtii/gtin/gtin24 parameters.

If the gti/gtia/gtii/gtin/gtin24=2 parameter is specified, then the np(v) and nai(v) parameter combinations cannot be specified.

If the gtii/gtin/gtin24=4 parameter is specified, then an np(v) and nai(v) parameter combination must be specified. The parameters can be specified in the following combinations: np/naiv, npv/nai, np/nai, or npv/naiv.

If the serv parameter has a value of *inpmr, gport* or *eir*, then the gtia and gti parameters cannot be specified.

If the serv=inpmr parameter is specified, then the snp=e164 parameter must be specified.

If the serv=inpq parameter is specified, then the gtii parameter cannot be specified.

If the value specified for the snai parameter is *rnidn*, *rnndn*, or *rnsdn*, then the value specified for the serv parameter must be *inpmr, gport*, or *smsmr*.

If the value specified for the serv parameter is *gflex, gport, inpmr*, or *smsmr*, then the snai and snp parameters must be specified.

If the value specified for the serv parameter is *aiq, atinp, eir, idpr, inpq, ttr*, or *vflex* then the snai and snp parameters cannot be specified.

If the snai=ccrndn parameter is specified, then the value specified for the serv parameter must be *gport* or *smsmr*.

If the value specified for the serv parameter is *gport* or *smsmr*, then the snp=e164 parameter must be specified.

An entry cannot already exist that matches the new gti/gtii/gtin/gtin24, tt, ssn, np(v), and nai(v) combination of parameters.

For the specified gti/gtia/gtii/gtin, tt, np(v), nai(v), and ssn=* parameters, an entry matching a specific ssn cannot already exist.

For the specified gti/gtia/gtii/gtin, tt, np(v), nai(v), and ssn parameters, an entry matching the ssn=* parameter cannot already exist.

If the ansigflex STP option is enabled (see the `chg-stpotps` command), then an ITU service selector cannot be entered.

The IDP Screening for Prepaid feature must be on before the serv=idps parameter can be specified.

If the serv=idps parameter is specified, then the supported mandatory parameters are tt, serv, ssn, gtin, and gtii. Supported optional parameters are np and nai.

The Prepaid IDP Query Relay feature must be turned on or the IAR Base feature must be enabled before the serv=ttr parameter can be specified.

If a value of *idpr* or *ttr* is specified for the serv parameter, then the only valid mandatory service parameters are tt, serv, ssn, gtii, and gtin, and the only valid optional parameters are np and nai.

If the A-Port or IGM feature is enabled, then the serv=gport parameter cannot be specified.

An entry cannot already exist that matches the new gti/gtii/gtin/gtin24, tt, ssn, np(v), and nai(v) combination of parameters.

An entry cannot already exist that matches the new gti/gtii/gtin/gtin24, tt, ssn, np(v), and nai(v) combination of parameters.

An entry cannot already exist that matches the new gti/gtii/gtin/gtin24, tt, ssn, np(v), and nai(v) combination of parameters.

The V-Flex feature must be turned on before the serv=vflex parameter can be specified.

The ATINP feature must be enabled before the serv=atinp parameter can be specified.

The PPSMS or Portability Check for Mobile Originated SMS feature must be turned on, or the MO SMS ASD, MO SMS GRN, MO SMS B-Party Routing, MO SMS IS41-to-GSM Migration, MO-based GSM SMS NP, or MO-based IS41 SMS NP feature must be enabled before the serv=smsmr parameter can be specified.

If a value of *aiq*, *atinp*, or *eir* is specified for the serv parameter, then the gtin24 parameter cannot be specified.

The Prepaid IDP Query Relay feature must be turned on before the serv=idpr parameter can be specified.

The ANSI41 AIQ feature must be enabled before the serv=aiq parameter can be specified.

The A-Port or IGM feature must be turned on, or the A-Port or IGM feature must be enabled and the G-Port feature must be turned on before the serv=mnp parameter can be specified.

If a DSM4G card is active in the system, then the on=gttrqd parameter cannot be specified.

The dfltact, gttselid, and on/off=gttrqd parameters are supported for only the IDPR, TTR, MNP, GPORT, SMSMR, GFLEX, and INPMR services.

If a GTT Action ID is specified as the value for the dfltact parameter, then the Action ID must already exist in the GTT Action table.

A valid value must be specified for the dfltact parameter.

The EGTT feature must be turned on before the gttselid or dfltact parameter can be specified.

The same value cannot be specified for the on and off parameters.

The dfltact=none parameter cannot be specified.

The EPAP Data Split feature or the Dual ExAP Config feature must be on before the rqdtblnop parameter can be specified.

If a value of *inpq*, *vflex*, *atinp*, or *eir* is specified for the serv parameter, then the rqdtblnop=gtt parameter cannot be specified.

If a value of *aiq* or *idps* is specified for the serv parameter, then the rqdtblnop parameter cannot be specified.

The requested service selector entry must exist in the database.

The GSM DBMM table must be accessible.

Notes

on/off options

- *gttrqd* —GTT required. Specifies whether GTT is required after service execution is complete and the message is relayed by the service. This option is supported for the IDPR, MNP, TTR, GPORT, SMSMR, GFLEX, and INPMR services.

Output

```
ent-srvsel:gtia=4:tt=10:ssn=25:snai=natl:serv=aiq
```

```
    tekelecstp 09-12-03 16:40:40 EST  EAGLE 42.0.0
    Service Selector table is (114 of 1024) 11% full
    ENT-SRVSEL: MASP A - COMPLTD
;
```

```
ent-srvsel:gtia=2:tt=20:ssn=105:snai=natl:serv=inp
```

```
    tekelecstp 13-09-26 11:51:11 EST  EAGLE 46.0.0
    Service Selector table is (11 of 1024) 1% full
    ENT-SRVSEL: MASP A - COMPLTD
;
```

Related Commands

chg-srvsel, *dlt-srvsel*, *rtrv-srvsel*

ent-ss-appl

Enter Subsystem Application

Use this command to reserve a subsystem number for an application and set the application status to be online or offline. One subsystem can be defined per application. The application must be unique.

Parameters

appl (mandatory)

Application type.

Range:

lnp

inp

eir

vflex

atinpq

aiq

ssn (mandatory)

Primary subsystem number.

Range:

2 - 255

rqdtblnop (optional)

The action performed if a message arrives at an SCCP card that does not have the necessary RTDB table, and the current message routing is subsystem.

Range:

udts

generate UDTS for the processed MSU

disc

discard the processed MSU

stat (optional)

Status.

Range:

offline

online

Default:

offline

Example

```
ent-ss-appl:appl=lnp:ssn=16:stat=online
ent-ss-appl:appl=inp:ssn=15:stat=offline:rqdtblnop=disc
```

Dependencies

The LNP feature must be turned on before the appl=lnp parameter can be specified.

The INP feature must be turned on before the appl=inp parameter can be specified.

The EIR feature must be turned on before the appl=eir parameter can be specified.

The value specified for the appl parameter cannot already be assigned.

The maximum number of applications must not already be assigned.

For LNP, the STP true point code and LNP subsystem must exist in the MAP table.

For INP, the STP true point code and INP subsystem must exist in the MAP table.

For EIR, the STP true point code and EIR subsystem must exist in the MAP table.

STP True Point Code must exist in MAP table

If the V-Flex feature is turned on, then the STP true point code and V-Flex subsystem must exist in the MAP table.

The V-Flex feature must be turned on before the appl=vflex parameter can be specified.

The ATINP feature must be enabled before the appl=atinpq parameter can be specified.

For ATINP, the STP true point code and ATINPQ subsystem must exist in the MAP table.

The value specified for the ssn parameter cannot already exist in the SS-APPL table.

The specified MAP table entry for a subsystem number (SSN) value in the SS-APPL table, must be a valid point code type for that subsystem. The following point code types are not valid for the indicated subsystems:

- For the INP subsystem, the True Point code cannot be an ITU-I point code.
- For the EIR subsystem, the True Point code cannot be an ANSI point code.
- For the AIQ, ATINPQ, or VFLEX subsystem, the True Point code can not be an ITU-N24 point code.

The ANSI41 AIQ feature must be enabled before the appl=aiq parameter can be specified.

The STP true point code and a MAP entry for the AIQ subsystem must be provisioned in the MAP table before the appl=aiq parameter can be specified.

The EPAP Data Split feature OR Dual ExAP Config feature must be on before the rqdtblnop parameter can be specified.

If the appl=aiq parameter is specified, then the rqdtblnop parameter cannot be specified.

Notes

If not specified, the application subsystem status defaults to OFFLINE. When the application is OFFLINE, the application subsystem is down.

The LNP application status applies to both message relay and LNP query.

Output

```
ent-ss-appl:appl=aiq:ssn=18:stat=online
```

```
    tekelecstp 09-12-03 16:40:40 EST  EAGLE 42.0.0
    ENT-SS-APPL: MASP A - COMPLTD
;
```

Related Commands

chg-ss-appl, *dlt-ss-appl*, *rtrv-ss-appl*

ent-subnetid

Enter Subnet ID

Use this command to enter elements into the Subnet ID list, for the ISUP NP with EPAP feature. Each entry is identified by the Subnet ID and the Subnet number.

The Subnet ID length (subnetidlen parameter) must be entered first, before the command is entered the second time to enter the Subnet ID and Subnet Number.

Parameters

subnetid (optional)

Vendor Subnet ID

Range:

1 - 15 digits

Valid digits are *0-9, a-f, A-F*.

Note: The number must contain the number of digits defined by the subnetidlen parameter.

subnetidlen (optional)

Subnet ID Length.

Range:

1 - 15

All Subnet IDs defined for the ISUP NP with EPAP feature must contain this number of digits.

subnetnum (optional)

Subnet Number. A reference to the prefix number for the ISUP NP with EPAP feature (see the `chg-prefix` command).

Range:

1

Corresponds to the prefix defined with prefix number 1

2

Corresponds to the prefix defined with prefix number 2

3

Corresponds to the prefix defined with prefix number 3

4

Corresponds to the prefix defined with prefix number 4

5

Corresponds to the prefix defined with prefix number 5

Example

```
ent-subnetid:subnetidlen=6
```

```
ent-subnetid:subnetid=886933:subnetnum=1
```

Dependencies

The value *none* cannot be specified for the subnetid parameter.

The ISUP NP with EPAP feature must be enabled before this command can be entered.

The SUBNETID table can contain a maximum of 50 entries.

The specified ID entry cannot already exist in the SUBNETID table.

All SUBNETID table entries must have the number of digits defined by the subnetidlen parameter value.

The prefix with the same prefix number as the specified Subnet Number must already be provisioned for the ISUP NP with EPA feature.

The Subnet ID length cannot be changed unless the SUBNETID table is empty. All Subnet IDs must be deleted from the table before a different Subnet ID length can be entered.

The Subnet ID length must be entered before any Subnet IDs can be defined.

The subnetidlen parameter cannot be specified in the same command with the subnetid and subnetnum parameters.

Notes

None.

Output

The Subnet ID length must be entered first.

```
ent-subnetid:subnetidlen=6
```

```
    rlghncxa03w 04-10-07 11:11:28 EST  EAGLE 31.11.0
    ENT-SUBNETID: MASP A - COMPLTD
;
```

The first Subnet ID and Subnet number can be entered after the Subnet ID length has been entered.

```
ent-subnetid:subnetid=886933:subnetnum=1
```

```
    rlghncxa03w 04-10-07 11:11:28 EST  EAGLE 31.11.0
    VENDID table is (6 of 50) 11% full
```

```
    ENT-SUBNETID: MASP A - COMPLTD
;
```

Related Commands

dlt-subnetid, *rtrv-subnetid*

ent-t1 Enter T1 Interface

Use this command to enter an interface for an HC-MIM, E5-E1T1, or E5-E1T1-B card used as a T1 or ST-HSL-A card.

T1 ports 1, 3, 5, and 7 (master ports) can be independently channel bridged with their adjacent even-numbered (slave) T1 ports 2, 4, 6, and 8 to allow non-signaling data pass-through.

Any of the 8 ports on an HC-MIM or E5-E1T1 card can be specified when the card is used as a standard HC-MIM or E5-E1T1 card, respectively.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

t1port (mandatory)

T1 card port number. The value must be a T1 port for which an interface has not been configured on the specified T1 card.

Range:

1 - 8

Any 2 of the 8 ports on an HC-MIM or E5-E1T1-B card can be specified when the card is used as an ST-HSL-A card.

Any 1 of the 8 ports on an E5-E1T1 card can be specified when the card is used as an ST-HSL-A card.

chanbrdg (optional)

Port bridging status. This parameter specifies whether an odd-numbered T1 port is channel bridged with its adjacent even-numbered T1 port for non-signaling data pass through.

Range:

on

off

Default:

off

encode (optional)

Indicator for use of B8ZS or AMI encoding/decoding.

Range:

b8zs

ami

Default:

b8zs

force (optional)

This parameter specifies to provision an odd-numbered T1 port to channel bridging mode if the adjacent next higher even-numbered port is already provisioned with a T1 interface.

Range:

yes

no

framing (optional)

Indicator for framing format. *esfperf* is the framing format with performance monitoring.

Range:

sf, esf, esfperf

Default:

sf

linkclass (optional)

Link class for links assigned to T1 cards (channelized links) or ST-HSL-A cards (unchannelized links).

Range:

chan

unchan

Default:

chan

ll (optional)

T1 cable length in feet between the EAGLE and the connecting node.

Range:

0 - 655

Default:

133

minsurate (optional)

Minimum signal unit rate. The minimum number of SUs present on a link uniformly distributed.

Note: The linkclass=unchan parameter must be specified for an ST-HSL-A card before this parameter can be specified.

Range:

400 - 1600

Default:

1000

t1tsel (optional)

Timing source

Range:

line

slave timing source

external

master timing source

recovered

timing source recovered from the paired master port for channel bridged slave ports

Default:

line

Example

```
ent-t1:loc=1205:t1port=1:encode=ami:t1tsel=external:framing=sf:ll=100
ent-t1:loc=1203:t1port=1:chanbrdg=on:t1tsel=recovered
ent-t1:loc=1203:t1port=2:linkclass=unchan:minsurate=1200
```

Dependencies

The specified card location (loc parameter) must be equipped.

The card specified by the loc parameter must be a LIMT1 card type.

The port specified by the t1port parameter must not be already equipped with a T1 interface.

The chanbrdg=on parameter can be specified only for cards that are used as T1 cards. The parameter cannot be specified if the cards are used as ST-HSL-A cards.

The chanbrdg=on parameter cannot be specified for even-numbered T1 ports.

The timing source parameter t1tsel must be specified if the chanbrdg=on parameter is specified.

The t1tsel=line parameter cannot be specified if the chanbrdg=on parameter is specified.

The chanbrdg=on parameter must be specified before the t1tsel=recovered parameter can be specified.

When provisioning an odd-numbered T1 port to channel bridging mode using the chanbrdg=on parameter, the force=yes parameter must be specified if the adjacent even-numbered port is already provisioned with a T1 interface.

Before the chanbrdg=on parameter can be specified for an odd-numbered T1 port, all signaling links assigned to the adjacent even-numbered T1 port must be deleted.

The shelf FAN bit must be turned ON for the shelf on which an HC-MIM card is being used as a T1 or ST-HSL-A card.

HIPR2 cards must be equipped in card locations *xy*09 and *xy*10 (*x* is the frame, *y* is the shelf) on each EAGLE shelf that contains one or more HC-MIM or E5-E1T1/E5-E1T1-B cards that are used as T1 cards or ST-HSL-A cards.

T1 ports 3 - 8 can be specified only for HC-MIM and E5-E1T1 cards.

Card locations 1113 - 1118 (E5-MASP and E5-MDAL cards) cannot be specified as values for the loc parameter.

If the linkclass=unchan parameter is specified, then the chanbrdg=on parameter cannot be specified.

The linkclass=unchan parameter must be specified before the minsurate parameter can be specified.

An ST-HSL-A feature quantity must be enabled before the linkclass=unchan parameter can be specified for an ST-HSL-A card.

The linkclass=unchan parameter can be specified only for HC-MIM and E5-E1T1 cards.

Channelized and unchannelized T1 ports (mixed mode) cannot be specified on a single card (the card cannot be used as a T1 card and an ST-HSL-A card at the same time).

Only 2 of the 8 ports can be used for T1 interfaces on an HC-MIM or E5-E1T1-B card that is used as an ST-HSL-A card.

Only 1 of the 8 ports can be used for T1 interfaces on an E5-E1T1 card that is used as an ST-HSL-A card.

The ST-HSL-A feature must be turned on before the framing=esfperf parameter can be specified.

Notes

One or two T1 interfaces must be defined on a T1 card after the T1 card type (LIMT1) is defined in the database, and before the signaling links and associated timeslots are defined for the T1 card.

External timing is derived from the EAGLE High-Speed Master Clock (1.544 MHz for T1 or 2.048 MHz for E1): therefore, the Master Timing feature is required. Line timing is derived from its received data stream, if present.

Up to 8 T1 interfaces can be defined on an HC-MIM or E5-E1T1/E5-E1T1-B card used as a T1 card after the T1 card type (LIMT1) is defined in the database, and before the signaling links and associated timeslots are defined for the T1 card.

On an HC-MIM or E5-E1T1/E5-E1T1-B card, T1 ports 1, 3, 5, and 7 (master ports) can be independently channel bridged with their adjacent even-numbered (slave) ports 2, 4, 6, and 8 to allow non-signaling data pass-through. The chanbrdg=on parameter must be specified for the odd-numbered T1 port.

For an ST-HSL-A card, the minsurate parameter indicates the least number of SUs present on a link uniformly distributed. The number of SUs present is the minsurate parameter value (without link traffic) and the minsurate parameter value minus the number of MSUs (with link traffic).

Output

```
ent-t1:loc=1205:t1port=1:encode=ami:t1tsel=external:framing=sf:ll=100
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
    ENT-T1: MASP A - COMPLTD
;
```

Related Commands

chg-t1, *dlt-t1*, *rtrv-t1*, *tst-t1*

ent-tt

Enter Translation Type

Use this command to add a translation type to the system database.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

type/typea/typei/typen/typen24/typeis/typens (mandatory)

The translation type and network type. This value is the decimal representation of the 1-byte field used in SS7.

The type and typea parameters specify an ANSI network.

The typei parameter specifies an ITU-international network.

The typen parameter specifies an ITU-national network.

The typen24 parameter specifies a 24-bit ITU-national network.

The typeis parameter specifies an ITU-international spare network.

The typens parameter specifies an ITU-national spare network.

A translation type numeric value may be entered as ANSI type (type/typea) and as an ITU type (typei/typen/typen24/typeis/typens). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE protocol processing as either ANSI or ITU; therefore, ITU applies to ITU-I, ITU-I spare, ITU-N, ITU-N spare, and ITU-N24.

Range:

000 - 255

Default:

No translation type is specified

alias (optional)

The alias of the global title translation type

Range:

000 - 255

Default:

No alias assignment is made.

ndgt (optional)

The number of digits contained in the global title translation. This parameter is not valid if the VGTT (variable length GTT) feature is turned on.

Range:

1 - 21

Default:

6 (not applicable if the VGTT feature is on)

ttn (optional)

Translation type name.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

Default:

"set" + "ans" | "int" | "nat" | "24n" | "ins" | "nas" + 3-digit TT value

Example

```
ent-tt:type=230:ttn=lidb:ndgt=5
ent-tt:type=230:ttn=lidb:alias=007
ent-tt:type=2:ndgt=5
ent-tt:type=3
ent-tt:typens=2
ent-tt:typeis=1:ttn=setitu001
```

Dependencies

The translation type specified by type/typea/typei/typen/typen24/typeis/typens cannot already exist in the database containing the ANSI and ITU types.

The alias and ndgt parameters cannot be specified together in the command.

The translation type name must be unique.

The ndgt parameter is not valid if the VGTT (variable length GTT) feature is turned on.

The value specified for the type/typea/typei/typen/typen24/typeis/typens parameter cannot be an alias value.

The value specified for the type/typea/typei/typen/typen24/typeis/typens parameter must already exist in the database for the network type.

The value specified for the ttn parameter must already exist in the database.

The values specified for the type/typea/typei/typen/typen24/typeis/typens and ttn parameters must refer to the same entity.

The value specified for the alias parameter must be associated with the specified translation type and cannot be the value of an existing translation type.

The value specified for the alias parameter cannot be an existing alias value for the specified network type.

The network domain of the translation type specified by the ttn parameter cannot be CROSS (see the `ent-gttset` command) when entering an alias entry for that ttn.

The ttn=none parameter cannot be specified.

Notes

The new translation type is entered into the translation type table along with the translation name and the number of digits used by the translation type.

The ttn parameter always refers to a translation type. Aliases do not have translation type names.

If the OBSR or FLOBR feature is turned on, then the `ent-tt` command can be used to provision only CdGTA GTT sets and GTT selectors. NP and NAI values cannot be specified for GTT selectors using the `ent-tt` command as gtii=4 entries cannot be provisioned with this command.

If the EGTT feature is on, then the following occurs for this command:

- For ANSI, if the GTT selector of a true entry is deleted using the `dlt-gttsel` command, a new entry using the same TTN cannot be created. If the true selector is deleted for an entry using the `dlt-gttsel` command, then its aliases cannot be entered.
- For ITU, if a true GTT selector entry (GTI=2 or GTI=4) is deleted using the `dlt-gttsel` command, or if the GTT set name of an entry is changed using the `chg-gttsel` command, then a new entry for the same TTN cannot be created. If a true GTT selector entry is deleted using the `dlt-gttsel` command, or if the GTT set name of an entry is changed using the `chg-gttsel` command, then its aliases cannot be created.

Output

```
ent-tt:typeis=1:ttn=setitu001
```

```
    tekelecstp 10-04-28 16:45:34 EST  Eagle 42.0.0
    ENT-TT: MASP A - COMPLTD
;
```

Related Commands

dlt-tt, *rtrv-tt*

ent-ttmap

Enter Translation Type Mapping

Use this command to add a mapped SS7 message translation type (TT) for a given gateway linkset name. With this command you can add to the database the identification of the type of allowed global title translation in the SS7 message before and after translation type mapping. For example, you can use this command to add to the database that you want the SS7 message translation type 001 (before TT mapping) mapped to 254 (after TT mapping).

Parameters

ett (mandatory)

Translation type before mapping. The identification of the type of global title translation in the SS7 message*before* translation type mapping. This attribute is the decimal representation of the 1-octet binary field used by the SS7 protocol to identify the translation type.

Range:

000 - 255

io (mandatory)

Incoming or outgoing. The system uses this parameter to indicate whether the translation type mapping data provisioned for the gateway linkset is for SS7 messages*received* or*sent* on the linkset.

Range:

i

incoming

o

outgoing

lsn (mandatory)

Linkset name. The unique network identifier for the gateway linkset.

Range:

ayyyyyyyyy

1 alphabetic character followed by 9 alphanumeric characters

mtt (mandatory)

Mapped translation type. The identification of the type of global title translation in the SS7 message after translation type mapping. This attribute is the decimal representation of the 1-octet binary field used by the SS7 protocol to identify the translation type.

Range:

000 - 255

Example

```
ent-ttmap:lsn=nc001:io=i:ett=128:mtt=16
```

Dependencies

The linkset must be defined.

The Translation Type Mapping table must not be full for the linkset specified in the lsn parameter.

Notes

None

Output

```
ent-ttmap:lsn=nc001:io=i:ett=128:mtt=16
```

```
    rlghncxa03w 04-02-21 13:09:27 EST  EAGLE 31.3.0
    ENT-TTMAP: MASP A - COMPLTD

    TTMAP table for nc001 is (2 of 64) 3% full
;
```

Related Commands

chg-ttmap, *dlt-ttmap*, *rtrv-ttmap*

ent-user

Enter User

Use this command to add a user to the database. When you first enter the command, the system prompts you for the user's password, which must follow the administered password guidelines. For security reasons, the password is not displayed. After successfully entering a user password, you are prompted to verify it by entering it again.

Parameters

Note: Allcc(X)parameters consist of a configurable command class name (*ayy*), and indicator (*-yes*or-*no*) to specify whether the command class is allowed. A value of*ayy-yes*indicates that the value is allowed. A value of*ayy-no*indicates that the value is not allowed.

uid (mandatory)

User ID

Range:

*a*zzzzzzzzzzzzzzz

1 alphabetic character followed by up to 15 alphanumeric characters (including asterisks, single quotes, and commas)

all (optional)

This parameter specifies whether the user ID is assigned all non-configurable command classes (LINK, SA, SYS, PU, DB, DBG, LNP).

Range:

yes

no

Default:

no

cc1 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy-yes, *ayy-no*

ayy—Command class name of 1 alphabetic character followed by 2 alphanumeric characters

no —the command class is not allowed

yes —the command class is not allowed

cc2 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy-yes, *ayy-no*

ayy—Command class name of 1 alphabetic character followed by 2 alphanumeric characters

no —the command class is not allowed

yes —the command class is not allowed

cc3 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy-yes, ayy-no

ayy —Command class name of 1 alphabetic character followed by 2 alphanumeric characters

no —the command class is not allowed

yes —the command class is allowed

cc4 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy-yes, ayy-no

ayy—Command class name of 1 alphabetic character followed by 2 alphanumeric characters

no —the command class is not allowed

yes —the command class is allowed

cc5 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy-yes, ayy-no

ayy—Configurable command class name of 1 alphabetic character followed by 2 alphanumeric characters

no —the command class is not allowed

yes —the command class is allowed

cc6 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy-yes, ayy-no

ayy—Configurable command class name of 1 alphabetic character followed by 2 alphanumeric characters

no —the command class is not allowed

yes —the command class is allowed

cc7 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy-yes, ayy-no

ayy—Configurable command class name of 1 alphabetic character followed by 2 alphanumeric characters

no —the command class is not allowed

yes —the command class is allowed

cc8 (optional)

Configurable command class name and an indicator to specify whether the User ID can enter commands assigned to the specified command class.

Range:

ayy-yes, ayy-no

ayy—Configurable command class name of 1 alphabetic character followed by 2 alphanumeric characters

no —the command class is not allowed.

yes —the command class is allowed

db (optional)

Access to all commands in command class Database Administration.

Range:

yes

no

Default:

no

dbg (optional)

Access to all commands in command class Debug.

Range:

yes

no

Default:

no

link (optional)

Access to all commands in command class Link Maintenance.

Range:

yes

no

Default:

no

page (optional)

The maximum age of the password, in days. The STP automatically prompts the user for a new password at login if the user's password is older than the value specified for this parameter.

Range:

0-999

Default:

The value specified for the page parameter in the `chg-secu-dflt` command

pu (optional)

Access to all commands in command class Program Update.

Range:

yes

no

Default:

no

revoke (optional)

Revoke the user ID. The system rejects login attempts for a revoked user ID.

Range:

yes

no

Default:

no

sa (optional)

Access to all commands in command class Security Administration.

Range:

yes

no

Default:

no

sys (optional)

Access to all commands in command class System Maintenance.

Range:

yes

no

Default:

no

uout (optional)

User ID aging interval. The number of successive days a user ID can go unused (no successful login) before the system denies login of that user ID.

Range:

0 - 999

Default:

The value specified for the uout parameter in the `chg-secu-dflt` command

Example

```
ent-user:uid=john:db=yes
ent-user:uid=john*mayer:db=yes
ent-user:uid=user123:cc5=u21-yes:cc8=u32-yes
```

Dependencies

Passwords cannot be created or modified from a telnet terminal (terminal IDs 17-40) without the OA&M IP Security Enhancements feature turned on.

The specified user ID cannot already exist.

The user IDs *seas* or *none* cannot be entered because they are reserved for system use. Up to 100 users can be entered.

The revoke=yes parameter cannot be specified for a user ID with system administration authorization.

The Command Class Management feature must be enabled before a configurable command class name can be specified in the cc1-cc8 parameters.

The cc1-cc8 parameter values must have valid default or provisioned configurable command class names. Default names are *u01-u32* .

Notes

To disable user ID aging, specify the uout=0 parameter.

The *Database Administration Manual - System Management* provides a list of all commands allowed within each command class.

Up to 8 configurable command class name parameters can be specified in one command. Additional commands can be entered to assign user access for more than 8 names. To assign user access for all

32 available configurable command class names, four commands could be entered with 8 names specified in each command.

A password must be entered for the newly-created userID. The system issues a separate prompt for this password and disables character echo at the terminal so that the entered password is not displayed on the screen.

After the password has been entered, the system issues a second prompt, and the password must be entered again. This ensures that no typing mistakes were made on the first entry.

Use the following rules for creating passwords:

- A new password cannot contain more than 12 characters.
- A new password must contain at least the number of characters that is specified in the minlen parameter of the `chg-secu-dflt` command.
- A new password must contain at least the number of alphabetic (alpha parameter), numeric (num parameter), and punctuation (punc parameter) characters that is specified in the `chg-secu-dflt` command.
- A new password cannot contain the associated user ID.

As a default, the command class Basic is assigned to all users. If no other command class is assigned, the user still has access to commands in the Basic class.

Output

```
ent-user:uid=john*mayer:db=yes
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    ENT-USER: MASP A - COMPLTD
;
```

Related Commands

act-user, *chg-pid*, *chg-user*, *dact-user*, *dlt-user*, *login*, *logout*, *rept-stat-user*, *rtrv-secu-user*, *rtrv-user*

ent-vendid

Enter Vendor ID

Use this command to enter elements into the Vendor ID list, for the GSM MAP SRI Redirect to Serving HLR (also called GSM MAP SRI Redirect) feature. Each entry is identified by the Vendor ID and the Vendor number.

The Vendor ID length (vendidlen parameter) must be entered first, before the command is entered the second time to enter the Vendor ID and Vendor Number.

Parameters

vendid (optional)

Vendor ID

Range:

1 - 15 digits

vendidlen (optional)

Vendor ID Length. All Vendor IDs defined for the GSM MAP SRI Redirect for Serving HLR feature must contain this number of digits.

Range:

1 - 15

vendnum (optional)

Vendor Number. The Vendor Number is used as a reference to the prefix for the GSM MAP SRI Redirect for Serving HLR feature.

Note: The prefix values in the range are defined in the `chg-prefix` command.

Range:

1 - 32

1

Corresponds to the prefix defined with prefix number 1

2

Corresponds to the prefix defined with prefix number 2

..

..

32

Corresponds to the prefix defined with prefix number 32

vendtype (optional)

Vendor Type. The Vendor Type is used with the GSM MAP SRI Redirect for Serving HLR feature to allow multiple networks for the same equipment vendor.

Range:

1 - 32

Example

```
ent-vendidvend:len=6
ent-vendid:vendid=886933:vendnum=1:vendtype=1
ent-vendid:vendid=886939:vendnum=5:vendtype=9
```

Dependencies

The vendid=none parameter cannot be specified.

The GSM MAP SRI Redirect feature must be enabled before this command can be entered.

The VENDID table can contain a maximum of 500 entries.

The specified ID entry cannot already exist in the VENDID table.

All VENDID table entries must have the number of digits defined by the vendidlen parameter value.

The prefix with the same prefix number as the specified Vendor Number must already be provisioned for the GSM MAP SRI Redirect feature.

The Vendor ID length cannot be changed unless the VENDID table is empty. All Vendor IDs must be deleted from the table before a different Vendor ID length can be entered.

The Vendor ID length must be entered before any Vendor IDs can be defined.

The vendidlen parameter cannot be specified in the same command with the vendid, vendidlen, and vendtype parameters. Either the vendidlen parameter, or the vendid, vendidlen, and vendtype parameters can be specified in the command.

Notes

None.

Output

`ent-vendid:vendidlen=6`

```
    rlghncxa03w 04-10-07 11:11:28 EST  EAGLE 31.11.0
    ENT-VENDID: MASP A - COMPLTD
;
```

`ent-vendid:venid=886933:vendnum=1:vendtype=1`

```
    rlghncxa03w 04-10-07 11:11:28 EST  EAGLE 31.11.0
    VENDID table is (6 of 200) 3% full
    ENT-VENDID: MASP A - COMPLTD
;
```

`ent-vendid:vendid=886939:vendnum=5:vendtype=9`

```
    tekelecstp 14-05-30 14:12:00 EST  EAGLE 46.1.0
    VENDID table is (35 of 500) 7% full
    ENT-VENDID: MASP A - COMPLTD
;
```

Related Commands

dlt-vendid, *rtrv-vendid*

ent-vflx-cd

Enter VFLEX Call Decision Entry

Use this command to provision the call decision criteria that is used to create a voice mail routing number. This command creates a new entry in the V-Flex Call Decision Table. The V-Flex feature must be enabled before this command can be entered.

Parameters

bcap (mandatory)

The INAP/CAP bearer capabilities for the call.

The INAP/CAP bearer capabilities are used to determine the type of mail that is used by the call, such as voice, video, multimedia, etc.

Range:

0 - 31, none

none —BCAP is not present in the incoming MSU.

cdn (mandatory)

Call decision name. This parameter specifies an entry in the call decision table.

Range:

ayyy

1 alphabetic character followed by 3 alphanumeric characters

dnstat (mandatory)

Dialed number status. This parameter specifies whether the MSISDN is found in the EPAP RTDB.

Range:

fnd

DN found in RTDB

nfnd

DN not found in RTDB

*****

It does not matter whether the DN is found in RTDB

rnidx (mandatory)

Routing number index. The index associated with the generated voice mail routing number.

Range:

0 - 9

vmdig (mandatory)

Voice mail number or voice mail prefix digits. A voice mail number or voice mail digits for the call decision entry.

Note: If the call is redirected (the rdi=redir parameter is specified), then the value specified for the vmdig parameter represents a voice mail number. If the call is not redirected (the rdi=dir parameter is specified), then the value specified for the vmdig parameter represents a set of voice mail digits.

Range:

1 - 15

Valid digits are *0-9, A-F, a-f*

rdi (optional)

Redirection indicator. This parameter specifies whether the call is redirected.

Range:

dir

call is not redirected

redir

call is redirected

Default:

dir

Example

```
ent-vflx-cd:dnstat=fnd:rdi=redir:bcap=31:vmdig=abcdef123456abc:rnidx=0:cdn=cdn1
```

Dependencies

The V-Flex feature must be enabled before this command can be entered.

The value specified for the cdn parameter cannot be a reserved word, such as *none*.

The value specified for the cdn parameter cannot already exist in the Call Decision table.

An entry with the specified dnstat, rdi, bcap, and vmdig parameters cannot already exist in the Call Decision table.

The value specified for the vmdig parameter cannot differ from a value that already exists in the Call Decision table by only the value of the dnstat parameter. The values specified for the rdi and bcap parameters must differ as well.

The maximum number of 25 entries cannot already be provisioned for a given rdi, dnstat, and bcap.

Output

```
ent-vflx-cd:dnstat=fnd:rdi=redir:bcap=31:vmdig=abcdef123456abc:rnidx=0:cdn=cdn1
```

```
    rlghncxa03w 08-05-07 11:11:28 EST  EAGLE 39.0.0
    ENT-VFLX-CD: MASP A - COMPLTD
;
```

```
ent-vflx-cd:dnstat=nfnd:bcap=none:vmdig=dadbeefeed:rnidx=9:cdn=cdn2
```

```
    rlghncxa03w 08-05-07 11:11:28 EST  EAGLE 39.0.0
    ENT-VFLX-CD: MASP A - COMPLTD
;
```

Related Commands

chg-vflx-cd, *dlt-vflx-cd*, *rtrv-vflx-cd*

ent-vflx-rn Enter VFLEX Routing Number

Use this command to associate a routing number name to a set of voice mail routing numbers. This command creates an entry in the Routing Number table. The V-Flex feature must be enabled before this command can be entered.

Parameters

rn (mandatory)

Routing number. The voice mail routing number.

Range:

1 - 15 digits. Valid digits are *0-9, A-F, a-f*.

rnname (mandatory)

Routing number name. The name associated with the voice mail routing number.

Range:

ayyyyyyy

1 alphabetic character followed by 7 alphanumeric characters

Example

```
ent-vflx-rn:rnname=rn01:rn=123ABCDF012
```

Dependencies

The V-Flex feature must be enabled before this command can be specified.

The Routing Number table cannot contain more than 10,000 entries.

The value specified for the rnname parameter cannot already exist in the database.

The value specified for the rn parameter cannot already exist in the database.

The value specified for the rnname parameter cannot be a reserved word, such as *none*.

Output

```
ent-vflx-rn:rnname=rn01:rn=1234ABCDF56
```

```
    rlghncxa03w 08-05-07 11:11:28 EST  EAGLE 39.0.0
    ENT-VFLX-RN: MASP A - COMPLTD
;
```

Related Commands

chg-vflx-rn, *dlt-vflx-rn*, *rtrv-vflx-rn*

ent-vflx-vmsid

Enter VFLEX VMS ID Entry

Use this command to provision a voice mail server ID and associate up to 10 routing number names with the ID. This command creates an entry in the VMSID table. The V-Flex feature must be enabled before this command can be entered.

Parameters

id (mandatory)

The ID of the voice mail server.

Range:

1 - 15 digits, *dflt*

Valid digits are *0-9, A-F, a-f*

dflt—a set of routing numbers used when a query is received with an invalid MSISDN or an MSISDN that is not found in the RTDB

idx0 (optional)

Index 0. The routing number name for index 0.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

idx1 (optional)

Index 1. The routing number name for index 1.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

idx2 (optional)

Index 2. The routing number name for index 2.

Range:

ayyyyyyy

1 alphabetic character followed by upto 7 alphanumeric characters

idx3 (optional)

Index 3. The routing number name for index 3.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

idx4 (optional)

Index 4. The routing number name for index 4.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

idx5 (optional)

Index 5. The routing number name for index 5.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

idx6 (optional)

Index 6. The routing number name for index 6.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

idx7 (optional)

Index 7. The routing number name for index 7.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

idx8 (optional)

Index 8. The routing number name for index 8.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

idx9 (optional)

Index 9. The routing number name for index 9.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

Example

This example provisions a VMS ID and associates a routing number name with index 0:

```
ent-vflx-vmsid:id=123456abcdef123:idx0=RN45
```

This example provisions a VMS ID and associates routing number names with index 0 and index 5:

```
ent-vflx-vmsid:id=DADBEEFEED:idx0=rn15:idx5=rn30
```

Dependencies

The V-Flex feature must be enabled before this command can be entered.

The values specified for the idx* parameters must already exist in the Routing Number table.

The value specified for the id parameter cannot already exist in the VMSID table.

The idx*=none parameter cannot be specified.

The VMSID table contains a maximum of 1000 entries.

The value specified for the rnname parameter must already exist in the Routing Number table.

Output

```
ent-vflx-vmsid:id=123456abcdef123:idx0=rn45
```

```
    rlghncxa03w 08-05-07 11:11:28 EST  EAGLE 39.0.0
    ENT-VFLX-VMSID: MASP A - COMPLTD
;
```

```
ent-vflx-vmsid:id=DADBEEFEED:idx0=rn15:idx5=rn30
```

```
    rlghncxa03w 08-05-07 11:11:28 EST  EAGLE 39.0.0
    ENT-VFLX-VMSID: MASP A - COMPLTD
;
```

Related Commands

chg-vflx-vmsid, *dlt-vflx-vmsid*, *rtrv-vflx-vmsid*

flash-card

Flash-Card

Use this command to load all flash images (GPL) supported by a specified card. This command performs the same functions as the `init-flash` and the `act-flash` commands.

Parameters

code (mandatory)

The GPL type to be loaded.

Range:

appr

Approved GPL

trial

Trial GPL

loc (mandatory)

Card address. The location of the card as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

force (optional)

This parameter is used to force the command to work on an IS-NR card. Links provisioned on the card are inhibited during command execution. The card and inhibited links are restored to their previous state when the command is completed.

Range:

yes

no

Default:

no

Example

```
flash-card:loc=1105:code=trial
```

```
flash-card:loc=1105:code=appr:force=yes
```

Dependencies

Cards do not have to be provsioned to use the `flash-card` command. However, if the specified card is provisioned and not inhibited, use of the force parameter is required.

The specified card locations must be running a flashable software image.

This command cannot be used to load flash images for MUX cards. Use the `init-flash` command.

If the even-numbered E5-TDM (1114,1116) is specified, the flash occurs on the odd-numbered E5-MCAP running OAM (1113,1115).

The specified card location cannot be the active E5-MASP (either the active E5-MCAP or the active E5-TDM).

No other action command can be in progress when this command is entered.

The card specified in the location parameter must be present and able to communicate over the IMT. The card does not have to be provisioned in the database.

If the card is already running the specified code load, it cannot be loaded by this command.

This command cannot be entered if an IMT Rate Change sequence is in progress.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

Notes

The specified card must be present and able to communicate over the IMT.

A card that is already running the specified code load cannot be reflashed using the force parameter. The `act-flash` and `init-flash` commands must then be used to reload the same code level.

Output

`flash-card:loc=1105:code=appr:force=yes`

```
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Downloading BLBIOS on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 download BLBIOS complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Downloading BLDIAG6 on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 download BLDIAG6 complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Downloading PLDE1T1 on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 download PLDE1T1 complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Downloading IMTPCI on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 download IMTPCI complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Downloading BLVXW6 on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 download BLVXW6 complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Downloading PLDPMC1 on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 download PLDPMC1 complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Activating BLBIOS on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 activation BLBIOS complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
```

```
    Flash Card: Activating BLDIAG6 on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 activation BLDIAG6 complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Activating PLDE1T1 on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 activation PLDE1T1 complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Activating IMTPCI on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 activation IMTPCI complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Activating BLVXW6 on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 activation BLVXW6 complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Activating PLDPMC1 on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 activation PLDPMC1 complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Downloading BLCPLD on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 download BLCPLD complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Activating BLCPLD on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 activation BLCPLD complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Command Completed.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Canceling links on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Inhibiting card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Downloading BPMPL on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 download BPMPL complete.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Allowing card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Activating BPMPL on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Card 1105 activation BPMPL complete.
```

```
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Flash Card: Activating links on card 1105.
;
    tekelecstp 08-05-11 01:52:11 EST  EAGLE5 39.0.0
    Command Completed.
;
```

Related Commands

act-flash, *init-flash*

format-disk

Format Disk

Use this command to format and initialize a removable drive or standby Terminal Disk Module (TDM).

Note: The `format-disk` command leaves the disk unusable until the `chg-db` and `copy-gpl` commands are entered.

Parameters

type (mandatory)

The type of drive to format.

Range:

fixed

The standby fixed disk on the standby TDM

meas

The removable measurement drive

system

The removable system drive

usb

Argument to be used by Oracle personnel only.

force (optional)

This parameter provides some protection against data loss due to reformatting a used system removable drive.

Range:

yes

no

Default:

no

loc (optional)

The location of the disk that is being formatted.

Range:

1114

The TDM

1116

The TDM

1113

The latched USB port

1115

The latched USB port

low (optional)

This parameter provides control over whether a low-level format will be performed on the target disk. Specifying low=no can be used to decrease formatting time.

Range:

yes

no

Default:

yes

prtngrp (optional)

Partition group. The disk partition group to be formatted. Specifying the inactive group is relevant only when type=fixed is specified.

Caution: Do not enter the `format-disk:prtngrp=inactive` command unless directed to by the Customer Care Center to avoid possible loss of a previously archived software release.

Range:

active

inactive

Default:

active

Example

```
format-disk:type=system
format-disk:type=meas:force=yes
```

Dependencies

The type=fixed parameter must be specified before the prtngrp parameter can be specified.

If the prtngrp parameter is specified, then the low=no parameter must be specified.

Measurements collection must be inhibited during execution of this command. If measurements are not inhibited, this command cannot be executed.

- Do not enter the `chg-measopts:collect=on` command while the `format-disk` command is in progress. This results in read and write errors, because the standby disk is not accessible.
- Do not enter the `format-disk` command until the 30 minute measurements processing or the midnight measurements processing has completed, because inhibiting measurements during these periods results in the loss of measurement data for the period being processed.

If a removable flash drive that is inserted into the latched USB port contains EAGLE data, then the force=yes parameter is required.

If a plug-in flash drive that is inserted into the flush-mounted USB port contains EAGLE data, then the force=yes parameter is required.

If the medium that is being formatted contains system data, then the force=yes parameter is required.

The force=yes parameter must be specified if the drive to be formatted is recognized as a system removable drive. This parameter is optional if the drive is not recognized as a system removable drive. Only drives that have a **dms.cfg** file are recognized as system removable drives.

A removable drive must be inserted and made ready before the type=meas or type=system parameter can be specified in the command.

If the force=yes parameter is specified, the disk should not require low-level formatting, and the format=no parameter should be specified.

The card with the standby OAM must be available when this command is entered.

The OAMHC GPL version that is running in the active OAM card location must be the same GPL version that is running in the standby OAM card location.

OAM Measurements collection cannot be in progress when this command is entered.

If the type=usb parameter is specified, then a plug-in flash drive must be present in the flush-mounted USB port of the active MASP.

A value of 1114 or 1116 must be specified for the loc parameter before the type=fixed parameter can be specified.

An E5-MCAP card must be installed before the type=usb parameter can be specified.

The OAM card must be able to read the media being formatted.

Notes

The low=no parameter should be specified when upgrading a spare TDM. The low=yes parameter should be specified when there is a suspected hardware problem.

When the type=meas parameter is specified, a measurements removable drive is built.

When the type=system parameter is specified, a system removable drive is built.

A system removable drive can contain only GPLs and the database, not measurement data. After formatting, the drive does not contain any data, but can be used as the destination disk of the `copy-gpl` and `chg-db:action=backup:dest=remove` commands. The `copy-gpl` command copies all approved GPLs from the fixed disk on the active TDM to the system removable drive, providing a

backup copy of the approved GPLs. The `chg-db:action=backup:dest=remove` command copies the database from the current partition of the fixed disk on the active TDM to a system removable drive, providing a backup copy of the database.

A measurements removable drive can contain only measurement data, not database information and GPLs. After formatting, the drive does not contain any data, but can be used as the destination disk of the `copy-meas` command. The `copy-meas` command copies all measurement data from the fixed disk on the active TDM to a measurements removable drive for offline processing of the measurement data.

The database audit and GPL audit facilities are automatically disabled during execution of this command. When this command has completed (successful or not), the database and GPL audit facilities are automatically re-enabled.

All commands that affect the database are disallowed for the duration of the command. Attempts to use such commands are rejected, and an error message is displayed explaining that the command has been rejected.

During the upgrade process, files made obsolete by the upgrade process are deleted, freeing up disk space.

If the `format-disk` command is initiated and the standby OAM initialization is not complete, command processing is delayed. If standby initialization fails, the command proceeds to allow the standby TDM to recover from a previous `format-disk` or `copy-disk` failure. In such cases, the following messages appear:

```
Standby MASP has not finished initializing - please wait...
```

```
Standby MASP initialization timed out - continuing...
```

The *dms.cfg* file on either the active TDM or a system formatted removable drive is used by the `format-disk` command when formatting the target disk. The location of the *dms.cfg* file cannot be specified by the `format-disk` command. The value of the type parameter is used to determine the target disk to format and the location of the *dms.cfg* file on which to base the format. *Table 34: DMS.CFG File Location for format-disk Command* shows the location of the *dms.cfg* file based on the value of the type parameter for the `format-disk` command.

Table 34: DMS.CFG File Location for format-disk Command

Value of the type Parameter	Target Disk (Card Location)	Location of the DMS.CFG File
fixed	Standby TDM (1114 or 1116)	Latched USB Port (1113 or 1115)
system	Latched USB Port (1113 or 1115)	Active TDM (1114 or 1116)
meas	Latched USB Port (1113 or 1115)	Active TDM (1114 or 1116)

The `format-disk` command can create a maximum disk partition size of 2047 Mbytes, based on a 16-bit cluster size. A cluster is composed of 64 512-Kilobyte sectors. The physical capacity of the disk being formatted determines the formatted size of the disk and the number of partitions created on the disk.

Table 35: Disk Format Capacity shows the format capacities of each type of disk used on the system and the number of partitions created on each disk.

Table 35: Disk Format Capacity

Target Disk Type	Disk Location	Target Capacity	Number of Partitions	Formatted Size of Partition
Latched USB Port	1113 or 1115	2 Gigabytes	1	1.9 GB
TDM	1114 or 1116	540 Mbytes	1	507 Mbytes
TDM	1114 or 1116	2 Gigabytes	1	2014 Mbytes
TDM	1114 or 1116	4 Gigabytes	2	2047 Mbytes

Output

`format-disk:type=system`

```
    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk of system removable cartridge started.

    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk (removable cartridge) format in progress.

    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk (removable cartridge) format in progress.

    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk (removable cartridge) format is complete.

    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk of system removable cartridge completed.
    Measurements collection may be turned on now if desired.
;
```

`format-disk:type=fixed:low=no:force=yes`

```
    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk of standby fixed disk started.
    Extended processing required, please wait.
;

    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk (fixed) format in progress.

    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk (fixed) format is complete.

    rlghncxa03w 04-01-07 00:57:31 EST  EAGLE 31.3.0
    Format-disk of standby fixed disk completed.
    Measurements collection may be turned on now if desired.
;
```

Related Commands

chg-db, *copy-disk*, *copy-gpl*, *copy-meas*, *disp-disk-dir* , *rept-stat-db*, *rtrv-gpl*

inh-alm

Inhibit Alarm Reporting

Use this command to inhibit the reporting of alarms for the given device. Inhibited alarms will not generate unsolicited output or cause alarm indicators to be turned on. All `rept-stat-xxx` commands continue to display the alarm with an indication that the device has its alarms inhibited.

The frame alarm LEDs are off for the inhibited alarm. This command does not affect the alarm counts on the VT320 banner. The fourth box on the right of the VT320 Control Area indicates the number of devices in the system with inhibited alarms.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dev (mandatory)

Device. The device where the reporting of alarms is to be inhibited.

Range:

applsock

IP gateway application socket

as

IP gateway Application Server

card

Cards in the database

cdt

Customer defined troubles

clock

System clock

dlk

IP ports on the VSCCP, EROUTE, STPLAN, MCP, and FC-capable cards

e1port

E1 port on HC-MIM, E5-E1T1, or E5-E1T1-B cards

enet

Ethernet

ls

Linksets

lsmsconn

Communication link between the LSMS and the EMS

route

Route

rtx

Exception Route

slk

Signaling links

t1port

T1 port on HC-MIM, E5-E1T1, or E5-E1T1-B cards

tps

TPS subsystem

trm

Terminals

asname (optional)

Gateway Application Server name. Used with the dev=as parameter to inhibit alarms for the named Application Server.

Range:

ayyyyyyyyyyyyyy

up to 15 alphanumeric characters; the first character must be a letter

cic (optional)

Starting Circuit Identification Code. Used with the ecic parameter to define the CIC range that is used as an exception routing criterion for the specified exception route.

Range:

0 - 16383

dpc (optional)

ANSI destination point code with subfields network indicator-network cluster-network cluster member (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24 /dpcn16 (optional)

Destination Point Code

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point*. The *prefix* subfield indicates a private point code.

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. The *prefix* subfield indicates a private point code.

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

dur (optional)

Duration. The period for which the alarms are inhibited.

Range:

perm

permanent inhibition of an alarm

temp

temporary inhibition of an alarm

timed

inhibition of an alarm for a specified duration

Note: If the dur=temp parameter is specified, then an alarm inhibit lasts as long as the alarm is present. If the system boots or switches over, then the alarm inhibit is removed. If the dur=perm parameter is specified, then the alarm inhibit remains after the alarm is cleared or is no longer present, and after a boot/switchover. The dur=timed parameter behaves the same as the dur=perm parameter, but for a set time period.

Default:

perm

e1port (optional)

Port ID. The E1 port on the specified E1 card.

This parameter is mandatory if the dev=e1port parameter is specified.

Range:

1 - 8

ecic (optional)

Ending Circuit Identification Code. Used with the cic parameter to define the CIC range that is used as exception routing criteria for the specified exception route.

Range:

0 - 16383

edate (optional)

Expiry date. The date on which a timed alarm inhibit expires, at the time specified in the etime parameter value.

Note: This parameter is valid and required when the dur=timed parameter is specified.

Range:

101 - 991231

Specify the date in the format of *year*, followed by *month*, followed by *day* (*yymmdd*).

etime (optional)

Expiry time. The time at which a timed alarm inhibit expires, on the date specified in the edate parameter value.

This parameter is valid and required when the dur=timed parameter is specified.

Range:

0 - 2359

Specify the time in the format of *hour* followed by *minute* (*hhmm*).

force (optional)

Allows critical alarms to be inhibited on a device.

This parameter is mandatory if the lvl=crit parameter is specified.

The critalminh STP option must be turned on before this parameter can be specified.

Range:

yes

no

Default:

no

id (optional)

Identification number of the customer-defined trouble. Customer-defined troubles 1 - 4 are generated critical alarms and cannot be specified as values for this parameter.

Range:

5 - 16

ilsn (optional)

Incoming Link Set Name. The name of the originating linkset. The parameter value is used as part of the exception routing criteria for the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

link (optional)

Signaling link on the card specified in the loc parameter.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

a1, a2, b1, b2 — dev=lsmsconn

a, b, a1-a31, b1-b31 — dev=slk for an HC-MIM, E5-E1T1, or E5-E1T1-B

a1, b1 — dev=dlk for an FC-capable card

a, b — dev=enet

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

lsn (optional)

Linkset name. The name of the linkset for which the report information is to be displayed.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

lvl (optional)

The alarm severity level (critical, major, or minor).

Range:

crit

majr

minr

Default:

majr

opc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

opca

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Origination point code.

opci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna).* The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

si (optional)

Service Indicator. This parameter is used as the exception routing criterion for the specified exception route.

Range:

0 - 15

sname (optional)

Gateway application socket. Used with the dev=applsock parameter to inhibit alarms for the named application socket.

Range:

ayyyyyyyyyyyyyy

1 to 15 alphanumeric characters

t1port (optional)

Port ID. This parameter is mandatory if the dev=t1port parameter is specified.

Range:

1 - 8

trm (optional)

Terminal ID. The ID number of the terminal whose characteristics are to be retrieved and displayed.

Range:

1 - 40

Example

```
inh-alm:dev=route:dpc=1-1-1:dur=perm:lvl=crit:force=yes
inh-alm:dev=rtx:dpc=1-101-1:opc=4-4-4
inh-alm:dev=route:dpc=1-1-1:dur=timed:lvl=crit:edate=050515:etime=2300:force=yes
inh-alm:dev=enet:loc=1201:port=a
inh-alm:dev=enet:loc=1101:port=a:dur=temp:lvl=minr
inh-alm:loc=1102:dev=dlk:port=a1
inh-alm:dev=rtx:dpcn16=121-10-15:opcn16=121-10-16
```

Dependencies

This command is not allowed in upgrade mode.

The parameters that can be specified with the dev parameter vary, depending on the value specified for the dev parameter as shown:

- dev=(any value) — dur or lvl
- dev=asname — as
- dev=dpc/dpca/dpci/dpcn/dpcn24/dpcn16 — route
- dev=id — cdt
- dev=loc — card, dlk, e1port, slk, t1port, enet
- dev=lsn — ls
- dev=e1port — e1port
- dev=link (link=a, b)— dlk, slk, enet
- dev=link (link=a1, b1)— dlk (For FC-capable cards)
- dev=link (link=a, b, a1, a2, b1, b2, a3, b3)— slk
- dev=link (link=a1, a2, b1, b2)— lsmsconn

- dev=sname — applsock
- dev=t1port — t1port
- dev=trm — trm

No other action command can be in progress when this command is entered.

The linkset specified by the lsn parameter must be equipped in the database.

This command will not execute while the signaling link is running either a Link Fault Sectionalization test or a Loopback test. An AST of LFS or LPBK must be cleared before signaling link alarms can be inhibited.

This command cannot be used to permanently inhibit XLIST point codes.

Before critical alarms can be inhibited, the STP option critalminh must be enabled. The `chg-stpopts:critalminh=yes` command enables this option.

Alarms cannot already be inhibited for the specified device.

If the lvl=crit parameter is specified, the force=yes parameter must be specified.

When the dev=card parameter is specified, the loc parameter must be specified.

When the dev=dlk parameter is specified, the loc parameter must be specified.

When the dev=slk parameter is specified, the loc parameter and the link parameter must be specified.

When the dev=e1port parameter is specified, the loc and e1port parameters must be specified.

When the dev=t1port parameter is specified, the loc and t1port parameter must be specified.

When the dev=ls parameter is specified, the lsn parameter must be specified.

When the dev=trm parameter is specified, the trm parameter must be specified.

When the dev=cdt parameter is specified, the id parameter must be specified.

When the dev=lsmsconn parameter is specified, the link parameter must be specified.

When the dev=route parameter is specified, the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be specified.

When the dev=applsock parameter is specified, the sname parameter must be specified.

If the dev=as parameter is specified, the asname parameter must be specified.

If the sname parameter is specified, the socket name must exist in the IPAPSOCK table.

If a point code parameter is specified, the point code must exist in the Routing table.

If the dev=slk or dev=dlk parameter is specified, the specified link must exist in the database.

The card location that is specified in the loc parameter must be equipped.

The specified device type must be supported by the card in the specified card location.

The Origin-Based MTP Routing feature must be on before the dev=rtx parameter can be specified.

Permanent alarm inhibit is not allowed on the cluster PC if either the cluster or a member PC of the cluster is already alarm inhibited.

When the dur=timed parameter is specified, the edate and etime parameters must be specified.

If the dur parameter has a value other than *timed*, the edate and etime parameters cannot be specified.

The edate parameter value must be a date equal to or later than the current system date. If the current system date is specified, then the etime parameter value must be a time later than the current system time. If a date later than the current system date is specified, then the etime parameter value can be any valid time in the format *hhmm*.

This command cannot be used to change the level of inhibition on a device.

If the dev=enet parameter is specified, then the loc and port parameters must be specified.

The card specified by the loc parameter must be provisioned with an IPS, MCP, STPLAN, EROUTE, VSCCP, IPSG, IPLIM, IPLIMI, SS7IPGW, or IPGWI application.

The value specified for the e1port/t1port parameter must be in the range 1-8.

The link parameter must be valid for the selected device type.

The J7 Support feature must be enabled before the opcn16/dpcn16 parameters can be specified.

Notes

If critical alarms are inhibited, all alarms (critical, major, and minor) are disabled. Likewise, if major alarms are inhibited, both major and minor alarms are disabled.

The dur parameter allows alarms to be inhibited on a temporary basis. If a device has its alarms temporarily disabled, the device's alarms are automatically enabled after the alarm clears.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Output

```
inh-alm:dev=route:dpc=1-1-1:dur=perm:lvl=crit
```

```
    rlghncxa03w 04-02-23 13:20:59 EST  EAGLE 31.3.0
    Alarms are permanently inhibited.
;
    rlghncxa03w 04-02-23 13:20:59 EST  EAGLE 31.3.0
    Command Completed.
;
```

```
inh-alm:dev=rtx:dpc=1-101-1:opc=4-4-4
```

```
     stdcfg2b 06-05-27 20:20:35 EST  EAGLE 35.0.0
     Alarms are permanently inhibited
     Command Completed.
;
```

```
inh-alm:dev=route:dpc=1-1-1:dur=timed:lvl=crit:edate=050515:etime=2300:force=yes
```

```
    tekelecstp 07-02-27 13:20:59 EST  EAGLE 35.6.0
    Alarms are timed inhibited.
;
    tekelecstp 07-02-27 13:20:59 EST  EAGLE 35.6.0
```

```
    Command Completed
;
```

```
inh-alm:dev=enet:loc=1201:port=a
```

```
     stdcfg2b 07-02-07 20:20:35 EST  EAGLE 35.6.0
     Alarms are permanently inhibited
     Command Completed.
;
```

```
inh-alm:dev=enet:loc=1101:port=a:dur=temp:lvl=minr
```

```
    stdcfg2b 07-02-07 20:20:35 EST  EAGLE 35.6.0
    Temporary alarm inhibit level less than alarm level on device
    Command Completed.
;
```

Related Commands

rept-stat-alm, *rept-stat-card*, *rept-stat-cdt*, *rept-stat-dlk*, *rept-stat-dstn*, *rept-stat-ls*, *rept-stat-rte*, *rept-stat-rtx*, *rept-stat-seas*, *rept-stat-slk*, *rept-stat-sys*, *rept-stat-trbl*, *rept-stat-trm*, *rtrv-log*, *unhb-alm*

inh-card

Inhibit Card

Use this command to change the state of the card from in-service normal (IS-NR) to Out-of-Service Maintenance-Disabled (OOS-MT-DSBLD). A user can then test the card or physically remove it from the shelf.

Parameters

loc (mandatory)

Card address. The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

force (optional)

Force indicator. This parameter is required if:

- The specified card is the last card supporting a linkset, SCCP subsystem, MPS-to-Service Module connection, E1, T1, Measurements Platform subsystem, or GLS

- The TDM contains a security log with un-uploaded entries or any other TDM process in progress
- The specified HC-MIM or E5-E1T1/E5-E1T1-B card is in channel bridging mode
- The specified card has the last in-service SEAS terminal configured.

Range:

yes

no

Default:

no

Example

```
inh-card:loc=1101
inh-card:loc=1201:force=yes
```

Dependencies

No other action commands can be in progress when this command is entered.

TDM and MDAL cards cannot be inhibited. E5-APP-B cards and Telco Switches cannot be inhibited. Card locations 1114, 1116, 1117, xx09, and xx10 cannot be specified as values for the loc parameter.

If the card contains signaling or data links, all links must be out of service (OOS-MT-DSBLD) before the card can be inhibited.

If the card is type LIME1, all signaling links providing timeslots serviced by the E1 interfaces assigned to the card must be deactivated, unless force=yes is specified.

If the card is type LIMT1, all signaling links providing timeslots serviced by the T1 interfaces assigned to the card must be deactivated, unless force=yes is specified.

The shelf and card must be equipped.

If the specified card is the only in-service MPS-Service Module, the force=yes parameter must be specified.

The force=yes parameter must be specified if:

- the specified card is the only in-service E5-TSM, LIM, or MCPM card
- the specified HC-MIM or E5-E1T1/E5-E1T1-B card is in channel bridging mode
- the card is the only linkset, SCCP or Service Module card remaining

If inhibiting the Service Module card would cause less than 80% of the in-service normal (IS-NR) LIM cards to have VSCCP service (i.e., cause the system to enter an unstable loading mode), the force=yes parameter must be specified.

If the Integrated GLS feature is turned OFF and the specified card is only GLS card remaining, then the force=yes parameter is required.

The card that is specified cannot be running the active OAM.

If the specified card has the last in-service SEAS Terminal configured, then the force=yes parameter must be specified to inhibit the card.

The card location (loc) must be within the allowed range.

The standby fixed disk cannot be initialized while un-uploaded security log entries exist.

Notes

The function of this command is the same as the `rmv-card` command.

When this command is entered, the card is initialized and enters the OOS-MT-DSBLD state. It has no affect if the card is already OOS-MT-DSBLD.

Caution: This command can be used to disable Measurements Platform measurements collection after the collection function has been enabled with the `chg-measopts:platformenable=on` command. To disable collection, ALL MCPM cards in the system must be inhibited. THIS CAN RESULT IN LOSING ALL PAST MEASUREMENT DATA ON THE CARDS. Use the `alw-card` command to enable measurements collection after the MCPM cards have been inhibited.

When an IPSM card is inhibited, the active SEAS terminals are set to the state OOS-MT/FLT.

Output

`inh-card:loc=1101`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Card has been inhibited.
;
```

Related Commands

alw-card, *dlt-card*, *ent-card*, *init-card*, *rept-stat-card*, *rmv-card*, *rst-card*, *rtrv-card*

inh-imt

Inhibit IMT

The interprocessor message transport bus (IMT bus) is the main communications artery between all subsystems in the system. This command removes the IMT bus from service.

Caution: Use this command only when directed by the Customer Care Center.

Parameters

bus (mandatory)

IMT bus to be inhibited

Range:

a, b

force (optional)

This parameter forces inhibition of a specified bus where an IMT Rate change sequence is in progress.

Range:

yes

no

Default:

no

Example

```
inh-imt:bus=a
```

```
inh-imt:bus=a:force=yes
```

Dependencies

Valid IMT bus entries are "A" or "B".

The alternate IMT bus must be in-service normal (IS-NR) in order for the specified bus to be inhibited.

This command cannot be entered during an IMT Fault Isolation Test or an Extended Bit Error Rate Test (BERT).

The force=yes parameter must be specified to inhibit a bus where an IMT Rate Change sequence is in progress.

If an IMT Rate Change sequence is in progress on the alternate bus, then this command cannot be entered.

Notes

Cards not connected to the other IMT bus will reinitialize.

All traffic is rerouted to the alternate IMT bus.

The function of this command is the same as the `rmv-imt` command.

Output

`inh-imt:bus=a`

```
rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
Inhibit IMT Bus A command issued

rlghncxa03w 04-01-07 13:12:41 EST  EAGLE 31.3.0
```

```
    3116.0098    IMT BUS A            IMT inhibited
;
```

Related Commands

alw-imt, *clr-imt-stats*, *conn-imt*, *disc-imt*, *rept-imt-lvl1*, *rept-imt-lvl2*, *rept-stat-imt*, *rmv-imt*, *rst-imt*

inh-map-ss

Inhibit Mated Application Subsystem

Use this command to shut down (inhibit) a mated application subsystem. Currently, the AIQ, ATINPQ, EIR, INP, INPQS, LNP, and V-Flex and subsystems can be inhibited. The specified subsystem attempts a coordinated shutdown. If the coordinated shutdown fails, a UIM is issued indicating the shutdown failed. If the force parameter is specified, the subsystem is forced to shut down, and a coordinated shutdown is not performed.

Parameters

ssn (mandatory)

The AIQ, ATINPQ, EIR, INP, LNP or V-Flex subsystem number.

Range:

2 - 255

force (optional)

This parameter forces the shutdown of the AIQ, ATINPQ, EIR, INP, LNP or V-Flex subsystem.

Range:

yes

no

Default:

no

Example

```
inh-map-ss:ssn=10
```

```
inh-map-ss:ssn=10:force=yes
```

Dependencies

The EIR, INP, LNP, or V-Flex feature must be turned on or the ANSI41 AIQ or ATINP feature must be enabled before this command can be entered.

No other action command can be in progress when this command is entered.

The specified ssn parameter value must represent the AIQ, ATINPQ, EIR, INP, LNP or V-Flex subsystem.

The EAGLE must be configured with at least one card running the SCCP application.

Notes

If the LNPQS subsystem is disabled, any GTT requiring Message Relay is also disabled because they both use the same database. This causes the EAGLE to generate a TFP for the EAGLE CPCs. Traffic is then routed to the mate. If both Message Relay GTT and non Message Relay GTT use the same CPC, this could affect the GTT.

Table 36: Route Set Test When LNP is Offline

Network Management	Concerned PC	Network Management
RSP	CPC	TFA concerning CPC
RSP	LNP CPC	None
RSP	TPC	TFA concerning TPC
RSR	CPC	TFA concerning CPC
RSR	LNP CPC	TFP concerning LNP CPC
RSR	TPC	TFA concerning TPC

Table 37: Receiving Messages when LNP is Offline shows what actions the system takes when LNP is offline and a message arrives requiring LNP. This table assumes that SCCP cards are available.

Table 37: Receiving Messages when LNP is Offline

Routing Indicator in Incoming Message	DPC	Result of GTT	Message Handling	Network Management
rt-on-gt	Capability PC	rt-on-ssn, LNP subsystem	Reroute to mate	TFP concerning CPC
rt-on-gt	True PC	rt-on-ssn, LNP subsystem	Reroute to mate	None
rt-on-gt	Capability PC	Message Relay required	Generate UDTS	TFP concerning CPC
rt-on-gt	True PC	Message Relay required	Generate UDTS	None
rt-on-ssn	Capability PC	Not applicable	Generate UDTS	None
rt-on-ssn	True PC	Not applicable	Generate UDTS	SSP concerning True PC

Output

`inh-map-ss:ssn=30`

```
    rlghncxa03w 04-02-24 10:37:22 EST  EAGLE5 31.0.0
    Inhibit map subsystem command sent to all SCCP cards.
    Command Completed.
;
```

`inh-map-ss:ssn=30:force=yes`

```
    rlghncxa03w 04-02-24 10:37:22 EST  EAGLE5 31.0.0
    Inhibit map subsystem command sent to all SCCP cards.
    Command Completed.
;
```

Related Commands

alw-map-ss, *rept-stat-lnp*, *rept-stat-sccp*

inh-slk

Inhibit Signaling Link

Use this command to prevent message signal units (MSU) from being transmitted on a specified, previously uninhibited signaling link.

Note: The signaling link's inhibited status is not preserved across a LIM reboot.

Parameters

link (mandatory)

The signaling link on the card that is specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108,

3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
inh-slk:loc=1307:link=b
```

Dependencies

A card location must be specified that is valid and defined in the database.

No other action command can be in progress when this command is entered.

The card must be equipped and must be one of the following cards:

- E5-E1T1, E5-E1T1-B, or HC-MIM card running the SS7ANSI or CCS7ITU application
- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPLIM, IPLIMI, or IPSG application

The card must contain signaling links.

The signaling link must be equipped in the database.

If an IPSG-M3UA signaling link is used, then this command cannot be entered.

This command is not valid for E5-ENET or E5-ENET-B cards with IPGWI links.

If an ATM card is used, then a valid value must be specified for the link parameter:

- a-a1, b—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

This command is not supported for links associated with J7 APCs.

This command is not valid for IPSG-M3UA signaling links.

Notes

If the link is already inhibited, the system does not execute the command.

If the link is aligned, it attempts to perform a changeover to alternate links. If it is not aligned, it cannot carry traffic.

If the link is the last link in the linkset, or if the node assigned to the link is inaccessible by another route, then the SS7 changeover procedure cannot occur, the inhibit request is denied, and UIM 1150 is issued. The UIM can be retrieved from the logs or from a terminal with the appropriate TRM settings.

If the `inh-slk` command is followed by the `init-card` command, the inhibition of the signaling link is not preserved after the `init-card` command completes.

The `inh-slk` command might time out if a far-end remote does not respond to the inhibit message.

Output

```
inh-slk:loc=1301:link=a
```

```
    rlghncxa03w 05-01-07 11:11:28 EST  EAGLE5 33.0.0
    Inhibit Link message sent to card
;
```

Related Commands

act-slk, *blk-slk*, *dact-slk*, *dlt-slk*, *ent-slk*, *rept-stat-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

inh-trm

Inhibit Terminal

Use this command to set the primary state of a serial port to OOS-MT-DSBLD . It sets the secondary state to MANUAL . The serial port is not available to perform service functions. There is no outgoing traffic from the serial port, and all incoming traffic is ignored.

Parameters

trm (mandatory)

The ID of serial port to be inhibited

Range:

1 - 40

force (optional)

This parameter forces the removal of a specified terminal, even if it is last in-service SEAS terminal available.

Range:

yes

no

Default:

no

Example

```
inh-trm:trm=5
```

```
inh-trm:trm=1:force=yes
```

Dependencies

No other action command can be in progress when this command is entered.

The IP User Interface feature must be enabled before terminal ports 17 through 40 can be specified for the trm parameter.

The terminal specified by the trm parameter must be equipped.

This command cannot be used to inhibit the terminal from which the command is entered.

The force=yes parameter must be specified to inhibit the last in-service SEAS terminal.

Notes

When inhibiting an already inhibited terminal, a warning message is echoed to the scroll area, but no action is taken.

Output

```
inh-trm:trm=5
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Inhibit message sent to terminal
;
```

```
inh-trm:trm=17:force=yes
```

```
    tekelecstp 07-01-23 18:46:01 EST  EAGLE 37.5.0
    Inhibit message sent to terminal
;
```

Related Commands

act-echo, *alw-trm*, *canc-echo*, *chg-trm*, *dact-echo*, *rept-stat-trm*, *rmv-trm*, *rst-trm*, *rtrv-trm*

init-card

Initialize Card

Use this command to cause a soft reset of a card. It has the same result as a hard reset (card boots, application, and data load), except that connect status is not affected; that is, if a card is not connected, it stays that way.

When the command is issued to the E5-OAM software, there is a 10-second wait before the card is reset. This wait period is intended to ensure that all database updates are complete before the card is reset.

Caution: Resetting more than 8 Service Module cards at once may result in an extended reload time for the Service Module cards.

Parameters

appl (optional)

Application. The type of application residing on the card.

Caution: Because the appl parameter causes all LIMs running the assigned application to reload, it should be used only during periods of low traffic.

Range:

xyyyyyy

1 alphabetic character followed by up to 6 alphanumeric characters. Valid applications are:

atmansi—Used by E5-ATM and E5-ATM-B cards to support high-speed ATM signaling links and T1 functions.

atmitu—Used by E5-ATM and E5-ATM-B cards to support E1 high-speed signaling links and E1 functions.

ccs7itu—Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards for ITU-TSS MTP functions.

deirhc— Used by E5-SM8G-B cards to support the S13/S13' EIR feature.

enumhc— Used by E5-SM8G-B cards to support the ENUM application.

eroute—Used by E5-ENET and E5-ENET-B cards for EAGLE 5 Integrated Monitoring Support functions.

gls—Used by E5-TSM cards for downloading gateway screening to LIM cards and Service Module cards.

ipgwi—Used by E5-ENET and E5-ENET-B cards for point-to-multipoint IP connectivity for ITU point codes. The system allows a maximum of 125 cards to be assigned the IPGWI application.

iplim—Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ANSI point codes.

iplimi—Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ITU point codes.

ips—Used by E5-IPSM and E5-ENET-B cards for the IP User Interface feature.

ipsg—Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA.

mcp—Used by E5-MCPM-B cards for the Measurements Platform feature

oam—Used by both MASP Cards running GPLs that support the OAM application

siphc—Used by E5-SM8G-B Cards to support SIP application

ss7ansi—Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards for the MTP functions

ss7ipgw—Application software for point-to-multipoint IP connectivity. The system allows a maximum of 125 cards to be assigned the SS7IPGW application.

stplan—Used by E5-ENET and E5-ENET-B cards to support STP LAN functions

vsccp—Used by Service Module cards to support EPAP-based features and LNP features. If no EPAP-based features or LNP features are turned on, and a Service Module card is present, the *vsccp* application processes normal GTT traffic.

Default:

The application assigned to the card

data (optional)

High memory refresh. This parameter causes data to be reloaded to the specified card.

Note: The LNP feature or an EPAP-based feature must be turned on or the ATINP feature must be enabled before this parameter can be specified. This parameter applies only to Service Module cards that (1) run the VSCCP application and contain an RTDB or (2) run the DEIRHC application.

Range:

refresh

Causes data to be reloaded to the specified card.

persist

Indicates that the database is not to be reloaded to the card. Used to request that the EAGLE perform a warm restart of the requested cards. The EAGLE performs various checks to ensure that all conditions necessary to initiate the warm restart are in place. The force parameter is required if all of the specified cards do not meet the warm restart requirements. During the card initialization and loading sequence, a warm restart is performed for all cards that meet the warm restart conditions.

Default:

refresh

force (optional)

Force indicator. Enables the command to be processed under the following conditions:

- If serial=yes and all cards of the specified GPL type are not IS-NR or OOS-MT-DSBLD.
- If initclk=yes and the TDM card specified in the loc parameter is the only good HS clock source that is currently active. A temporary clock outage will occur.
- If initclk=yes and appl=oam is specified (bitfiles on both TDMs will be initialized). A temporary clock outage will occur.

Range:

yes

no

Default:

no

initclk (optional)

Initialize TDM Bitfile indicator. If TDM reload would cause a system clock outage, the initclk parameter cannot be specified unless force=yes is also specified.

Caution: The resulting clock outage will probably cause loss of traffic on all links.

The following scenarios will cause such clock outages:

- Simplex MASP configuration (a system with a single TDM).
- Bad clock status on the remaining TDM.

Range:

yes, *no*

If initclk=yes is specified with a single TDM card location, the bitfile for the specified TDM reloads.

If initclk=yes is specified with appl=oam and force=yes, the bitfile reloads on both TDMs.

loc (optional)

Card address. The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1116, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2301 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

When the initclk parameter is not specified, the listed card locations are valid.

When the initclk parameter is specified, card locations 1113, 1114, 1115, and 1116 are valid.

Entering locations 1114 and 1116 results in the same action as entering 1113 and 1115.

Default:

All valid card locations are initialized.

prtngrp (optional)

Partition group. The disk partition group that is used as the source for downloading the appropriate GPL.

A value of 1113 or 1115 must be specified for the loc parameter before this parameter can be specified.

Range:

active

the active partition group

inactive

the inactive partition group

Default:

active

serial (optional)

Controls the manner in which cards are initialized.

Range:

yes

cards of the specified APPL type are initialized one at a time

no

cards of the specified APPL type are initialized simultaneously

Default:

no

type (optional)

SM Type. The type of RTDB data that can be loaded on an E5-SM4G or an E5-SM8G-B card.

Range:

dn

initialize SM cards running the SIPHC or SCCPHC gpl, with SM type DN or EPAP.

elap

initialize SM cards running the SIPHC or SCCPHC gpl, with SM type ELAP.

epap

initialize SCCPHC cards running the SIPHC, DEIRHC, or SCCPHC gpl, with SM type DN, IMSI, or EPAP.

gtt

initialize SM cards running the SCCPHC gpl, with SM type GTT.

imsi

initialize SM cards running the DEIRHC or SCCPHC gpl, with SM type IMSI or EPAP.

Default:

none

Example

```
init-card:loc=1113:prtngrp=inactive
init-card:loc=1101:data=persist
init-card:loc=1113:initclk=yes
init-card:appl=oam:initclk=yes:force=yes
```

```
init-card:appl=ipsg
init-card:type=epap
init-card:appl=deirhc
init-card:appl=deirhc:data=persist
init-card:appl=enumhc
```

Dependencies

The shelf and card must be equipped.

The loc or appl or type parameter must be specified in the command. The parameters cannot be specified together in the command.

The following card locations (loc parameter) are not allowed for this command: 1117, 1118, and all *xy*09 and *xy*10 card locations (where *x* is the frame and *y* is the shelf).

If the loc and initclk parameters are specified, the loc parameter value must be card location 1113 or 1115. If the appl and initclk parameters are specified, the appl parameter value must be *oam*.

If TDM reload would cause system clocks to fail that are required to keep links active or TSCSYNC available, the initclk parameter cannot be specified unless force=yes is also specified.

Caution: The resulting clock outage will probably cause loss of traffic on all links.

Clocks are required in the following situations:

- When at least one DS0 card is provisioned, one BITS clocks is required.
- When a high speed link is being master-timed, at least one high speed clock is required.
- When TSCSYNC is turned on, both SYSTEM clocks (A&B) are required.

The initclk parameter can be specified only for TDM cards that support bitfile reloading (TDM-15 or later).

The force parameter must be specified for the cards that are not in the In-service Normal state.

The serial parameter is valid only when used with the appl parameter.

The appl=all parameter can be specified only when the serial=yes parameter is also specified.

A valid value must be specified for the appl parameter.

The initclk, appl, and data parameters must be specified before the force parameter can be specified.

The data parameter is valid only for SCCP card locations or GPLs/MPS database (VSCCP) card locations or GPLs/DEIR card locations or GPLs.

The data parameter is not allowed when DUAL ExAP or EPAP Split feature is ON and type=GTT is specified.

The card location (loc) must be within the allowed range.

The specified card must exist in the card database and must be a logical processing element.

An EPAP-based feature or an LNP feature that is warm-restart-capable must be enabled before this command can be entered with the data=persist parameter.

If the serial=yes parameter is specified, the appl parameter must specify a network type application value or must be equal to *all*.

A primary Service Module card must be provisioned.

The command cannot be executed if system maintenance is in progress.

The A-Port, EIR, G-Flex, G-Port, INP, IS41 GSM Migration (IGM), LNP ELAP Configuration, PPSMS, Prepaid IDP Relay Query (IDP Relay), or V-Flex feature must be turned on, or the ATINP feature must be enabled before the data parameter can be specified.

If a removable drive is inserted in the system, then the prtngrp=inactive parameter cannot be specified.

The loc parameter must be specified with a value of 1113 or 1115 before the prtngrp parameter can be specified.

If an Extended BERT is running, the appl parameter cannot be specified in this command to initialize multiple cards.

If type specified is *epap*, *elap* or *gtt* then the Dual ExAP Config, SIPNP or DEIR feature must be enabled.

If type specified is *imsi* or *dn*, then the EPAP Data Split feature must be ON.

If type specified is *epap*, then the Dual ExAP feature must be ON and EPAP Data Split feature must be OFF.

Notes

The TDM card has a processor but no application.

Output

```
init-card:loc=1201
```

```
    Init Card command issued to card 1201

    3021.0013  * CARD 1201 CCS7ITU     Card is isolated from the system

    3022.0201  * SLK 1201,A lsnsspn2   SLK unavailable for traffic
                 SLC=0    FECLLI=-----------

    3023.1201  * SLK 1201,B lsnstpi    SLK unavailable for traffic
                 SLC=0    FECLLI=-----------
;
```

```
init-card:appl=all:serial=yes
```

```
    Command entered at terminal #3.
    Init Card command issued to card 1201

    *   3021.0013  * CARD 1201 SS7ANSI     Card is isolated from the system
    **  3022.0236 ** SLK 1201,A lsnsspn2   REPT-LKF: not aligned
                  SLC=0    FECLLI=-----------      CLASS=MTP2
```

```
    3023.0014    CARD 1201 SS7ANSI     Card is present

    3024.0200    SLK 1201,A lsnsspn2   RCVRY-LKF: link available
                 SLC=0    FECLLI=-----------      CLASS=MTP2

    Init Card command issued to card 1202

    *   3026.0013  * CARD 1202 ATMANSI     Card is isolated from the system

    **  3026.0236 ** SLK 1202,A lsnsspn3   REPT-LKF: not aligned
                     SLC=0    FECLLI=-----------      CLASS=SAAL

    3027.0014    CARD 1202 ATMANSI     Card is present

    3028.0200    SLK 1202,A lsnsspn3   RCVRY-LKF: link available
                 SLC=0    FECLLI=-----------      CLASS=SAAL
;
```

`init-card:loc=1101:data=refresh`

```
    Command entered at terminal #10.
    Init Card command issued to card 1101
    **  1127.0013 ** CARD 1101 SCCP        Card is isolated from the system
                     ASSY SN:  97361659

    1128.0329    SCCP SYSTEM           SCCP capacity normal, card(s) abnormal

    1129.0014    CARD 1101 SCCP        Card is present
                 ASSY SN:  97361659

    1234.1238    SYSTEM       INFO  Full LNP database reload initiated:
                 CARD=1101    GPL=SCCP    CAUSE=USER REQUEST
    Report Date: 00-02-24  Time: 16:27:19

    5402.1241    SYSTEM       INFO  REPT EVT: LNP Incremental Loading.
                 database levels loaded :       0 of   1145
    Report Date: 00-02-24 Time: 16:52:04

    1234.1239    SYSTEM       INFO LNP updates inhibited: loading stability
    Report Date: 00-02-24  Time: 16:52:07

    1234.1240    SYSTEM       INFO LNP updates allowed: loading stability
    Report Date: 00-02-24  Time: 16:52:09

    1130.0096    CARD 1101 SCCP        Card has been reloaded

    1131.0328    SCCP SYSTEM           SCCP is available
;
```

`init-card:loc=1115:initclk=yes`

```
    tekelecstp 04-07-17 13:01:59 EST  EAGLE 31.6.0
    Init Card command issued to card 1115
;

    tekelecstp 04-07-17 13:01:59 EST  EAGLE 31.6.0
*   3021.0013  * CARD 1115 OAMHC        Card is isolated from the system
;

    tekelecstp 04-07-17 13:03:10 EST  EAGLE 31.6.0
```

```
    3022.0014    CARD 1115 OAMHC        Card is present
                 ASSY SN:  1216115
;
```

init-card:appl=deirhc

```

    eagle7 13-06-21 10:05:10 MST  EAGLE 45.1.0
    init-card:appl=deirhc:data=persist
    Command entered at terminal #18.
;

Command Accepted - Processing
    eagle7 13-06-21 10:15:11 MST  EAGLE 45.1.0
    Init Card command issued to card 1207
;
    eagle7 13-06-21 10:15:11 MST  EAGLE 45.1.0
    Init Card command issued to card 1217

    eagle7 13-06-21 10:15:11 MST  EAGLE 45.1.0
    Initialized all DEIRHC cards.
;
Command Executed
    eagle7 13-06-21 10:15:14 MST  EAGLE 45.1.0
**  6738.0013 ** CARD 1207 DEIRHC        Card is isolated from the system
                 ASSY SN:  10209135227
;
    eagle7 13-06-21 10:15:14 MST  EAGLE 45.1.0
*C  6739.0483 *C DEIR SYSTEM             DEIR System is not available
;
    eagle7 13-06-21 10:15:14 MST  EAGLE 45.1.0
**  6740.0539 ** ENET 1207,A             Ethernet Interface Down
;
    eagle7 13-06-21 10:15:15 MST  EAGLE 45.1.0
**  6741.0539 ** ENET 1207,B             Ethernet Interface Down
;
    eagle7 13-06-21 10:15:15 MST  EAGLE 45.1.0
**  6742.0084 ** DLK 1207,A   DEIRHC     IP Connection Unavailable
                 Failed Channels:  Prov  Dnld  UDP
;
    eagle7 13-06-21 10:15:15 MST  EAGLE 45.1.0
**  6743.0013 ** CARD 1217 DEIRHC        Card is isolated from the system
                 ASSY SN:  10208097026
;
    eagle7 13-06-21 10:15:15 MST  EAGLE 45.1.0
**  6744.0539 ** ENET 1217,A             Ethernet Interface Down
;
    eagle7 13-06-21 10:15:16 MST  EAGLE 45.1.0
**  6745.0539 ** ENET 1217,B             Ethernet Interface Down
;
    eagle7 13-06-21 10:15:16 MST  EAGLE 45.1.0
**  6746.0084 ** DLK 1217,A   DEIRHC     IP Connection Unavailable
                 Failed Channels:  Prov  Dnld  UDP
;
    eagle7 13-06-21 10:16:01 MST  EAGLE 45.1.0
    6757.0014    CARD 1217 DEIRHC        Card is present
                 ASSY SN:  10208097026
;
    eagle7 13-06-21 10:16:01 MST  EAGLE 45.1.0
    6759.0014    CARD 1207 DEIRHC        Card is present
                 ASSY SN:  10209135227
;
    eagle7 13-06-21 10:23:01 MST  EAGLE 45.1.0
```

```
    6834.1238    SYSTEM        INFO    Full database reload initiated:
                 CARD=1207    GPL=DEIRHC    CAUSE=USER REQUEST
                 Report Date:13-06-21  Time:10:17:59
;
    eagle7 13-06-21 10:18:45 MST  EAGLE 45.1.0
    6768.0540    ENET 1207,A             Ethernet Interface Up
;
    eagle7 13-06-21 10:18:46 MST  EAGLE 45.1.0
    6769.0540    ENET 1207,B             Ethernet Interface Up
;
    eagle7 13-06-21 10:23:01 MST  EAGLE 45.1.0
    6834.1238    SYSTEM        INFO    Full database reload initiated:
                 CARD=1217    GPL=DEIRHC    CAUSE=USER REQUEST
                 Report Date:13-06-21  Time:10:18:46
;
    eagle7 13-06-21 10:18:46 MST  EAGLE 45.1.0
    6770.0085    DLK 1207,A   DEIRHC     IP Connection Available
;
    eagle7 13-06-21 10:18:46 MST  EAGLE 45.1.0
    6771.0540    ENET 1217,A             Ethernet Interface Up
;
    eagle7 13-06-21 10:18:46 MST  EAGLE 45.1.0
    6772.0540    ENET 1217,B             Ethernet Interface Up
;
    eagle7 13-06-21 10:18:47 MST  EAGLE 45.1.0
    6773.0085    DLK 1217,A   DEIRHC     IP Connection Available
;
    eagle7 13-06-21 10:19:02 MST  EAGLE 45.1.0
    6777.0096    CARD 1207 DEIRHC        Card has been reloaded
;
    eagle7 13-06-21 10:19:05 MST  EAGLE 45.1.0
    6775.0485    DEIR SYSTEM              DEIR System is available
;
    eagle7 13-06-21 10:19:06 MST  EAGLE 45.1.0
    6778.0096    CARD 1217 DEIRHC        Card has been reloaded
;
```

`init-card:appl=deirhc:data=persist`

```
    eagle7 13-06-21 10:05:10 MST  EAGLE 45.1.0
    init-card:appl=deirhc:data=persist
    Command entered at terminal #18.
;

    eagle7 13-06-21 10:05:11 MST  EAGLE 45.1.0
    Verifying card(s) persistent database - please wait
;
Command Accepted - Processing
    eagle7 13-06-21 10:05:11 MST  EAGLE 45.1.0
    Init Card command issued to card 1207
;
    eagle7 13-06-21 10:05:11 MST  EAGLE 45.1.0
    Init Card command issued to card 1217

    eagle7 13-06-21 10:05:11 MST  EAGLE 45.1.0
    Initialized all DEIRHC cards.
;
Command Executed
    eagle7 13-06-21 10:05:14 MST  EAGLE 45.1.0
**  6738.0013 ** CARD 1207 DEIRHC        Card is isolated from the system
                 ASSY SN:  10209135227
;
```

```
    eagle7 13-06-21 10:05:14 MST  EAGLE 45.1.0
*C  6739.0483 *C DEIR SYSTEM              DEIR System is not available
;
    eagle7 13-06-21 10:05:14 MST  EAGLE 45.1.0
**  6740.0539 ** ENET 1207,A              Ethernet Interface Down
;
    eagle7 13-06-21 10:05:15 MST  EAGLE 45.1.0
**  6741.0539 ** ENET 1207,B              Ethernet Interface Down
;
    eagle7 13-06-21 10:05:15 MST  EAGLE 45.1.0
**  6742.0084 ** DLK 1207,A   DEIRHC      IP Connection Unavailable
                 Failed Channels:  Prov  Dnld  UDP
;
    eagle7 13-06-21 10:05:15 MST  EAGLE 45.1.0
**  6743.0013 ** CARD 1217 DEIRHC         Card is isolated from the system
                 ASSY SN:  10208097026
;
    eagle7 13-06-21 10:05:15 MST  EAGLE 45.1.0
**  6744.0539 ** ENET 1217,A              Ethernet Interface Down
;
    eagle7 13-06-21 10:05:16 MST  EAGLE 45.1.0
**  6745.0539 ** ENET 1217,B              Ethernet Interface Down
;
    eagle7 13-06-21 10:05:16 MST  EAGLE 45.1.0
**  6746.0084 ** DLK 1217,A   DEIRHC      IP Connection Unavailable
                 Failed Channels:  Prov  Dnld  UDP
;
    eagle7 13-06-21 10:06:01 MST  EAGLE 45.1.0
    6757.0014    CARD 1217 DEIRHC         Card is present
                 ASSY SN:  10208097026
;
    eagle7 13-06-21 10:06:01 MST  EAGLE 45.1.0
    6759.0014    CARD 1207 DEIRHC         Card is present
                 ASSY SN:  10209135227
;
    eagle7 13-06-21 10:08:45 MST  EAGLE 45.1.0
    6768.0540    ENET 1207,A              Ethernet Interface Up
;
    eagle7 13-06-21 10:08:46 MST  EAGLE 45.1.0
    6769.0540    ENET 1207,B              Ethernet Interface Up
;
    eagle7 13-06-21 10:08:46 MST  EAGLE 45.1.0
    6770.0085    DLK 1207,A   DEIRHC      IP Connection Available
;
    eagle7 13-06-21 10:08:46 MST  EAGLE 45.1.0
    6771.0540    ENET 1217,A              Ethernet Interface Up
;
    eagle7 13-06-21 10:08:46 MST  EAGLE 45.1.0
    6772.0540    ENET 1217,B              Ethernet Interface Up
;
    eagle7 13-06-21 10:08:47 MST  EAGLE 45.1.0
    6773.0085    DLK 1217,A   DEIRHC      IP Connection Available
;
    eagle7 13-06-21 10:09:02 MST  EAGLE 45.1.0
    6777.0096    CARD 1207 DEIRHC         Card has been reloaded
;
    eagle7 13-06-21 10:09:05 MST  EAGLE 45.1.0
    6775.0485    DEIR SYSTEM              DEIR System is available
;
    eagle7 13-06-21 10:09:06 MST  EAGLE 45.1.0
    6778.0096    CARD 1217 DEIRHC         Card has been reloaded
;
```

```
init-card:type=elap
```

```
    init-card:type=elap
    Command entered at terminal #17.
;
```

```
Command Accepted - Processing
    Init Card command issued to card 1205
;
```

```
    Initialized all ELAP cards.
    6160.0013 ** CARD 1205 VSCCP         Card is isolated from the system
    6161.0331 *C SCPELAP SYSTEM          SCCP is not available
    6162.0014    CARD 1205 SCCPHC        Card is present
;
```

Related Commands

dlt-card, *ent-card*, *init-sys*, *rept-stat-card*, *rmv-card*, *rst-card*, *rtrv-card*

init-ext-stats

Initialize Extended Statistics

Use this command to cause the HIPR2 cards to collect Extended Statistics for later retrieval.

Parameters

bus (optional)

The IMT bus that contains the HIPR2 card where extended statistics are collected.

Range:

a

collect statistics for HIPR2 cards on the A bus

b

collect statistics for HIPR2 cards on the B bus

both

collect statistics for HIPR2 cards on both buses

Default:

both

delay (optional)

The number of milliseconds to wait before collecting HIPR2 Extended Statistics.

Range:

0 - 10000

Note: The specified value is automatically rounded to a 10 ms boundary.

Default:

0

eloc (optional)

The ending card location for a range of HIPR2 cards where extended statistics are collected.

Note: Statistics are collected from only valid In-Service Normal HIPR2 cards within the range.

Range:

1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110

Default:

6110

loc (optional)

The location of a single HIPR2 card where statistics are collected.

Range:

1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110

Default:

all HIPR2 cards within the range specified by the sloc and eloc parameters

sloc (optional)

The starting card location for a range of HIPR2 cards where extended statistics are collected.

Note: Statistics are collected from only valid In-Service Normal HIPR2 cards within the location range.

Range:

1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110

Default:

1109

Example

```
init-ext-stats
init-ext-stats:bus=a
init-ext-stats:sloc=1109:eloc=1110
```

```
init-ext-stats:loc=1109
```

Dependencies

The value specified for the loc or sloc and eloc parameters must indicate a valid card location. See the description of the desired parameter for a list of valid values.

The range specified by the sloc and eloc parameters must include an MUX card location.

The value specified for the loc parameter must be a valid MUX card location or the range specified by the sloc and eloc parameters must include an MUX card location.

The value specified for the delay parameter must be between 0 - 10000.

A value of *a*, *b*, or *both* must be specified for the bus parameter.

The loc parameter cannot be specified in the same command with the sloc and eloc or bus parameters.

An `init-ext-stats` or `copy-ext-stats` command cannot already be in progress when this command is entered.

Output

`init-ext-stats`

```
    e5oam 10-02-06 00:56:54 EST  EAGLE 42.0.0
    init-ext-stats
    Command entered at terminal #6.
;

    e5oam 10-02-06 00:56:54 EST  EAGLE 42.0.0
    INIT-EXT_STATS: Init msg sent to the following MUX cards:
        CARD Location: 1209
        CARD Location: 1210
        CARD Location: 1109
        CARD Location: 1110
;

    e5oam 10-02-06 00:56:54 EST  EAGLE 42.0.0
    Command Completed.
;
```

Related Commands

copy-ext-stats

init-flash

Initialize Flash

Use this command to load the Board PROM to the inactive FLASH memory of a specified card or range of cards. When a card is reinitialized, it runs this version of the GPL in the card's inactive FLASH memory.

Parameters

Note: As of Release 43.0, the BLBEPM, BLBIOS, BLBSMG, BLCPLD, BLDIAG6, BLROM1, BLVXW6, IMTPCI, and PLDPMC1 GPLs are replaced with the BLIXP GPL. The replaced GPLs are used only during upgrade to Release 43 and hardware replacement.

boot (optional)

This parameter specifies whether the HC-MIM or E5-class card should boot after the command successfully completes.

Multiple images can be flashed without having to boot after each flash. If multiple images are being flashed to the HC-MIM or E5-class card, this parameter can be used to prevent the card from booting after each image is flashed. If multiple images are being flashed and the card is allowed to boot after each flash, an image that is not activated after the card boots will be lost on a subsequent reset of the card. This option does not apply to MUX cards.

Range:

yes

Reboot the card after the command completes successfully

no

Do not reboot the card after the command completes successfully.

Default:

yes

For HC-MIM and E5-class cards, if the mode parameter is not specified or if mode=foregrnd, mode=imgselct or mode=pvjoy, then default value of boot parameter is yes. If the mode parameter is specified for E5-class card(s) as mode=backgrnd, then default value of boot parameter is no.

code (optional)

The version of the GPL being loaded onto the card.

Range:

appr

The approved GPL version

trial

The trial GPL version

The code parameter must be specified if the mode parameter is not specified as mode=imgselct; the code parameter must not be specified if the mode parameter is specified as mode=imgselct.

eloc (optional)

End location. The location of the last card of a range of cards to be initialized.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

force (optional)

This parameter is required to force the TDM-GTI bitfile reload if a clock outage will occur when initclk=yes is specified.

Range:

yes

no

Default:

no

gpl (optional)

Generic program load. The flash GPL type that is running on the cards in the specified range of cards.

Range:

xyyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters.

Valid GPLs: *blbios, blbepm, blbsmg, blcpld, bldiag6, blixp, blmcap, blrom1, blvxw6, hipr2, imtpci, pldpmc1, multiple.*

Use " gpl=multiple " to simultaneously flash multiple E5-class cards running different GPLs, such as BLIXP, BLMCAP, etc. The command will then flash all E5-class cards in the specified range.

initclk (optional)

If this parameter is specified for an EOAM card location (1113 or 1115), it determines whether or not the TDM-GTI bitfile should be reloaded, causing a clock initialization.

The command will be accepted if the TDM being initialized is a TDM-GTI and the following conditions are true:

- The card being flashed is in location 1113 or 1115.
- Any required clocks from the mate OAM are valid, or the force=yes parameter is used.

Range:

yes

no

Default:

no

loc (optional)

The location of a single card to be initialized.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

mode (optional)

If this parameter is specified for the E5-class cards, it indicates that the flashing of the E5-class card or range of cards will be performed in the specified mode. This parameter can be specified only for E5-class cards.

Range:

foregrnd

In this mode, the flash image will be copied into an inactive FLASH memory area of an E5-class card or range of cards. After the E5-class card initializes, it runs this version of the GPL in the card's inactive FLASH memory. If the E5-class card in the specified location is provisioned, the E5-class card must be inhibited before it can be flashed in this mode.

backgrnd

In this mode, the flash image will be copied into an inactive FLASH memory area of an E5-class card or range of cards. If the E5-class card in the specified location is provisioned, the E5-class card can be flashed without inhibiting it. The image uploaded with mode=backgrnd will run after the card boots upon receiving the command init-flash:mode=imgselct.

imgselct

This mode will initialize the card(s), and load & run the image previously copied to the local FLASH memory with mode=backgrnd. Do not use this mode unless directed by Oracle's Customer Service.

pvjoy

In this mode, the flash image will be copied into inactive FLASH memory of an E5-class card or range of cards and the card(s) will initialize. After the E5-class card initializes, it will run the version of the GPL in the card's inactive FLASH memory. If the E5-class card in the specified location is provisioned, then the E5-class card can be flashed without inhibiting the E5-class card in the specified location. Do not use this mode unless directed by Oracle's Customer Service.

Default:

foregrnd

sloc (optional)

Start location. Location of the first card of a range of cards to be initialized.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

Example

```
init-flash:loc=1105:code=trial
init-flash:sloc=1101:eloc=1112:gpl=blixp:code=appr
init-flash:loc=1113:code=appr:initclk=yes
init-flash:loc=1115:code=appr:initclk=yes:force=yes
init-flash:loc=1115:code=trial:initclk=no
```

```
init-flash:sloc=1105:eloc=1306:appr:gpl=blmcap:mode=foregrnd
init-flash:sloc=1203:eloc=1402:code=trial:gpl=blixp:mode=foregrnd:boot=no
init-flash:loc=1205:code=appr:mode=backgrnd
init-flash:sloc=1201:eloc=1311:code=trial:gpl=blmcap:mode=backgrnd
init-flash:sloc=1201:eloc=1311:code=trial:mode=imgselct
```

Dependencies

The specified card must be an HC-MIM, E5-class card, or Service Module card. A MUX card can be specified for locations *xy*09 and *xy*10 (*x* is the frame and *y* is the shelf).

Each specified card does not have to be defined in the database, but it does have to be aligned on the IMT bus.

If the card in the specified card location is provisioned, then the card must be inhibited before this command is entered (unless the card is a MUX card or E5-class card with mode set to backgrnd, imgselct or pvjoy).

If the target card is a MUX card, then both card locations specified in the sloc and eloc parameters must contain MUX cards on the same IMT bus. For these cards, the bus is implicit based on the specified location. Location *xy*09 specifies the MUX A Bus, and location *xy*10 specifies the MUX B Bus (*x* is the frame and *y* is the shelf). For example, sloc=1109:eloc=6109 specifies all MUX cards on the A Bus only; sloc=1110:eloc-6110 specifies all MUX cards on the B Bus only. MUX cards from both the A bus and B bus cannot be flash downloaded simultaneously.

The boot parameter can be specified only if the target is an HC-MIM or E5-class card.

The boot parameter cannot be specified for an HC-MIM card running the BLCPLD GPL.

A card location that contains the active MASP cannot be specified for the loc parameter.

The provisioning subsystem mode (simple, duplex) must be established prior to executing the command.

The loc parameter cannot be specified with the eloc and sloc parameters.

The loc parameter or the eloc and sloc parameters must be specified.

If the eloc and sloc parameters are specified, the gpl parameter must be specified. MUX cards in the locations specified in the sloc and eloc parameters must be running the specified general program load (gpl). If the GPL specified is not multiple, then other cards in the range of card locations can be running other GPLs, but will not be initialized and only the cards within the range that are running the specified GPL will be initialized.

The sloc parameter value must be less than the eloc parameter value, when the two parameters are specified.

The specified card cannot be running an inactive flash GPL when the command is executed. If the sloc and eloc parameters are specified, cards within the range running an inactive flash GPL will be skipped.

If the initclk parameter is specified, the card location parameter value must be 1113 or 1115.

If TDM reload would cause a system clock outage, the initclk parameter cannot be specified unless force=yes is also specified.

Caution: The resulting clock outage will probably cause loss of traffic on all links.

The initclk parameter can be specified only for TDM cards that support bitfile reloading (TDM-15 or later).

E5-class cards cannot support a valid trial version of the BLBEPM GPL and BLCPLD GPL at the same time. One of these GPLs must be downloaded and activated before the other one can be downloaded.

The HC-MIM card cannot support a valid trial version of the BLBIOS GPL and BLCPLD GPL at the same time. One of these GPLs must be downloaded and activated before the other one can be downloaded.

No other related command can be in progress when this command is entered.

A card location that is valid and defined in the database must be specified.

The eloc and sloc parameters must be specified together in the command.

MUX cards specified in the sloc and eloc location parameters must be running the specified GPL. For other GPLs including multiple, all cards within the range running the specified GPL will be flashed.

If the loc and initclk parameters are specified, the loc parameter value must be card location 1113 or 1115. If the appl parameter and initclk parameters are specified, the appl parameter value must be eoam .

This command cannot be entered if an IMT Rate Change sequence is in progress.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

The command will be accepted if the TDM being initialized is a TDM-GTI and the following conditions are true:

- The card being flashed is in location 1113 or 1115.
- Any required clocks from the mate OAM are valid, or the force=yes parameter is used.

The boot parameter cannot be specified with the mode=backgrnd, mode=imgselct or mode=pvjoy for the E5-class card.

A card location that contains the MASP cannot be specified for the sloc or eloc parameter.

The mode parameter cannot be specified with the non E5-class card.

The gpl=multiple parameter can be specified only if the sloc and eloc parameters are specified.

The gpl=multiple parameter can be specified only if the card locations in the sloc and eloc parameters are E5-class cards.

The code parameter cannot be specified with mode=imgselct parameter for the E5-class card(s). If the mode=imgselct parameter is not specified, then the code parameter must be specified.

Notes

Card locations 1114, 1116, and 1117 are not valid and cannot be specified.

For the HC-MIM or E5-class cards, multiple images can be flashed without having to boot the card after each flash. If multiple images are being flashed to the card the boot=no parameter can be used to prevent the card from booting after each image is flashed. After flashing any number of images,

the card can be reset either by entering the `init-flash` command with the boot=yes parameter or by entering the `init-card` command. If multiple images are being flashed and the card is allowed to boot after each flash, any images that are not activated after the card boots will be lost on a subsequent reset of the card.

If E5-OAMs are being used, then the init-flash command can be accepted even when the cards specified in the sloc and eloc parameter range contains 1113 and/or 1115 locations in it. But the cards in 1113 and 1115 are never included in the list to flash the cards.

For example, if "sloc=1111:eloc=1215:gpl=blmcap", neither 1113 nor 1115 would be included in the list to flash the cards and the command will be accepted. The only way to flash an E5-OAM card is to specify loc=1113/1115 but the card location specified cannot be the active E5-MASP.

For mode=backgrnd or mode=imgselct to be accepted, the E5-class target card must already be running a 45.0.0=64.XX.YY release version or higher.

Output

`init-flash:loc=1105:code=trial`

```
    rlghncxa03w 04-01-05 13:05:05 EST  EAGLE 31.3.0
    FLASH Memory Downloading for card 1105 Started.

    rlghncxa03w 04-01-05 13:05:05 EST  EAGLE 31.3.0
    BPHCAP Downloading for card 1105 Complete.

    rlghncxa03w 04-01-05 13:05:05 EST  EAGLE 31.3.0
    Command Completed.
;
```

`init-flash:loc=1113:code=appr:initclk=yes`

```
    rlghncxa03w 04-03-08 10:02:04 EST  EAGLE 31.6.0
    FLASH Memory Download for card 1113 Started.
;

    rlghncxa03w 04-03-08 10:02:23 EST  EAGLE 31.6.0
    FLASH Memory Download for card 1113 Completed.
;
```

`init-flash:sloc=1101:eloc=1112:gpl=blixp:code=appr`

```
    rlghncxa03w 05-01-02 13:05:05 EST  EAGLE 33.0.0
    FLASH Memory Download for cards 1101 - 1112 Started.
;
    rlghncxa03w 05-01-02 13:05:05 EST  EAGLE 33.0.0
    FLASH Memory Download for cards 1101 - 1112 Completed.
    LOC 1101 : PASSED
    LOC 1102 : PASSED
    LOC 1112 : PASSED

    ALL CARD RESULTS PASSED
;
    rlghncxa03w 05-01-02 13:05:05 EST  EAGLE 33.0.0
    Command Completed.
```

Related Commands

act-flash, *clr-imt-stats*, *flash-card*, *init-imt-gpl*, *rept-imt-info*, *rept-imt-lvl1*, *rept-imt-lvl2*, *tst-imt*

init-imt-gpl

Initialize IMT GPL

Use this command to load the specified IMT GPL software to the specified card and to reset that card. The application software is reloaded following IMT reset.

Parameters

code (mandatory)

The IMT GPL to load to the card.

Range:

appr

The approved GPL version

refresh

Reload approvedl GPL version without card reset

trial

The trial GPL version

loc (optional)

The location of the card to be initialized.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

All locations

Example

```
init-imt-gpl:loc=1201:code=trial
init-imt-gpl:code=refresh
init-imt-gpl:code=appr
```

Dependencies

The card location shelf must be within the allowed ranges as specified on the loc parameter. The shelf is the first two digits of the loc parameter.

The card location slot must be within the allowed ranges as specified on the loc parameter. The slot is the second two digits of the loc parameter.

The card location cannot contain a card with flash memory (HC-MIM or MUX).

When this command is entered, no other action command can be in progress.

If the code=appr or code=trial parameter is specified, the loc parameter must be specified.

If the code=trial parameter is specified, the loc parameter must be specified, and the specified card location must be equipped and in service.

If the code=appr or code=refresh parameter is specified, the card must be connected to at least one IMT bus and communicating with the active MASP when the command is entered.

This command cannot be entered if the `clr-imt-stats`, `rept-imt-info`, `rept-imt-lvl1`, `rept-imt-lvl2`, or `tst-imt` command is running.

This command must not be entered during IMT statistics collection following an hourly boundary.

A card location that is valid and defined in the database must be specified.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

Notes

None

Output

`init-imt-gpl:loc=1201:code=trial`

```
    rlghncxa03w 04-02-27 16:53:22 EST   EAGLE 31.3.0
    Initializing IMT GPL for card 1201.

    rlghncxa03w 04-02-27 16:53:22 EST   EAGLE 31.3.0
*   0192.0013  * CARD 1201 SS7ANSI     Card is isolated from the system

    rlghncxa03w 04-02-27 16:53:22 EST   EAGLE 31.3.0
    0193.0014    CARD 1201 SS7ANSI     Card is present

    rlghncxa03w 04-02-27 16:53:22 EST   EAGLE 31.3.0
    0194.0096    CARD 1201 SS7ANSI     Card has been reloaded
;
```

Related Commands

alw-card, *inh-card*, *init-card*, *rept-stat-card*

init-mux

Initialize High-Speed Multiplexer

This command is used to reset an individual MUX card, or a given IMT Bus A or B (which includes all MUX cards for that bus).

The command boots the MUX card processor and brings down the respective IMT bus temporarily (approximately 10 seconds) until the MUX card(s) come back into service.

Note: When a card is disconnected from the IMT Bus, it may take several seconds for the card IMT Status to be updated. If an `init-mux` or `disc-imt` command is entered for the alternate IMT Bus before the card IMT Status is updated, then the card may reboot. After disconnecting the card from the IMT bus, use the `rept-stat-imt` or `rept-stat-card` command to determine whether the card IMT status is updated. Do not issue the `disc-imt` or `init-mux` command for the alternate IMT bus until the card status is updated.

Parameters

bus (optional)

The MUX bus to be reset. All MUX cards on the specified bus are reset.

Range:

a

b

Default:

a

force (optional)

This parameter is specified to override normal safeguards. The force=yes parameter can be used to reset an entire MUX bus when the alternate bus is non-functional or to reset one MUX card during a fault isolation test (see the `tst-imt` command).

Caution: If the force=yes parameter is specified, and the alternate IMT bus is OOS, then all of the cards on the IMT that are running a GPL will initialize. If one or more cards are not aligned on the alternate bus, placing the alternate IMT in IS-ANR, only the non-aligned cards will initialize. Either occurrence could result in nodal isolation.

Range:

yes

no

Default:

no

loc (optional)

The location of a single MUX card to be reset.

Range:

1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110

Example

```
init-mux:bus=a
init-mux:loc=1109
init-mux:loc=6202
```

Dependencies

An `act/init-flash` command cannot be in progress when this command is entered.

The bus or loc parameter must be specified in the command. Both parameters cannot be specified in the command.

The force=yes parameter must be specified before this command can be entered during an IMT Fault Isolation test.

This command cannot be entered during an Extended Bit Error Rate Test (BERT) even if the force=yes parameter is specified.

This command is not allowed during the IMT statistics collection period following an hourly boundary (IMT performance monitoring).

This command cannot be entered if an IMT Rate Change sequence is in progress.

Notes

None

Output

`init-mux:loc=1109`

```
    rlghncxa03w 05-07-13 08:15:10 EST  EAGLE 31.3.0
    Command Completed.
;
```

Related Commands

act-flash, *init-flash*

init-network — Initialize the Network

Use this command to reset all the network cards. The network cards are E5- TSMs and LIMs; that is, anything not part of the Maintenance and Administration Subsystem (MAS). This command resets all the network cards by reloading GPLs and data to the cards. Use of this command requires maintenance personnel to be located at the site.

Caution: Using this command causes network nodal isolation; however, if the network nodal isolation is less than two seconds, it may not be detected and may not be reported. Also, in some cases when network nodal isolation has been detected and a large number of maintenance troubles are being reported, the network nodal isolation message may not be reported. An alarm is generated, however.

Parameters

force (optional)

Force the resetting of all the network cards.

Range:

yes

no

Default:

no

Example

```
init-network
```

Dependencies

The MASP must be in either *Upgrade Phase 3* mode or *Full Function* mode. (See the "Notes" section for this command for more information.)

The system database must be coherrent when this command is entered.

At least one card with the SS7ANSI or CCS7ITU application installed must exist with an in-service active signaling link.

The force=yes parameter must be specified to override the required four-card SS7ANSI or CCS7ITU configuration. The system then selects the best available of the remaining SS7ANSI or CCS7ITU cards.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

Notes

Upgrade Phase 3

*Upgrade Phase 3*mode means that the MASPs are running GPLs that match the major revision defined for the approved GPLs, but the other network processors are only prepared to be upgraded.

Full Function

Full Function mode means that all MASPs are running GPLs that match the major revision defined for the approved GPLs. *Full Function* mode is the normal operating mode for the MASP.

Output

The command output scrolls into the scroll area of your display contiguously. However, for purposes of this example, each part has an explanation preceding it.

```
init-network
```

```
rlghncxa03w 06-05-27  08:15:10 EST  EAGLE 35.0.0
(Reports the selection of an alternate card.)
rlghncxa03w 06-05-27  08:15:10 EST  EAGLE 35.0.0
1234.1107    SYSTEM       INFO  INW ALT card as first to be preloaded
             CARD=1201    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:29:15
```

Reports the selection of a main card.

```
init-network
```

```
rlghncxa03w 06-05-27  08:15:10 EST  EAGLE 35.0.0
1234.1108    SYSTEM       INFO  INW MAIN card as last to be reset
             CARD=1202    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:29:17
```

Reports that the card cross loading is inhibited.

```
init-network
```

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1109    SYSTEM       INFO  Asserted DDL inhibition
             CARD=1113    GPL=OAM
             Report Date: 06-05-27  Time: 16:27:18
```

Reports that a card reset has been issued.

```
init-network
```

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1110    SYSTEM       INFO  Card reset command issued
             CARD=1204    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that a card is being allowed to load.

```
init-network
```

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1111    SYSTEM       INFO  Allowing card to load
             CARD=1204    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that INW is waiting for validation of card loading.

```
init-network
```

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1112    SYSTEM       INFO  Waiting for validation of card loading
             CARD=1204    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that INW has detected successful completion of card loading.

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1113    SYSTEM       INFO  Detected card loaded
             CARD=1204    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that INW has detected the reset or removal of a card.

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1114    SYSTEM       INFO  Detected card reset or removed
             CARD=1204    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that the card is being allowed to crossload.

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1115    SYSTEM       INFO  Allowed card to skip DDL inhibited
             CARD=1204    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that DDL inhibition has been removed.

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1116    SYSTEM       INFO  Removed DDL inhibition
             CARD=1113    GPL=OAM
             Report Date: 06-05-27  Time: 16:30:18
```

If `init-network` is entered during an upgrade, reports that the upgrade is to continue.

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1117    SYSTEM       INFO  Initialize OAMs to continue upgrade
             CARD=1113    GPL=OAM
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that a card must be reset manually or removed.

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1118    SYSTEM       INFO  Card must be manually reset/removed
             CARD=1204    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that a card has failed to reset.

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1119    SYSTEM       INFO  Card failed to reset
             CARD=1204    GPL=SS7ANSI
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that a DDL inhibition assertion has failed.

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
1234.1120    SYSTEM       INFO  Failed to assert DDL inhibition
             CARD=1113    GPL=OAM
             Report Date: 06-05-27  Time: 16:30:18
```

Reports that an internal error has stopped an `init-network` .

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
Command Aborted : Internal error.
```

Reports that a failure to load a card has stopped an `init-network` .

`init-network`

```
rlghncxa03w 06-05-27 16:30:02 EST  EAGLE 35.0.0
Command Aborted : Card 1206 failed to load.
```

Related Commands

None

init-sys

Initialize System

Use this command to reset all cards in the system (except HMUX, HIPR and MUX cards). When this command is entered, a caution message is displayed in the scroll area requesting to re-enter the command to confirm the operation. The command must be re-entered within 30 seconds. The only valid commands that can be entered after entering this command the second time are the `login` and `act-user` commands.

Caution: This command causes a complete system reload, and should be used only during periods of low traffic. Use this command only when directed by the Customer Care Center.

Caution: When this command executes, the system does not retain the manually initiated state (for example, OOS-MT-DSBLD) for the signaling link, card, or the terminal. After the command executes, the system attempts to bring all provisioned links, cards, and terminals on line, including those that were previously out of service. Each device must be put back into its previous state after the system is back on line. It is advisable to print

or electronically capture the output of the `rept-stat-slk`, `rept-stat-card`, and `rept-stat-trm` commands for reference prior to issuing the `init-sys` command. To restore a device to its previous state, issue the appropriate inhibit/deactivate command listed in this manual in the section for each of the above `rept-stat` commands.

Parameters

data (optional)

High memory refresh. This parameter causes data to be reloaded to the specified card. This parameter is used to reload data if the G-Flex, G-Port, INP, or LNP feature is on, or the ATINP feature is enabled. This parameter is applicable only to network cards containing the MPS database (VSCCP/ENUM or S13 card running DEIRHC gpl).

Range:

refresh

Causes data to be reloaded to the specified card.

persist

Indicates that the database is not to be reloaded to the card. Used to request that the EAGLE perform a warm restart of the requested cards. The EAGLE performs various checks to ensure that all conditions necessary to initiate the warm restart are in place.

Default:

refresh

force (optional)

Allows the command to be processed if the data=persist parameter is specified and all the network cards containing the LNP database cannot maintain a persistent LNP database over the reset.

Range:

yes

no

Default:

no

Example

```
init-sys
init-sys:data=persist
```

Dependencies

When this command is entered, another `init-sys` command cannot be in progress on another port.

The G-Flex, G-Port, INP, LNP, or V-Flex feature must be turned on, or the ATINP feature must be enabled before the data parameter can be specified.

The value specified for the data parameter for the confirmation command must be the same value that was specified the first time.

The force parameter is valid only with the data parameter.

Notes

When this command is entered the first time, 30 seconds are allowed to enter the command again. After the command is accepted, a delay of 10 seconds gives the system time to broadcast the information message regarding the system initialization.

From the time that the `init-sys` command is accepted, you must wait approximately two minutes before you can log into the system. If the system terminal is in the VT-100/VT-320 mode, the terminal display will be refreshed with nonzero alarm counts. During this 2-minute interval, an intermediate screen refresh caused by the MASPs' role change from active to standby, and from standby to active. This screen refresh is typically a partial refresh and the alarm indicators are set to zero.

If you are logged into the system in the KSR mode, you receive UAM 0009 (MASP became active) to indicate that you are now able to log into the system. UAM 0009 could be issued twice due to possible transient MASP role change (switching from active to standby). Following the execution of the `init-sys` command, the MASP that was active before the `init-sys` command was entered will be the active MASP when the system has finished reinitializing. E5-TSM cards are reloaded only in the event of power failure or hardware reboot. The execution of this command does not require E5-TSM cards to be reloaded.

When the OA&M IP Security feature and the parameter SSH in SECUDFLT table are turned ON, and an IPSM card is inserted and initialized for the first time or is removed, inserted, and initialized again, the "SSH Host Keys Regenerated" UIM is displayed. The UIM shows the generated SSH Host Key fingerprint that must be provided at the secure client in order for secure information transfer to occur. The SSH Host Key fingerprint is changed whenever power is lost and restored to an IPSM card.

```
rlghncxa03 03-07-11 07:05:00 EST  EAGLE 30.2.0
0021.1493    CARD 1111     INFO    SSH Host Keys Regenerated
DSA Server Host Key FTRA-formatted Fingerprint=
84 7c 92 8b c 7c ds 19 1c 6 4b de 5c 8f c5 4d
Report Date:03-07-11  Time:22:27:36
```

When the OA&M IP Security feature and the parameter SSH in SECUDFLT table are turned ON, and an IPSM card is restarted with this command, the "SSH Host Keys Loaded" UIM is displayed. The UIM shows the current SSH Host Key fingerprint. The SSH Host Key fingerprint is not changed if the IPSM card does not lose power.

```
rlghncxa03 01-07-11 07:05:00 EST  EAGLE 30.2.0
0021.1493    CARD 1111     INFO    SSH Host Keys Loaded
DSA Server Host Key FTRA-formatted Fingerprint=
84 7c 92 8b c 7c ds 19 1c 6 4b de 5c 8f c5 4d
Report Date:03-07-11  Time:22:27:36
```

Output

This example shows the output when the `init-sys` command is entered once, then entered again within 30 seconds, causing the system to start resetting all of its cards:

```
init-sys
```

```
rlghncxa03w 04-01-07 07:05:00 EST  EAGLE 31.3.0
Command entered at terminal #3

rlghncxa03w 04-01-07 07:05:01 EST  EAGLE 31.3.0
CAUTION: This command causes a complete system reload, and
will result in traffic loss.
Re-enter command within 30 seconds to confirm.
```

```
init-sys
```

```
rlghncxa03w 04-01-07 07:05:16 EST  EAGLE 31.3.0
Command entered at terminal #3

rlghncxa03w 04-01-07 07:05:17 EST  EAGLE 31.3.0
Init System command issued at terminal #3
```

This example shows the output when the `init-sys` command is entered once, and more than 30 seconds pass with no other keyboard entry:

```
init-sys
```

```
rlghncxa03w 04-01-05 07:05:00 EST  EAGLE 31.3.0
Command entered at terminal #3.

rlghncxa03w 04-01-05 07:05:01 EST  EAGLE 31.3.0
CAUTION: This command causes a complete system reload, and
will result in traffic loss.
Re-enter command within 30 seconds to confirm.

rlghncxa03w 04-01-05 07:05:31 EST  EAGLE 31.3.0
Init System command aborted due to confirmation timeout
```

This example shows the output when the `init-sys` command is entered once and then the `rls-alm:lvl=minr` command is entered, letting the 30-second timer expire for the second entry of the `init-sys` command:

```
init-sys
```

```
rlghncxa03w 04-01-05 07:05:00 EST  EAGLE 31.3.0
Command entered at terminal #3

rlghncxa03w 04-01-05 07:05:01 EST  EAGLE 31.3.0
CAUTION: This command causes a complete system reload, and
will result in traffic loss.
Re-enter command within 30 seconds to confirm.

rls-alm:lvl=minr
rlghncxa03w 04-01-05 07:05:10 EST  EAGLE 31.3.0
Command entered at terminal #3

rlghncxa03w 04-01-05 07:05:11 EST  EAGLE 31.3.0
All the minor alarms are released
```

```
rlghncxa03w 04-01-05 07:05:12 EST  EAGLE 31.3.0
Command Completed

rlghncxa03w 04-01-05 07:05:31 EST  EAGLE 31.3.0
Init System command aborted due to confirmation timeout
```

This example shows the output when the `init-sys` command is entered twice within 30 seconds, and the data=persist parameter is specified to perform a warm restart of the requested cards without reloading the database to the cards:

`init-sys:data=persist`

```
rlghncxa03w 04-01-05 07:05:31 EST  EAGLE 31.3.0
Command entered at terminal #3

rlghncxa03w 04-01-05 07:05:31 EST  EAGLE 31.3.0
CAUTION: This command causes a complete system reload, and will result in
traffic loss.
Re-enter command within 30 seconds to confirm.

init-sys:data=persist
rlghncxa03w 04-01-05 07:05:31 EST  EAGLE 31.3.0
Command entered at terminal #3
rlghncxa03w 04-01-05 07:05:31 EST  EAGLE 31.3.0
Init System command issued at terminal #3
```

This example shows the output when the `init-sys` command is entered twice within 30 seconds, and the force=yes and data=persist parameter is specified to perform a warm restart of the requested cards without reloading the database to the cards:

`init-sys:data=persist:force=yes`

```
tekelecstp 02-01-01 21:49:15 MST  EAGLE5 46.2.0-65.42.0
init-sys:data=persist:force=yes
Command entered at terminal #17.
;

tekelecstp 02-01-01 21:49:15 MST  EAGLE5 46.2.0-65.42.0
Verifying card(s) persistent database - please wait

Command Accepted - Processing
tekelecstp 02-01-01 21:49:15 MST  EAGLE5 46.2.0-65.42.0
CAUTION: This command causes a complete system reload, and
will result in traffic loss.
Re-enter command within 30 seconds to confirm.
;
Command Executed
```

`init-sys:data=persist:force=yes`

```
tekelecstp 02-01-01 21:49:20 MST  EAGLE5 46.2.0-65.42.0
init-sys:data=persist:force=yes
Command entered at terminal #17.
;

Command Accepted - Processing
Command Executed
```

Related Commands

act-gpl, *chg-db*, *chg-gpl*, *copy-gpl*, *copy-meas*, *disp-disk-dir* , *rept-stat-db*

lock — Lock Keyboard

Use this command to lock a terminal's keyboard. When the keyboard is locked, the system accepts no keyboard commands other than the `unlock` command. The keyboard remains locked until the logged on user's login password is entered at the UNLOCK prompt. When the keyboard is locked, any idle terminal monitor in effect for the terminal is suspended temporarily.

Parameters

This command has no parameters.

Example

`lock`

Dependencies

The terminal cannot be an MGMT terminal used for Network Surveillance.

The terminal cannot be a TELNET terminal (terminal IDs 17-40).

Notes

A locked terminal can also be unlocked by entering the `inh-trm` command, followed by the `alw-trm` command.

Output

`lock`

```
    rlghncxa03w 04-02-17 16:02:05 EST  EAGLE 31.3.0
    Terminal keyboard is locked. Enter UNLOCK command to unlock.
;
```

Related Commands

unlock

login — Login

Use this command to log into the system. After you enter this command, the system requests a password. For security reasons, the password is not displayed at the terminal.

Parameters

uid (mandatory)

User ID. The system prompts the user for a valid password after entering in this ID.

Range:

*a*zzzzzzzzzzzzzzz

1 alphabetic character followed by up to 15 alphanumeric characters

Example

```
login:uid=john
```

Dependencies

The user cannot be logged onto any terminal while changing the password.

The user ID must not be logged in to another port already, and it must not be revoked.

The user ID must have been logged in successfully within the number of days specified on the uout parameter of the `ent-user` command.

The OA&M IP Security Enhancements feature must be turned on before the password can be changed from a Telnet terminal (IDs 17-40) if the user is logging in with the assigned ID and password for the first time, or the password has expired.

The password can contain up to 12 characters.

The password must contain at least the number of characters specified by the minlen parameter in the `chg-secu-dflt` command.

The password must contain at least the number of alphabetic characters specified by the alpha parameter in the `chg-secu-dflt` command.

The password must contain at least the number of numeric characters specified by the num parameter in the `chg-secu-dflt` command.

The password must contain at least the number of punctuation characters specified by the punc parameter in the `chg-secu-dflt` command.

The password cannot contain the associated User ID.

The number of days specified by the minintrvl parameter in the `chg-secu-dflt` command must pass between password changes.

The password must contain fewer duplicate characters from the existing password than the number specified by the pchreuse parameter in the `chg-secu-dflt` command.

The password cannot be the same as a previous password if the limit in the password history, specified by the preuse parameter of the `chg-secu-dflt` command, has been reached.

The current password cannot be entered as the new password.

The values specified for the uid parameter and for the password must already exist.

Notes

The `act-user` command can be used in place of `login`. The `act-user` command has been provided in compliance with TL1 standards.

When a new system is shipped, the user ID and password are set to the system. These should be changed immediately to ensure system security.

Output

When the `login` command is entered, a password prompt occurs. If the password and User ID are valid, then the login is processed. When a password change is required, password rules are displayed, and a new password is requested. The login is granted if the change is successful, then or if no password change is necessary.

After login is granted, a banner is displayed. This banner consists of the warning text provided on the `chg-secu-dflt` command, indications about the last login, and any unsuccessful login attempts.

This example shows the output for a normal login path with no request for new password:

```
login:uid=eagle
```

```
    eagle5 10-02-19 19:37:16 EST  EAGLE5 42.0.0
    User logged in on terminal 3.
;

    eagle5 10-02-19 19:37:16 EST  EAGLE5 42.0.0
    NOTICE: This is a private computer system.
    Unauthorized access or use may lead to prosecution.
    0 LOGIN failures since last successful LOGIN
    Last successful LOGIN was on port 3 on 10-02-18 @ 20:38:26
;
```

This example shows the output for a login where a password change is required:

```
login:uid=user1
```

```
Enter Password :
Enter new password (password has expired and must be changed) :
Verify Password :
Command Accepted - Processing
    e5oam 10-02-19 23:30:57 EST  EAGLE 42.0.0
    login:uid=user1
    Command entered at terminal #3.
;

    e5oam 10-02-19 23:30:59 EST  EAGLE 42.0.0
    New password must contain:
      - between 8 and 12 characters
      - at least 1 alphabetic character(s) ('a'-'z')
      - at least 1 numeric character(s) ('0'-'9')
      - at least 1 punctuation character(s) (e.g. $%@#)
    New password must:
      - be unique from the old password
      - be unique from the last 2 historical password(s)
```

```
      - not reuse more than 4 character(s) from the old password
;
```

Related Commands

act-user, *chg-pid*, *chg-secu-dflt*, *chg-user*, *dact-user*, *dlt-user*, *ent-user*, *logout*, *rept-stat-user*, *rtrv-secu-dflt*, *rtrv-secu-user*, *rtrv-user*

logout

Logout

Use this command to end a user session. The `logout` command has the same affect as the `canc/dact-user` commands.

Parameters

This command has no parameters.

Example

`logout`

Dependencies

None

Notes

The `canc/dact-user` commands can be used in place of `logout`.

Output

`logout`

```
    rlghncxa03w 06-06-05 07:05:31 EST  EAGLE 35.0.0
    Command Completed.
;
```

Related Commands

act-user, *chg-pid*, *chg-user*, *dact-user*, *dlt-user*, *ent-user*, *login*, *rept-stat-user*, *rtrv-secu-user*, *rtrv-user*

pass

Pass

Use this command to pass a command string to an individual card for processing. This command reduces the reliance on the OAM build for card-specific or application-specific information.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

cmd (optional)

Command string including quotes (“ “). The command represented in the quoted string is sent to the specified card. Maximum command string length including quotes is 132 characters.

Range:

zzzz

```
pass:loc=6312:cmd="help"
```

Dependencies

The value specified for the loc parameter must be valid for the card type and application:

- E5-ENET or E5-ENET-B card running the IPGWI, IPLIM, IPLIMI, IPSG, SS7IPGW, or STPLAN application
- STC or E5-STC card running the EROUTE application
- IPSM card running the IPS application
- Service Module card running the VSCCP application
- E5-TSM card running the GLS application

The pass command must include either the cmd or shellcmd parameter.

Notes

None

Output

Output is shown in the individual Pass commands.

Related Commands

None

rept-ftp-meas

Report Measurements to FTP

Use this command to manually initiate generation and FTP transfer of a measurements report from the Measurements Platform MCPM or Integrated Measurements enabled E5-OAM to an FTP server.

Parameters

enttype (mandatory)

Entity type to report on in the measurements report.

Range:

aiq

Measurements for ANSI41 AIQ

atinpq

Measurements for ATINP

deir

Measurements for S13/S13' EIR

eir

Measurements for Equipment Identity Register

enum

Measurements for ENUM Mobile Number Portability and Tier One Address Resolution

gttapath

Measurements for GTT Actions Per-Path

idpr

Measurements for IDPR

link

Measurements for signaling links

lnkset

Measurements for linksets

lnp

Measurements for local number portability

lsdestni

Measurements for linkset destination network identifiers

lsonismt

Measurements for ISUP message type screening

lsorigni

Measurements for linkset originating network identifiers

mapscrn

Measurements for GSM MAP message screening

np

Measurements for INP, INP CRP, G-Port, A-Port, MO-based GSM SMS NP, MO-based IS41 SMS NP, IGM, MT-Based GSM SMS NP, and MT-Based IS41 SMS NP

origni

Measurements for originating network identifiers greater than 5

origninc

Measurements for originating network identifiers (less than 5, small networks) for network clusters

sctpasoc

Measurements per association for the SCTP protocol (used to carry M3UA, M2PA, and SUA traffic)

sctpcard

Measurements per card for the SCTP protocol (used to carry M3UA, M2PA, and SUA traffic)

sip

Measurements for SIP

stp

Measurements pertaining to the Signaling Transfer Point in general or summarized totals recorded on the STP

stplan

Measurements for STP Local Area Network data links

tt

Measurements for translation types

ua

Measurements per application server/association for the M3UA and SUA protocols

vflex

Measurements for V-Flex

type (mandatory)

Type of measurement report.

Range:

avl

Availability measurements

avld

Daily availability measurements

avldth

Day to hour availability measurements.

comp

Component measurements

gtwy

Internetwork gateway-related data from the STP for ANSI and ITU measurements. ANSI gateway measurements are pegged on a per-linkset, per-Network Indicator basis, whereas ITU measurements are pegged on a per-linkset basis.

mtcd

Daily maintenance measurements

mtcdth

Day-to-hour maintenance measurements

mtch

Hourly maintenance measurements

mtcs

Link/linkset maintenance status

nm

Network management, on-demand

rbase

Schedule-report type record base measurements

systot

STP system totals

day (optional)

Day of the week for the specified daily measurement report.

Range:

mon

tue

wed

thu

fri

sat

sun

Default:

If not specified, the previous single day is reported.

hh (optional)

Half-hour for the specified report. The end time for the collection interval. For example, hh=0300 generates a report for the interval 2:30-3:00.

Range:

0000 - 2400

hhmm where *hh*=00 -24 (hour) and *mm*=00 or 30 (minute)

period (optional)

The relative period for the report.

Range:

active

last

specific

qh (optional)

Quarter-hour for the specified report. The end time for the collection interval. For example, qh=0315 generates a report for the interval 3:00-3:15.

Range:

0000 - 2400

hhmm where *hh* = 00-24 (hour) and *mm* = 00, 15, 30 or 45

Example

```
rept-ftp-meas:type=systot:enttype=stp
rept-ftp-meas:type=mtch:enttype=deir
rept-ftp-meas:type=mtch:enttype=enum
```

Dependencies

This command cannot be used to specify a report type if that report type is currently printing.

A primary MCPM card must be available when this command is entered.

The 15 Minute Measurements feature must be turned on and the 15 Minute Measurements collection option (`chg-measopts:collect15min=on` command) must be on before the qh parameter can be specified.

The LNP feature must be turned on before the mtchlnp=on, mtcdlnp=on, or enttype=lnp parameter can be specified.

The GSM Map Screening feature must be turned on before the mtcdmap=on and enttype=mapscrn parameters can be specified

The EIR feature must be turned on before the enttype=eir parameter can be specified,.

If a value of *avl, avld, comp, gtwy, mtcd*, or *systot* is specified for the type parameter, then the value specified for the hh parameter must indicate a half-hour boundary (the end of the requested half-hour for the report). If the type=mtch parameter is specified, then the value specified for the hh parameter must indicate an hourly boundary (half hours ending in 00, such as 0100, etc).

The qh parameter must specify a quarter-hourly boundary (the end of the requested quarter-hour for the report) for valid report types (*avld(th), mtcd(th), mtch, nm, rbase*, and *mtcs*) cannot be specified.

Hourly collection and report processing cannot be in progress when report type mtch is specified.

Day-to-hour collection and report processing cannot be in progress

- When report type *mtcd* is specified
- When report type *mtcdth* is specified

Daily collection and report processing cannot be in progress when report type *mtcd* is specified.

Half-hourly collection and report processing cannot be in progress when report type *comp, systot, avl*, or *gtwy* is specified.

Quarter-hourly collection and report processing cannot be in progress when report type *comp, systot, avl*, or *gtwy* is specified.

5-minute collection and report processing cannot be in progress when report type *nm* is specified.

The *mtcdth* report type is unavailable between midnight and 1:00 AM (0100).

The day parameter can be specified only for report type *mtcd* and entity types *aiq, eir, lnp, np, vflex, mapscrn, atinpq*, and *gttapath*.

The hh and qh parameters cannot be specified together in the command.

When the period=last parameter is specified, the hh, qh, and day parameter cannot be specified.

When the period=active parameter is specified, the hh, qh, and day parameters cannot be specified.

When the period=specific parameter is specified, the hh, qh, or day parameters must be specified.

Table 38: rept-ftp-meas Valid Parameter Combinations indicates valid parameter combinations for measurements reports; invalid combinations will generate an error message.

Table 38: rept-ftp-meas Valid Parameter Combinations

Param. Value	**:type Values**											
	avl	avld	avldth	comp	gtwy	mtcd	mtcdth	mtch	mtcs	nm	systot	rbase
entity												
aiq						X		X				
atinpq						X		X				
deir						X		X				
eir						X		X				
enum						X		X				
gttapath						X		X				
idpr											X	
link	X	X	X	X		X	X		X	X		X
linkset				X	X	X	X		X	X		X
lnp						X		X				
lsdestni					X							
lsonismt					X							
lsorigni					X							
mapscrn						X		X				
np						X		X				
origni					X							
origninc					X							
sctpasoc				X		X	X					
sctpcard				X		X	X					
SIP						X					X	
stp					X	X	X			X	X	X
stplan	X					X	X				X	
tt											X	
ua				X		X	X					

Param. Value	:type Values											
:period												
active									X			X
last	X	X	X	X	X	X	X	X		X	X	
specific	X			X	X	X		X			X	

An hourly boundary must be specified for report type mtch .

The oamhcmeas=on or platformenable=on parameter must be specified (see the `chg-measopts` command) before this command can be entered.

The V-Flex feature must be turned on before the enttype=vflex parameter can be specified.

The A-Port, G-Port, IS41 GSM Migration, Prepaid SMS Intercept Ph1, TIF ASD, TIF GRN, TIF Number Portability, or TIF Simple Number Substitution feature must be enabled, or the INP, MO SMS IS41-to-GSM Migration, MO-based GSM SMS NP, or MO-based IS41 SMS NP feature must be turned on before the mtchnp=on or mtcdnp=on parameter can be specified.

The ANSI41 AIQ feature must be enabled before the enttype=aiq parameter can be specified.

The Integrated Measurements or Measurements Platform feature must be turned on before this command can be entered.

The GTT Action - DUPLICATE, GTT Action - DISCARD, or GTT Action - FORWARD feature must be enabled before the enttype=gttapath parameter can be specified.

SIPNP Feature must be enabled before the enttype=sip and type=mtcd/systot parameters can be specified.

Period/type parameter combinations:

- If the period=specific parameter is specified, then a value of *avl*, *mtcd*, *comp*, *systot*, *gtwy*, or *mtch* must be specified for the type parameter.
- If the type=mtcd and period=specific parameters are specified, then a value of *lnp*, *mapscrn*, *np*, *eir*, *vflex*, *atinpq*, *aiq*, or *gttapath* must be specified for the enttype parameter.
- If the period=active parameter is specified, then a value of *mtcs* or *rbase* must be specified for the type parameter.
- If the period=last parameter is specified, then a value of *mtcs* or *rbase* cannot be specified for the type parameter.

At least one ENUM card must be present before the enttype=enum parameter can be specified.

Notes

None

Output

Note: Refer to the *Measurements* Manual for the current release for `rept-ftp-meas` output examples.

```
rept-ftp-meas:type=mtcd:enttype=gttapath
```

```
    tekelecstp 10-02-11 15:31:25 EST  EAGLE 42.0.0
    FTP measurement report request sent to primary MCP.
    tekelecstp 10-02-11 15:31:25 EST  EAGLE 42.0.0
    Measurement Server Connection Successful
    tekelecstp 10-02-11 15:31:25 EST  EAGLE 42.0.0
    REPT-FTP-MEAS request was successful.
;
```

```
rept-ftp-meas:type=mtcd:enttype=deir
```

```
    tekelecstp 13-03-15 13:12:38 EST EAGLE 45.1.0
    rept-ftp-meas:type=mtcd:enttype=deir
    Command entered at terminal #4.
```

```
    tekelecstp 13-03-15 13:12:38 EST EAGLE 45.1.0
    FTP measurement report request sent to primary MCP.
```

```
   tekelecstp 13-03-15 13:12:38 EST EAGLE 45.1.0
    REPT-FTP-MEAS request was successful.
```

```
rept-ftp-meas:type=mtcd:enttype=enum
```

```
    tekelecstp 14-05-15 13:12:38 EST EAGLE 46.1.0
    rept-ftp-meas:type=mtcd:enttype=enum
    Command entered at terminal #4.
;

    tekelecstp 14-05-15 13:12:38 EST EAGLE 46.1.0
    FTP measurement report request sent to primary MCP.
;

    tekelecstp 14-05-15 13:12:38 EST EAGLE 46.1.0
    REPT-FTP-MEAS request was successful.
;
```

Related Commands

rept-meas

rept-imt-info

Display IMT Error and Use Statistics

Use this command to display the following statistics:

- IMT bus error statistics currently stored in the IMT fault isolation hourly statistics
- Current IMT bus use statistics. Bus use is the percentage of the capacity of the IMT bus that is used for data during a particular time.
- MUX card error statistics

Parameters

report (mandatory)

The type of report that is generated.

Range:

err

IMT bus error statistics

hmuxerr

HMUX card error statistics

hiprerr

HIPR card error statistics

hipr2err

HIPR2 card error statistics

ebucket (optional)

End bucket. The last one-hour time period (*bucket*) for which error statistics are reported.

Range:

0 - 15

Default:

If sbucket is specified—current sbucket value; information for only that time period is displayed.

If sbucket is not specified—*15*, the report includes statistics for all 16 time periods

eloc (optional)

End location. Specifies the card location of the last card in the range for the report.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

Default:

If sloc is specified—current sloc value; displays information for one card

If sloc is not specified—*1115*, which corresponds to IMT address 251 (e=251); displays information for entire range of locations.

erronly (optional)

This parameter filters the output to display only non-zero counts in the error report.

Range:

yes

no

Default:

yes

eshelf (optional)

The end shelf location for MUX statistics. This shelf location is the last shelf in the range.

Range:

1100, 1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300, 5100, 5200, 5300, 6100

Default:

sshelf is specified—the report starts with the sshelf value

sshelf and eshelf are not specified—the report is generated for all shelves equipped with the specified MUX type

eslot (optional)

The end slot location for MUX statistics for the cards in the MUX shelf.

Range:

1 - 18

Default:

sslot is specified—current sslot value

sslot is not specified—no default

mode (optional)

The display mode used in the error report.

Range:

full

Displays information for each card along with a summary report

stats

Displays only individual card statistics

summary

Displays the summary portion of the report

Default:

summary

sbucket (optional)

Start bucket. The first one-hour time period (bucket) for which error statistics are reported.

Range:

0 - 15

Default:

0

sloc (optional)

Start location. The card location of the first card in the range for the report.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

Default:

eloc is specified—current eloc value

eloc and sloc are not specified—displays information for entire range of card locations

sshelf (optional)

The starting shelf location for MUX statistics. This location is the first shelf in the range.

Range:

1100, 1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300, 5100, 5200, 5300, 6100

Default:

eshelf is specified—current eshelf value

eshelf and sshelf are not specified—report is generated for all shelves equipped with the specified MUX type

sslot (optional)

The starting slot location for MUX statistics for the cards in the MUX shelf.

Range:

1 - 18

Default:

eslot is specified—current eslot value

eslot is not specified—no default

trm (optional)

The serial port (printer location) where the report is sent.

Range:

1 - 16

Default:

Report displays on the terminal where the command is issued

Example

```
rept-imt-info:report=err
rept-imt-info:report=err:sloc=1101:eloc=1102:mode=stats
rept-imt-info:report=err:sloc=1101:eloc=1102:mode=full:erronly=no
rept-imt-info:report=hiprerr:sbucket=0
rept-imt-info:report=hiprerr:sshelf=1100:sslot=1:eslot=2:sbucket=0
```

Dependencies

No related IMT command can be in progress when this command is entered. Only one report can be active at a time.

This command cannot be entered at a telnet terminal (terminal ID 17-40).

This command cannot be entered during an IMT statistics collection period following an hourly boundary (IMT performance monitoring).

The ending hourly time period cannot be less than the starting hourly time period.

If the sslot and eslot parameters are specified, then the sshelf parameter must be specified and the eshelf parameter cannot be specified (slot information is reported for a single shelf).

A value of *hmuxerr*, *hiprerr*, or *hipr2err* must be specified for the report parameter before the sshelf and eshelf parameters can be specified.

The MUX card slots (09 and 10) cannot be specified for the sslot and eslot parameter values.

A card location that is valid and defined in the database must be specified.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

The shelf locations specified by the sshelf and eshelf parameters must be provisioned in the frame.

The report=err parameter must be specified before the erronly and mode parameters can be specified.

The sshelf parameter must be specified, and a value of *hiprerr* or *hipr2err* must be specified for the report parameter before the sslot and eslot parameters can be specified.

A value of *hiprerr*, *hipr2err*, or *hmuxerr* must be specified for the report parameter before the sshelf or eshelf parameter can be specified.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Hourly Bucket Statistics

Hourly Bucket Statistics apply to cards on the IMT bus and to MUX cards. Each hourly time period (*bucket*) contains the statistics for a single hour. A total of 16 hourly time periods, numbered 0 - 15, exist. Hourly time period *0* is the most-recent (current), and hourly time period *15* is the least-recent (oldest).

Each hour the statistics for the current hourly time period expire, and the hourly time periods advance. That is, after the advance, the statistics previously reported in hourly time period *0* are now reported

in the hourly time period *1*, and so on. The statistics reported in the hourly time period *15* are no longer available after the change.

When a card is reinitialized, it begins collecting statistics in hourly time period *0* and changes to hourly time period *1* at the start of the next hour. Thus, the first statistics that a card collects after being reinitialized may be for a partial hour.

MUX Statistics

A MUX card stores the statistics separately for each card on its shelf. If the sloc and eloc parameters are specified, then the card sends the statistics for each card to the OAM application for display. If the sloc and eloc parameters are not specified, then the card sends an aggregate number to the OAM application to represent statistics for all cards on its shelf.

Low Speed Summary

Table 39: rept-imt-info Statistics, Low Speed Summary (rept-imt-info:report=(hmuxerr, hiprerr, or hipr2err))

Stat Label – Low Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Rx Packet CRC Error	Receive CRC error: Bad Checksum in received IMT packet. Caused by corrupted data within the received packet. Detected by hardware.	Maintenance activity: Card insertion, removal, or boot. Does not occur in a normal system and indicates a hardware failure: defective LIM card, MUX card, FC cable or backplane.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue is present. Contact the Customer Care Center.
IMT Rx Packet Format Error	Receive Format error: Occurs when the End of Message byte of an IMT packet is found missing. Detected by hardware/software.	Maintenance activity: Card insertion, removal, or boot. Does not occur in a normal system and indicates a hardware failure: defective LIM card, MUX card, FC cable or backplane.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue is present. Contact the Customer Care Center.
IMT Rx Violation Error	Violation Error: Received an illegal character from the physical IMT transport (TAXI Interface). Detected by hardware	Card insertion, removal, or boot or defective hardware	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact the Customer Care Center.
IMT Rx Command Error	Reserved.	Reserved.	Reserved.

Stat Label – Low Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Rx FIFO Full	Receive FIFO Full: Watermark indication that this interface receiving data off the TAXI line is receiving traffic in excess of what it can handle. Some traffic will have been discarded. May cause retransmissions, CRC errors and Format errors.	Relatively heavy traffic on this interface can cause these counts to increment. If these counts occur in the field, a software problem may exist.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact the Customer Care Center.
IMT Rx FIFO Half Full	Receive FIFO Half Full: Watermark indication that the interface receiving data off the TAXI line has received substantial traffic.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is an indication; no action is required.
IMT Tx FIFO Full	Transmit FIFO Full: The FIFO has overflowed and data has been lost. This stat is only meaningful for MUX card columns.	Relatively heavy traffic on this interface can cause these counts to increment. This condition should never occur. These events may indicate a software problem	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact the Customer Care Center.
IMT Tx FIFO Half Full	Transmit FIFO Half Full: Watermark indication that this interface is backed up through ½ of its available storage. This stat is only meaningful for MUX card columns.	Indicates that data was transmitted at a relatively high rate for a short period.	None. FIFO Half Full is just an indication; no action is required.
CPU Rx FIFO Empty Before SOM	Occurs when valid packet data is read from the CPU Rx FIFO and the beginning (SOM) of the packet is found missing before all data was read.	The SOM was corrupted while being written into the CPU Rx FIFO from the low speed link.	None. This error will automatically empty the FIFO so it is ready to continue receiving data. If the error continues, contact the Customer Care Center.
CPU Rx FIFO Empty Before EOM	Occurs when valid packet data is read from	The SOM was corrupted while being written into	None. This error will automatically empty the

Stat Label – Low Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
	the CPU Rx FIFO and the end (EOM) of the packet is found missing before all data was read.	the CPU Rx FIFO or a partial packet was written into the FIFO from the low speed link.	FIFO so that it is ready to continue receiving data. If the error continues, contact the Customer Care Center.
CPU Rx Packet SOM Before EOM	A Start of Message was received when an End of Message was expected from the IMT bus.	Packet was corrupted in the system (EOM lost) and has another packet appended to it.	None. If the problem persists, contact the Customer Care Center.
CPU Rx Packet CRC Error	Occurs when valid packet data is read from the CPU Rx FIFO and transferred to the processor memory and calculated CRC does NOT match the CRC word at the end of the packet.	The data was corrupted while being written into the CPU Rx FIFO or data coming from the low speed link is corrupted.	None. If the problem persists, contact the Customer Care Center.
DMA Terminal Count	Received IMT packet length is longer than the max allowed. Detected by hardware.	Card insertion/removal or boot.	None if card has booted or was just inserted. Clear the stats and if the problem persists, contact the Customer Care Center.
CPU Tx Buffer EOB	A packet that was being transmitted from the CPU Tx Buffer did not have an EOM.	The data was corrupted while being written into or being read from the FIFO.	None. If the problem persists, contact the Customer Care Center.
CPU Tx Buffer Full	Transmit Buffer Full: The Tx Buffer unexpectedly filled up.	Either the COM software attempted to transmit too much data at once or the Tx logic was unable to transmit the data.	None. If the problem persists, contact the Customer Care Center.
CPU Tx Buffer Half Full	Transmit Buffer Half Full: Watermark indication that this interface is backed up through ½ of its available storage.	Relatively heavy outbound traffic on this interface can cause these counts to increment.	None. Buffer Half Full is just an indication, no action is required.
CPU Rx FIFO Full	Receive FIFO Full: The Rx FIFO unexpectedly filled up.	Indicates that data was received at a higher rate	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear,

Stat Label – Low Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
		than could be processed by the Communications processor.	there is no action to perform. If the errors continue, a problem may exist. Contact the Customer Care Center.
CPU Rx FIFO Half Full	Receive FIFO Half Full: Watermark indication that this interface is backed up through ½ of its available storage.	Relatively heavy inbound traffic on this interface can cause these counts to increment.	None. FIFO half full is just an indication, no action is required.
IMT Bypass FIFO Full	IMT Bypass FIFO Full: The bypass FIFO unexpectedly filled up.	Relatively heavy traffic on this interface can cause these counts to increment. If these counts occur in the field, a software problem may exist.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If the errors continue, a problem may exist. Contact the Customer Care Center.
IMT Bypass FIFO Half Full	IMT Bypass FIFO Half Full: Watermark indication that this interface is backed up through ½ of its available storage.	Relatively heavy inbound traffic on this interface can cause these counts to increment.	None. FIFO half full is just an indication, no action is required.

High Speed Summary

Table 40: rept-imt-info Statistics, High Speed Summary

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Rx Disparity Error	Fibre Channel Receive Packet with Disparity Errors: Parity error in received packet. Usually caused by corrupted data.	Should not occur in a properly functioning system and may indicate a hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact the Customer Care Center.
IMT Rx Sync Lost Error (This error count is not used in MUX card.)	Fibre Channel Receive Lost Synchronization Errors:	Should not occur in a properly functioning system and may indicate a hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
	The receiver on this interface lost synchronization.		perform. If errors continue, a problem may exist. Contact the Customer Care Center.
IMT Rx Code Word Error	Fibre Channel Receive code Word Errors: Error in received packet. Caused by corrupted data.	Should not occur in a properly functioning system and may indicate a hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If the errors continue, a problem may exist. Contact the Customer Care Center.
IMT Rx Packet SOM Before EOM	Fibre Channel Receive Packet with Start of Message without a previous End of Message Errors: The software detected the start of a new packet before the end of the previous packet was detected.	Should not occur in a properly functioning system and may indicate a hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
IMT Bypass FIFO Full	Fibre Channel Bypass FIFO Full: The FIFO has over run and data has been lost. May result in significant downstream errors.	Should not occur in a properly functioning system, and may indicate a software or hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact the Customer Care Center.
IMT Bypass FIFO Half Full	Fibre Channel Bypass FIFO Half Full: Watermark indication that this interface has backed up to the half way point of its capabilities.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is just an indication: no action is required.
IMT Rx FIFO Full	Fibre Channel Receive FIFO Full: The FIFO has over run and data has been lost. May result in significant downstream errors.	Should not occur in a properly functioning system. Indicates a software or hardware failure	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
			may exist. Contact the Customer Care Center.
IMT Rx FIFO Half Full	Fibre Channel Receive FIFO Half Full: Watermark indication that this interface has backed up to the half way point of its capabilities.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Full in this case is just an indication; no action is required.
IMT Tx FIFO Full	Fibre Channel Transmit FIFO Full: Watermark indication that this interface has transmitted substantial traffic.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Full in this case is just an indication; no action is required.
IMT Tx FIFO Half Full	Fibre Channel Transmit FIFO Half Full: Watermark indication that this interface has backed up to the half way point of its capabilities.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is just an indication; no action is required.
IXP Rx FIFO Full	Fibre Channel IXP Receive FIFO Full: The FIFO has over run and data has been lost. May result is significant downstream errors.	Should not occur in a properly functioning system. Indicates a software or hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
CPU Rx Fifo Full	Receive FIFO Full: The Rx FIFO unexpectedly filled up.	Indicates that data was received at a higher rate than could be processed by the Communications processor.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If the errors continue, a problem may exist. Contact the Customer Care Center.
CPU Rx FIFO Half Full	Receive FIFO Half Full: Watermark indication that this interface is backed up through ½ of its available storage.	Relatively heavy inbound traffic on this interface can cause these counts to increment.	None. FIFO half full is just an indication, no action is required.

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
CPU Rx FIFO Empty Before SOM	Occurs when valid packet data is read from the CPU Rx FIFO and the beginning (SOM) of the packet is found missing before all data was read.	The SOM was corrupted while being written into the CPU Rx FIFO from the high speed link.	None. This error will automatically empty the FIFO so that it is ready to continue receiving data. If the problem persists, contact the Customer Care Center.
CPU Rx FIFO Empty Before EOM	Occurs when valid packet data is read from the CPU Rx FIFO and the beginning (SOM) of the packet is found missing before all data was read.	The SOM was corrupted while being written into the CPU Rx FIFO or a partial packet was written into the FIFO from the high speed link.	None. This error will automatically empty the FIFO so that it is ready to continue receiving data. If the problem persists, contact the Customer Care Center.
CPU Rx Packet SOM Before EOM	A Start of Message was received when an End of Message was expected from the Fibre Channel bus.	Packet was corrupted in the system (EOM lost) and has another packet appended to it.	None. If the problem persists, contact the Customer Care Center.
CPU Rx Packet CRC Error	Occurs when valid packet data is read from the CPU Rx FIFO and transferred to the processor memory and calculated CRC does NOT match the CRC word at the end of the packet.	The data was corrupted while being written into the CPU Rx FIFO or data coming from the high speed link is corrupted.	None. If the problem persists, contact the Customer Care Center.
DMA Terminal Count	Received IMT packet length (on Fibre Channel) is longer than the max allowed. Detected by hardware.	Card insertion/removal or boot.	None if card has booted or was just inserted. Clear the stats and if the problem persists, contact the Customer Care Center.
CPU Tx Buffer EOB	A packet that was being transmitted from the CPU Tx Buffer did not have an EOM.	The data was corrupted while being written into or being read from the FIFO.	None. If the problem persists, contact Customer Care Center.
CPU Tx Buffer Full	Transmit Buffer Full: The Tx Buffer unexpectedly filled up.	Either the COM software attempted to transmit too much data at once or the Tx logic	None. If the problem persists, contact the Customer Care Center.

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
		was unable to transmit the data.	
CPU Tx Buffer Half Full	Transmit Buffer Half Full: Watermark indication that this interface is backed up through ½ of its available storage.	Relatively heavy outbound traffic on this interface can cause these counts to increment.	None. Buffer Half Full is an indication, no action is required.
IXP Rx FIFO Full	Fibre Channel IXP Receive FIFO Full: The FIFO has over run and data has been lost. May result in significant downstream errors.	Should not occur in a properly functioning system. Indicates a software or hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
IXP Rx FIFO Half Full	Fibre Channel IXP Receive FIFO Half Full: Watermark indication that this interface has backed up to the half way point of its capabilities.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is just an indication; no action is required.
IMT Rx Byte Per Minute AVG	Average per minute	Normal behavior	None. Information only.
IMT Rx Byte Per Second AVG	Average per second	Normal behavior	None. Information only.
IMT Tx Byte Per Minute AVG	Average per minute	Normal behavior	None. Information only.
IMT Tx Byte Per Second AVG	Average per second	Normal behavior	None. Information only.
IMT Rx Packet Per Minute AVG	Average per minute	Normal behavior	None. Information only.
IMT Rx Packet Per Second AVG	Average per second	Normal behavior	None. Information only.
IMT Tx Packet Per Minute AVG	Average per minute	Normal behavior	None. Information only.
IMT Tx Packet Per Second AVG	Average per second	Normal behavior	None. Information only.

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Rx Errors Per Minute AVG	Average per minute	Normal behavior	None. Information only.
IMT Rx Errors Per Second AVG	Average per second	Normal behavior	None. Information only.
IMT Tx Errors Per Minute AVG	Average per minute	Normal behavior	None. Information only.
IMT Tx Errors Per Second AVG	Average per second	Normal behavior	None. Information only.
IMT Rx Safety Per Minute AVG	Average per minute	Normal behavior	None. Information only.
IMT Rx Safety Per Second AVG	Average per second	Normal behavior	None. Information only.
IMT Rx MSU Byte Per Minute AVG	Average bytes per minute received on the line card interface within reliable delivery packets.	Normal behavior	None. Information only.
IMT Rx MSU Byte Per Second AVG	Average bytes per second received on the line card interface within reliable delivery packets.	Normal behavior	None. Information only
IMT Rx ASU Byte Per Minute AVG	Average bytes per minute received on the line card interface within acknowledgment packets.	Normal behavior	None. Information only.
IMT Rx ASU Byte Per Second AVG	Average bytes per second received on the line card interface within acknowledgment packets.	Normal behavior	None. Information only
IMT Rx DSU Byte Per Minute AVG	Average bytes per minute received on the line card interface within best effort delivery packets.	Normal behavior	None. Information only.

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Rx DSU Byte Per Second AVG	Average bytes per second received on the line card interface within best effort delivery packets.	Normal behavior	None. Information only.
IMT Rx MSU Byte Count	Number of bytes received on the line card interface within reliable delivery packets.	Normal behavior	None. Information Only
IMT Rx ASU Byte Count	Number of bytes received on the line card interface within acknowledgment packets.	Normal behavior	None. Information only.
IMT Rx DSU Byte Count	Number of bytes received on the line card interface within best effort delivery packets.	Normal behavior	None. Information only.
IMT RX HSU Byte Count	Number of bytes received on the line card interface within mux specific packets.	Normal behavior	None. Information only.
IMT Rx LSSU Byte Count	Number of bytes received on the line card interface within virtual circuit alignment packets.	Normal behavior	None. Information only.
IMT Rx TSU Byte Count	Number of bytes received on the line card interface within test data packets.	Normal behavior	None. Information only
IMT Rx SSU Byte Count	Number of bytes received on the line card interface within safety packets.	Normal behavior.	None. Information only.
IMT Rx BSU Byte Count	Number of bytes received on the line card interface within broadcast packets.	Normal behavior	None. Information only.

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Rx Byte Other	Number of bytes received on the line card interface within data packets other than the above.	Normal behavior	None. Information only.
IMT Rx Total Byte Count	Number of bytes received on the line card interface within all types of packets.	Normal behavior	None. Information only.
IMT Rx MSU Packet Count	Number of reliable delivery packets received on the IMT.	Normal behavior	None. Information only.
IMT Rx ASU Packet Count	Number of acknowledgment packets received on the IMT.	Normal behavior	None. Information only.
IMT Rx DSU Packet Count	Number of best effort delivery message data packets received on the IMT.	Normal behavior	None. Information only.
IMT Rx HSU Packet Count	Number of mux card data packets received on the IMT.	Normal behavior	None. Information only.
IMT Rx LSSU Packet Count	Number of virtual circuit alignment packets received on the IMT.	Normal behavior	None. Information only.
IMT Rx TSU Packet Count	Number of test data packets received on the IMT.	Normal behavior.	None. Information only.
IMT Rx SSU Packet Count	Number of safety packets received on the IMT.	Normal behavior	None. Information only.
IMT Rx BSU Packet Count	Number of broadcast data packets received on the IMT.	Normal behavior	None. Information only.
IMT Rx Packet Other	Number of all packets types not counted by one of the above.	Normal behavior	None. Information only.

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Rx Total Packet Count	Number of packets received on the IMT, all types.	Normal behavior	None. Information only.
IMT Rx MSU Packet Safety Count	Number of reliable delivery message data packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx ASU Packet Safety Count	Number of acknowledgment packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx DSU Packet Safety Count	Number of best effort delivery packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx HSU Packet Safety Count	Number of mux card packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx LSSU Packet Safety Count	Number of virtual circuit alignment packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx TSU Packet Safety Count	Number of test data packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx SSU Packet Safety Count	Number of safety packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx BSU Packet Safety Count	Number of broadcast data packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Rx Other Packet Safety Count	Number of other packets types not included above that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx Total Packet Safety Count	Number of all packets that did not arrive to the intended recipient on the IMT.	Normal behavior	None. Information only.
IMT Rx Packet Violation Error	Number of packets received that contained an illegal character.	Card insertion, removal, boot or defective hardware	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue exists. Contact Customer Care Center.
IMT Rx Packet CRC Error	Receive CRC error: Bad Checksum in received IMT packet. Caused by corrupted data within the received packet. Detected by hardware.	Card insertion, removal, or boot. Does not occur in a normal system and indicates a hardware failure: defective LIM card, MUX card, FC cable or backplane.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue exists. Contact Customer Care Center.
IMT Rx Packet Format Error	Receive Format error: Occurs when the End of Message byte of an IMT packet is found missing. Detected by hardware/software.	Card insertion, removal, or boot. Does not occur in a normal system and indicates a hardware failure: defective LIM card, MUX card, FC cable or backplane.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue exists. Contact Customer Care Center.
IMT Rx Packet Discard Error	Number of packets received that were discarded by this interface.	Relatively heavy traffic on this interface can cause these counts to increment.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear then there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.

Stat Label – High Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
IMT Tx Packet Format Error	Number of packets transmitted that were detected to contain a data format error.	Maintenance activity: Card insertion, removal, or boot. Does not occur in a normal system and indicates a hardware failure: defective LIM card, MUX card, FC cable or backplane.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear then there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
IMT Tx Packet Discard Error	Number of packets that were discarded by the transmit interface.	Relatively heavy traffic on this interface can cause these counts to increment.	Clear IMT stats, wait 1 hour and retrieve stats again. if stats are clear then there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.

Miscellaneous Summary

Table 41: rept-imt-info Statistics, Miscellaneous Summary

Stat Label – Low Speed Error & Event Counts	Explanation of Stat	Probable Cause	Recommended Action
Shelf ID UART Framing Error	The Mux card at this location detected a framing error within the data stream containing its shelf address, transmitted by the MASP through the clock cable.	These errors can occur when a Mux card or a MASP has booted or been inserted/ removed from the slot.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If the errors continue, a problem may exist. Contact the Customer Care Center.
Shelf ID UART Overrun Error	The Mux card at this location detected a overrun error in the data stream containing its shelf address, transmitted by the MASP through the clock cable.	These errors can occur when a Mux card or a MASP has booted or been inserted/ removed from the slot.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If the errors continue, a problem may exist. Contact the Customer Care Center.

Output

An asterisk (*) is appended to each statistic in the output when one or more MUX cards are unable to report statistics during the collection of IMT statistics.

IMT statistics are displayed as '-' instead of zero for counts when the IMT bus is down or inhibited in the output for `rept-imt-info` reports for MUX cards.

`rept-imt-info:report=err`

```
    rlghncxa03w 04-02-27 12:47:07 EST  EAGLE 31.3.0
    IMT Fault Isolation Error Statistics
    ============================================================
    SUMMARY REPORT: Totals accumulated from all requested cards for all buckets


    Statistic                Bus A Value    Bus B Value
    ---------                -----------    -----------
    Rcv CRC Err                       12             1
    Primary Ctl Rcv Err               23             3
    Violation Err                     34             5
    CPU Rcv FIFO Full                 45            12
;
```

`rept-imt-info:report=err:sloc=1101:eloc=1102:mode=stats`

```
    rlghncxa03w 04-02-27 12:47:07 EST  EAGLE 31.3.0
    IMT Fault Isolation Error Statistics
    ------------------------------------------------------------
    Totals accumulated from all requested cards for each bucket

    Bucket      Statistic                Bus A Value    Bus B Value
    ------      ---------                -----------    -----------
    00          Rcv CRC Err                        1              2
                Rcv Invalid Len           1012345678              0
                CPU Rcv FIFO Full                 23            123
    01          No errors in this bucket.
.
.       (data continues for each hourly time period)
;
```

`rept-imt-info:report=err:sloc=1101:eloc=1102:mode=full:erronly=no`

```
    rlghncxa03w 04-02-27 12:47:07 EST  EAGLE 31.3.0
    IMT Fault Isolation Error Statistics
    ------------------------------------------------------------
    Totals accumulated from all requested cards for each bucket
    Bucket      Statistic                Bus A Value    Bus B Value
    ------      ---------                -----------    -----------
    00          Rcv CRC Err                        0              0
                Rcv Format Err                     0              0
                Rcv Invalid Len                    1              0
                Primary Ctl Rcv Err                0              0
                Primary Ctl Tx Err                 0              0
                Primary Ctl Sanity Err             0              0
                Violation Err                      1              0
                IMT Rcv FIFO Half Full             0              0
                IMT Rcv FIFO Full                  0              0
                CPU Rcv FIFO Half Full             0              0
                CPU Rcv FIFO Full                  0              0
                MSU Retransmitted                  0              0
```

```
                DMA Terminal Ct Intrpt            0             0
                SSU Pkts Txd                      0             0
                SSU Pkts Rcvd                     0             0
    01          Rcv CRC Err                       3             0
                Rcv Format Err                    0             0
                Rcv Invalid Len                   0             0
                Primary Ctl Rcv Err               0             0
                Primary Ctl Tx Err                0             0
                Primary Ctl Sanity Err            0             0
                Violation Err                     0             0
                IMT Rcv FIFO Half Full            0             0
                IMT Rcv FIFO Full                 0             0
                CPU Rcv FIFO Half Full            0             0
                CPU Rcv FIFO Full                 0             0
                MSU Retransmitted                 0             0
                DMA Terminal Ct Intrpt            0             0
                SSU Pkts Txd                      0             0
                SSU Pkts Rcvd                     0             0
.
    (data continues for each hourly time period)
    ============================================================
    SUMMARY REPORT: Totals accumulated from all requested cards for all buckets

    Statistic                Bus A Value    Bus B Value
    ---------                -----------    -----------
    Rcv CRC Err                        3              0
    Rcv Format Err                     0              0
    Rcv Invalid Len                    1              0
    Primary Ctl Rcv Err       1012345678              0
    Primary Ctl Tx Err                 0              0
    Primary Ctl Sanity Err             0              0
    Violation Err                      1              0
    IMT Rcv FIFO Half Full             0              0
    IMT Rcv FIFO Full                  0              0
    CPU Rcv FIFO Half Full            23              0
    CPU Rcv FIFO Full                  0              0
    MSU Retransmitted                  0              0
    DMA Terminal Ct Intrpt             0              0
    SSU Pkts Txd                       1              0
    SSU Pkts Rcvd                      0              0
;
```

This example output displays the output when IMT Bus A and Bus B are normal and all HMUX cards are reporting the statistics:

```
rept-imt-info:report=hmuxerr:sbucket=0
```

```
    rlghncxa03w 10-01-17 00:10:20 PST  EAGLE 42.0.0
    HMUX Summary Report: Summed across all requested cards for each bucket
    Collecting HMUX stats: Extended processing time required.
    HMUX Hourly Bucket Statistics
    ================================================================================

    Bucket Low Speed Statistic           BUS A Value  BUS B Value
    ------ ------------------            -----------  -----------
    00     IMT Rx Packet CRC Error       0123456789   0123456789
           IMT Rx Packet Format Error    0123456789   0123456789
           IMT Rx Violation Error        0123456789   0123456789
           CPU Rx FIFO Full              0123456789   0123456789
           CPU Rx FIFO Half Full         0123456789   0123456789
           CPU Rx FIFO Empty Before SOM  0123456789   0123456789
           CPU Rx FIFO Empty Before EOM  0123456789   0123456789
```

```
        CPU Rx Packet SOM Before EOM  0123456789   0123456789
        CPU Rx Packet CRC Error       0123456789   0123456789
        DMA terminal count            0123456789   0123456789
        CPU Tx Buffer EOB             0123456789   0123456789
        CPU Tx Buffer Full            0123456789   0123456789
        CPU Tx Buffer Half Full       0123456789   0123456789
        IMT Bypass FIFO Full          0123456789   0123456789
        IMT Bypass FIFO Half Full     0123456789   0123456789
        IMT Rx FIFO Full              0123456789   0123456789
        IMT Rx FIFO Half Full         0123456789   0123456789

        High Speed Statistic          BUS A Value  BUS B Value
        --------------------          -----------  -----------
        IMT Rx Packet CRC Error       0123456789   0123456789
        IMT Rx Disparity Error        0123456789   0123456789
        IMT Rx Sync Lost Error        0123456789   0123456789
        IMT Rx Code Word Error        0123456789   0123456789
        CPU Rx FIFO Full              0123456789   0123456789
        CPU Rx FIFO Half Full         0123456789   0123456789
        CPU Rx FIFO Empty Before SOM  0123456789   0123456789
        CPU Rx FIFO Empty Before EOM  0123456789   0123456789
        CPU Rx Packet SOM Before EOM  0123456789   0123456789
        CPU Rx Packet CRC Error       0123456789   0123456789
        DMA terminal count            0123456789   0123456789
        CPU Tx Buffer EOB             0123456789   0123456789
        CPU Tx Buffer Full            0123456789   0123456789
        CPU Tx Buffer Half Full       0123456789   0123456789
        IMT Bypass FIFO Full          0123456789   0123456789
        IMT Bypass FIFO Half Full     0123456789   0123456789
        IMT Rx FIFO Full              0123456789   0123456789
        IMT Rx FIFO Half Full         0123456789   0123456789
        Misc Speed Statistic          BUS A Value  BUS B Value
        --------------------          -----------  -----------
        Shelf ID UART Framing Error   0123456789   0123456789
        Shelf ID UART Overrun Error   0123456789   0123456789

    HMUX CUMULATIVE Statistics

    ================================================================================

        Low Speed Statistic           BUS A Value  BUS B Value
        -------------------           -----------  -----------
        IMT Rx Packet CRC Error       0123456789   0123456789
        IMT Rx Packet Format Error    0123456789   0123456789
        IMT Rx Violation Error        0123456789   0123456789
        CPU Rx FIFO Full              0123456789   0123456789
        CPU Rx FIFO Half Full         0123456789   0123456789
        CPU Rx FIFO Empty Before SOM  0123456789   0123456789
        CPU Rx FIFO Empty Before EOM  0123456789   0123456789
        CPU Rx Packet SOM Before EOM  0123456789   0123456789
        CPU Rx Packet CRC Error       0123456789   0123456789
        DMA terminal count            0123456789   0123456789
        CPU Tx Buffer EOB             0123456789   0123456789
        CPU Tx Buffer Full            0123456789   0123456789
        CPU Tx Buffer Half Full       0123456789   0123456789
        IMT Bypass FIFO Full          0123456789   0123456789
        IMT Bypass FIFO Half Full     0123456789   0123456789
        IMT Rx FIFO Full              0123456789   0123456789
        IMT Rx FIFO Half Full         0123456789   0123456789

        High Speed Statistic          BUS A Value  BUS B Value
        --------------------          -----------  -----------
        IMT Rx Packet CRC Error       0123456789   0123456789
        IMT Rx Disparity Error        0123456789   0123456789
```

```
           IMT Rx Sync Lost Error        0123456789   0123456789
           IMT Rx Code Word Error        0123456789   0123456789
           CPU Rx FIFO Full              0123456789   0123456789
           CPU Rx FIFO Half Full         0123456789   0123456789
           CPU Rx FIFO Empty Before SOM  0123456789   0123456789
           CPU Rx FIFO Empty Before EOM  0123456789   0123456789
           CPU Rx Packet SOM Before EOM  0123456789   0123456789
           CPU Rx Packet CRC Error       0123456789   0123456789
           DMA terminal count            0123456789   0123456789
           CPU Tx Buffer EOB             0123456789   0123456789
           CPU Tx Buffer Full            0123456789   0123456789
           CPU Tx Buffer Half Full       0123456789   0123456789
           IMT Bypass FIFO Full          0123456789   0123456789
           IMT Bypass FIFO Half Full     0123456789   0123456789
           IMT Rx FIFO Full              0123456789   0123456789
           IMT Rx FIFO Half Full         0123456789   0123456789

           Misc Speed Statistic          BUS A Value  BUS B Value
           --------------------          -----------  -----------
           Shelf ID UART Framing Error   0123456789   0123456789
           Shelf ID UART Overrun Error   0123456789   0123456789
;
```

This example shows the output when IMT Bus A and Bus B are normal and all MUX cards are reporting the statistics:

```
rept-imt-info:report=hiprerr:sbucket=0
```

```
    rlghncxa03w 10-01-17 00:10:20 PST  EAGLE 42.0.0
    HIPR Summary Report: Summed across all requested cards for each bucket

    HIPR Hourly Bucket Statistics

    ==========================================================================


    Bucket Loc   Low Speed Statistic           BUS A Value  BUS B Value
    ------ ----  -------------------           -----------  -----------
    00     ----  IMT Rx Packet CRC Error       0123456789   0123456789
                 IMT Rx Packet Format Error    0123456789   0123456789
                 IMT Rx Violation Error        0123456789   0123456789
                 IMT Rx Command Error          0123456789   0123456789
                 IMT Rx FIFO Full              0123456789   0123456789
                 IMT Rx FIFO Half Full         0123456789   0123456789
                 IMT Tx FIFO Full              0123456789   0123456789
                 IMT Tx FIFO Half Full         0123456789   0123456789

                 High Speed Statistic          BUS A Value  BUS B Value
                 --------------------          -----------  -----------
                 IMT Rx Packet Format Error    0123456789   0123456789
                 IMT Rx Disparity Error        0123456789   0123456789
                 IMT Rx Sync Lost Error        0123456789   0123456789
                 IMT Rx Code Word Error        0123456789   0123456789
                 IMT Rx Packet SOM Before EOM  0123456789   0123456789
                 IMT Rx Packet CRC Error       0123456789   0123456789
                 IMT Bypass FIFO Full          0123456789   0123456789
                 IMT Bypass FIFO Half Full     0123456789   0123456789
                 IMT Rx FIFO Full              0123456789   0123456789
                 IMT Rx FIFO Half Full         0123456789   0123456789
                 IMT Tx FIFO Full              0123456789   0123456789
                 IMT Tx FIFO Half Full         0123456789   0123456789
                 IXP Rx FIFO Full              0123456789   0123456789
```

```
                IXP Rx FIFO Half Full         0123456789   0123456789

                Misc Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                Shelf ID UART Framing Error   0123456789   0123456789
                Shelf ID UART Overrun Error   0123456789   0123456789

    HIPR CUMULATIVE Statistics

    ================================================================================

                Low Speed Statistic           BUS A Value  BUS B Value
                ------------------            -----------  -----------
                IMT Rx Packet CRC Error       0123456789   0123456789
                IMT Rx Packet Format Error    0123456789   0123456789
                IMT Rx Violation Error        0123456789   0123456789
                IMT Rx Command Error          0123456789   0123456789
                IMT Rx FIFO Full              0123456789   0123456789
                IMT Rx FIFO Half Full         0123456789   0123456789
                IMT Tx FIFO Full              0123456789   0123456789
                IMT Tx FIFO Half Full         0123456789   0123456789

                High Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                IMT Rx Packet Format Error    0123456789   0123456789
                IMT Rx Disparity Error        0123456789   0123456789
                IMT Rx Sync Lost Error        0123456789   0123456789
                IMT Rx Code Word Error        0123456789   0123456789
                IMT Rx Packet SOM Before EOM  0123456789   0123456789
                IMT Rx Packet CRC Error       0123456789   0123456789
                IMT Bypass FIFO Full          0123456789   0123456789
                IMT Bypass FIFO Half Full     0123456789   0123456789
                IMT Rx FIFO Full              0123456789   0123456789
                IMT Rx FIFO Half Full         0123456789   0123456789
                IMT Tx FIFO Full              0123456789   0123456789
                IMT Tx FIFO Half Full         0123456789   0123456789
                IXP Rx FIFO Full              0123456789   0123456789
                IXP Rx FIFO Half Full         0123456789   0123456789

                Misc Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                Shelf ID UART Framing Error   0123456789   0123456789
                Shelf ID UART Overrun Error   0123456789   0123456789
;
```

This example shows the output when both IMT Bus A and Bus B are normal and all MUX cards are reporting the statistics:

```
rept-imt-info:report=hiprerr:sshelf=1100:sslot=1:eslot=2:sbucket=0
```

```
    rlghncxa03w 10-01-17 00:10:20 PST  EAGLE 42.0.0
    HIPR Summary Report: Summed across all requested cards for each bucket

    HIPR Hourly Bucket Statistics

    ================================================================================


    Bucket Loc   Low Speed Statistic           BUS A Value  BUS B Value
    ------ ----  ------------------            -----------  -----------
    00     1101  IMT Rx Packet CRC Error       0123456789   0123456789
                 IMT Rx Packet Format Error    0123456789   0123456789
```

```
               IMT Rx Violation Error        0123456789   0123456789
               IMT Rx Command Error          0123456789   0123456789
               IMT Rx FIFO Full              0123456789   0123456789
               IMT Rx FIFO Half Full         0123456789   0123456789
               IMT Tx FIFO Full              0123456789   0123456789
               IMT Tx FIFO Half Full         0123456789   0123456789

Bucket Loc     Low Speed Statistic           BUS A Value  BUS B Value
------ ----    ------------------            -----------  -----------
00     1102    IMT Rx Packet CRC Error       0123456789   0123456789
               IMT Rx Packet Format Error    0123456789   0123456789
               IMT Rx Violation Error        0123456789   0123456789
               IMT Rx Command Error          0123456789   0123456789
               IMT Rx FIFO Full              0123456789   0123456789
               IMT Rx FIFO Half Full         0123456789   0123456789
               IMT Tx FIFO Full              0123456789   0123456789
               IMT Tx FIFO Half Full         0123456789   0123456789

               High Speed Statistic          BUS A Value  BUS B Value
               --------------------          -----------  -----------
               IMT Rx Packet Format Error    0123456789   0123456789
               IMT Rx Disparity Error        0123456789   0123456789
               IMT Rx Sync Lost Error        0123456789   0123456789
               IMT Rx Code Word Error        0123456789   0123456789
               IMT Rx Packet SOM Before EOM  0123456789   0123456789
               IMT Rx Packet CRC Error       0123456789   0123456789
               IMT Bypass FIFO Full          0123456789   0123456789
               IMT Bypass FIFO Half Full     0123456789   0123456789
               IMT Rx FIFO Full              0123456789   0123456789
               IMT Rx FIFO Half Full         0123456789   0123456789
               IMT Tx FIFO Full              0123456789   0123456789
               IMT Tx FIFO Half Full         0123456789   0123456789
               IXP Rx FIFO Full              0123456789   0123456789
               IXP Rx FIFO Half Full         0123456789   0123456789
               Misc Speed Statistic          BUS A Value  BUS B Value
               --------------------          -----------  -----------
               Shelf ID UART Framing Error   0123456789   0123456789
               Shelf ID UART Overrun Error   0123456789   0123456789

HIPR CUMULATIVE Statistics

================================================================================

               Low Speed Statistic           BUS A Value  BUS B Value
               ------------------            -----------  -----------
               IMT Rx Packet CRC Error       0123456789   0123456789
               IMT Rx Packet Format Error    0123456789   0123456789
               IMT Rx Violation Error        0123456789   0123456789
               IMT Rx Command Error          0123456789   0123456789
               IMT Rx FIFO Full              0123456789   0123456789
               IMT Rx FIFO Half Full         0123456789   0123456789
               IMT Tx FIFO Full              0123456789   0123456789
               IMT Tx FIFO Half Full         0123456789   0123456789

               High Speed Statistic          BUS A Value  BUS B Value
               --------------------          -----------  -----------
               IMT Rx Packet Format Error    0123456789   0123456789
               IMT Rx Disparity Error        0123456789   0123456789
               IMT Rx Sync Lost Error        0123456789   0123456789
               IMT Rx Code Word Error        0123456789   0123456789
               IMT Rx Packet SOM Before EOM  0123456789   0123456789
               IMT Rx Packet CRC Error       0123456789   0123456789
               IMT Bypass FIFO Full          0123456789   0123456789
               IMT Bypass FIFO Half Full     0123456789   0123456789
```

```
                IMT Rx FIFO Full              0123456789   0123456789
                IMT Rx FIFO Half Full         0123456789   0123456789
                IMT Tx FIFO Full              0123456789   0123456789
                IMT Tx FIFO Half Full         0123456789   0123456789
                IXP Rx FIFO Full              0123456789   0123456789
                IXP Rx FIFO Half Full         0123456789   0123456789

                Misc Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                Shelf ID UART Framing Error   0123456789   0123456789
                Shelf ID UART Overrun Error   0123456789   0123456789
;
```

rept-imt-info:report=hipr2err:sbucket=0

```
    tekelecstp 11-16-12 14:01:34 EST  EAGLE 44.0.0
    HIPR2 Summary Report: Summed across all requested cards for each bucket

    HIPR2 Hourly Bucket Statistics

   ==============================================================================


    Bucket Loc   Low Speed Statistic                  BUS A Value  BUS B Value

    ------ ----  -------------------                  -----------  -----------

    00     ----  IMT Rx Packet CRC Error               0123456789   0123456789

                 IMT Rx Packet Format Error            0123456789   0123456789

                 IMT Rx Violation Error                0123456789   0123456789

                 IMT Rx Command Error                  0123456789   0123456789

                 IMT Rx FIFO Full                      0123456789   0123456789

                 IMT Rx FIFO Half Full                 0123456789   0123456789

                 IMT Tx FIFO Full                      0123456789   0123456789

                 IMT Tx FIFO Half Full                 0123456789   0123456789

                 High Speed Statistic                  BUS A Value  BUS B Value

                 --------------------                  -----------  -----------

                 IMT Rx Disparity Error                0123456789   0123456789

                 IMT Rx Code Word Error                0123456789   0123456789

                 IMT Rx Packet SOM Before EOM          0123456789   0123456789

                 IMT Bypass FIFO Full                  0123456789   0123456789

                 IMT Bypass FIFO Half Full             0123456789   0123456789

                 IMT Rx FIFO Full                      0123456789   0123456789

                 IMT Rx FIFO Half Full                 0123456789   0123456789

                 IMT Tx FIFO Full                      0123456789   0123456789
```

```
                IMT Tx FIFO Half Full                0123456789   0123456789
                IXP Rx FIFO Full                     0123456789   0123456789
                IXP Rx FIFO Half Full                0123456789   0123456789
                IMT Rx Byte Per Minute AVG           0123456789   0123456789
                IMT Rx Byte Per Second AVG           0123456789   0123456789
                IMT Tx Byte Per Minute AVG           0123456789   0123456789
                IMT Tx Byte Per Second AVG           0123456789   0123456789
                IMT Rx Packet Per Minute AVG         0123456789   0123456789
                IMT Rx Packet Per Second AVG         0123456789   0123456789
                IMT Tx Packet Per Minute AVG         0123456789   0123456789
                IMT Tx Packet Per Second AVG         0123456789   0123456789
                IMT Rx Errors Per Minute AVG         0123456789   0123456789
                IMT Rx Errors Per Second AVG         0123456789   0123456789
                IMT Tx Errors Per Minute AVG         0123456789   0123456789
                IMT Tx Errors Per Second AVG         0123456789   0123456789
                IMT Rx Safety Per Minute AVG         0123456789   0123456789
                IMT Rx Safety Per Second AVG         0123456789   0123456789
                IMT Rx MSU Byte Per Minute AVG       0123456789   0123456789
                IMT Rx MSU Byte Per Second AVG       0123456789   0123456789
                IMT Rx ASU Byte Per Minute AVG       0123456789   0123456789
                IMT Rx ASU Byte Per Second AVG       0123456789   0123456789
                IMT Rx DSU Byte Per Minute AVG       0123456789   0123456789
                IMT Rx DSU Byte Per Second AVG       0123456789   0123456789
                IMT Rx MSU Byte Count                0123456789   0123456789
                IMT Rx ASU Byte Count                0123456789   0123456789
                IMT Rx DSU Byte Count                0123456789   0123456789
                IMT Rx HSU Byte Count                0123456789   0123456789
                IMT Rx LSSU Byte Count               0123456789   0123456789
                IMT Rx TSU Byte Count                0123456789   0123456789
                IMT Rx SSU Byte Count                0123456789   0123456789
                IMT Rx BSU Byte Count                0123456789   0123456789
                IMT Rx Byte Other                    0123456789   0123456789
```

```
IMT Rx Total Byte Count                0123456789   0123456789
IMT Rx MSU Packet Count                0123456789   0123456789
IMT Rx ASU Packet Count                0123456789   0123456789
IMT Rx DSU Packet Count                0123456789   0123456789
IMT Rx HSU Packet Count                0123456789   0123456789
IMT Rx LSSU Packet Count               0123456789   0123456789
IMT Rx TSU Packet Count                0123456789   0123456789
IMT Rx SSU Packet Count                0123456789   0123456789
IMT Rx BSU Packet Count                0123456789   0123456789
IMT Rx Packet Other                    0123456789   0123456789
IMT Rx Total Packet Count              0123456789   0123456789
IMT Rx MSU Packet Safety Count         0123456789   0123456789
IMT Rx ASU Packet Safety Count         0123456789   0123456789
IMT Rx DSU Packet Safety Count         0123456789   0123456789
IMT Rx HSU Packet Safety Count         0123456789   0123456789
IMT Rx LSSU Packet Safety Count        0123456789   0123456789
IMT Rx TSU Packet Safety Count         0123456789   0123456789
IMT Rx SSU Packet Safety Count         0123456789   0123456789
IMT Rx BSU Packet Safety Count         0123456789   0123456789
IMT Rx Other Packet Safety Count       0123456789   0123456789
IMT Rx Total Packet Safety Count       0123456789   0123456789
IMT Rx Packet Violation Error          0123456789   0123456789
IMT Rx Packet CRC Error                0123456789   0123456789
IMT Rx Packet Format Error             0123456789   0123456789
IMT Rx Packet Discard Error            0123456789   0123456789
IMT Tx Packet Format Error             0123456789   0123456789
IMT Tx Packet Discard Error            0123456789   0123456789

Misc Speed Statistic                  BUS A Value  BUS B Value
--------------------                  -----------  -----------
Shelf ID UART Framing Error            0123456789   0123456789
Shelf ID UART Overrun Error            0123456789   0123456789
```

```
 HIPR2 CUMULATIVE Statistics
=================================================================================
              Low Speed Statistic                    BUS A Value  BUS B Value
              -------------------                    -----------  -----------
               IMT Rx Packet CRC Error                0123456789   0123456789
               IMT Rx Packet Format Error             0123456789   0123456789
               IMT Rx Violation Error                 0123456789   0123456789
               IMT Rx Command Error                   0123456789   0123456789
               IMT Rx FIFO Full                       0123456789   0123456789
               IMT Rx FIFO Half Full                  0123456789   0123456789
               IMT Tx FIFO Full                       0123456789   0123456789
               IMT Tx FIFO Half Full                  0123456789   0123456789

              High Speed Statistic                   BUS A Value  BUS B Value
              --------------------                   -----------  -----------
               IMT Rx Disparity Error                 0123456789   0123456789
               IMT Rx Code Word Error                 0123456789   0123456789
               IMT Rx Packet SOM Before EOM           0123456789   0123456789
               IMT Bypass FIFO Full                   0123456789   0123456789
               IMT Bypass FIFO Half Full              0123456789   0123456789
               IMT Rx FIFO Full                       0123456789   0123456789
               IMT Rx FIFO Half Full                  0123456789   0123456789
               IMT Tx FIFO Full                       0123456789   0123456789
               IMT Tx FIFO Half Full                  0123456789   0123456789
               IXP Rx FIFO Full                       0123456789   0123456789
               IXP Rx FIFO Half Full                  0123456789   0123456789
               IMT Rx Byte Per Minute AVG             0123456789   0123456789
               IMT Rx Byte Per Second AVG             0123456789   0123456789
               IMT Tx Byte Per Minute AVG             0123456789   0123456789
               IMT Tx Byte Per Second AVG             0123456789   0123456789
               IMT Rx Packet Per Minute AVG           0123456789   0123456789
               IMT Rx Packet Per Second AVG           0123456789   0123456789
```

```
                IMT Tx Packet Per Minute AVG          0123456789   0123456789
                IMT Tx Packet Per Second AVG          0123456789   0123456789
                IMT Rx Errors Per Minute AVG          0123456789   0123456789
                IMT Rx Errors Per Second AVG          0123456789   0123456789
                IMT Tx Errors Per Minute AVG          0123456789   0123456789
                IMT Tx Errors Per Second AVG          0123456789   0123456789
                IMT Rx Safety Per Minute AVG          0123456789   0123456789
                IMT Rx Safety Per Second AVG          0123456789   0123456789
                IMT Rx MSU Byte Per Minute AVG        0123456789   0123456789
                IMT Rx MSU Byte Per Second AVG        0123456789   0123456789
                IMT Rx ASU Byte Per Minute AVG        0123456789   0123456789
                IMT Rx ASU Byte Per Second AVG        0123456789   0123456789
                IMT Rx DSU Byte Per Minute AVG        0123456789   0123456789
                IMT Rx DSU Byte Per Second AVG        0123456789   0123456789
                IMT Rx MSU Byte Count                 0123456789   0123456789
                IMT Rx ASU Byte Count                 0123456789   0123456789
                IMT Rx DSU Byte Count                 0123456789   0123456789
                IMT Rx HSU Byte Count                 0123456789   0123456789
                IMT Rx LSSU Byte Count                0123456789   0123456789
                IMT Rx TSU Byte Count                 0123456789   0123456789
                IMT Rx SSU Byte Count                 0123456789   0123456789
                IMT Rx BSU Byte Count                 0123456789   0123456789
                IMT Rx Byte Other                     0123456789   0123456789
                IMT Rx Total Byte Count               0123456789   0123456789
                IMT Rx MSU Packet Count               0123456789   0123456789
                IMT Rx ASU Packet Count               0123456789   0123456789
                IMT Rx DSU Packet Count               0123456789   0123456789
                IMT Rx HSU Packet Count               0123456789   0123456789
                IMT Rx LSSU Packet Count              0123456789   0123456789
                IMT Rx TSU Packet Count               0123456789   0123456789
                IMT Rx SSU Packet Count               0123456789   0123456789
                IMT Rx BSU Packet Count               0123456789   0123456789
```

```
                IMT Rx Packet Other                    0123456789   0123456789
                IMT Rx Total Packet Count              0123456789   0123456789
                IMT Rx MSU Packet Safety Count         0123456789   0123456789
                IMT Rx ASU Packet Safety Count         0123456789   0123456789
                IMT Rx DSU Packet Safety Count         0123456789   0123456789
                IMT Rx HSU Packet Safety Count         0123456789   0123456789
                IMT Rx LSSU Packet Safety Count        0123456789   0123456789
                IMT Rx TSU Packet Safety Count         0123456789   0123456789
                IMT Rx SSU Packet Safety Count         0123456789   0123456789
                IMT Rx BSU Packet Safety Count         0123456789   0123456789
                IMT Rx Other Packet Safety Count       0123456789   0123456789
                IMT Rx Total Packet Safety Count       0123456789   0123456789
                IMT Rx Packet Violation Error          0123456789   0123456789
                IMT Rx Packet CRC Error                0123456789   0123456789
                IMT Rx Packet Format Error             0123456789   0123456789
                IMT Rx Packet Discard Error            0123456789   0123456789
                IMT Tx Packet Format Error             0123456789   0123456789
                IMT Tx Packet Discard Error            0123456789   0123456789

               Misc Speed Statistic                   BUS A Value  BUS B Value
               --------------------                   -----------  -----------
                Shelf ID UART Framing Error            0123456789   0123456789
                Shelf ID UART Overrun Error            0123456789   0123456789
;
```

This example shows the output when IMT Bus A is inhibited:

`rept-imt-info:report=hiprerr:sbucket=0`

```
    rlghncxa03w 10-01-27 00:10:20 PST  EAGLE 42.0.0
    HIPR Summary Report: Summed across all requested cards for each bucket

    HIPR Hourly Bucket Statistics
    ================================================================================

    Bucket Loc   Low Speed Statistic           BUS A Value  BUS B Value
    ------ ----  -------------------           -----------  -----------
    00     ----  IMT Rx Packet CRC Error               -            0
                 IMT Rx Packet Format Error            -            0
```

```
                IMT Rx Violation Error                -           101
                IMT Rx Command Error                  -             0
                IMT Rx FIFO Full                      -             0
                IMT Rx FIFO Half Full                 -             0
                IMT Tx FIFO Full                      -             0
                IMT Tx FIFO Half Full                 -             0

                High Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                IMT Rx Packet Format Error            -             0
                IMT Rx Disparity Error                -             0
                IMT Rx Sync Lost Error                -             0
                IMT Rx Code Word Error                -             0
                IMT Rx Packet SOM Before EOM          -             0
                IMT Rx Packet CRC Error               -             0
                IMT Bypass FIFO Full                  -             0
                IMT Bypass FIFO Half Full             -             0
                IMT Rx FIFO Full                      -             0
                IMT Rx FIFO Half Full                 -             0
                IMT Tx FIFO Full                      -             0
                IMT Tx FIFO Half Full                 -             0
                IXP Rx FIFO Full                      -             0
                IXP Rx FIFO Half Full                 -             0

                Misc Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                Shelf ID UART Framing Error           -             0
                Shelf ID UART Overrun Error           -             0

    HIPR CUMULATIVE Statistics

    ================================================================================

                Low Speed Statistic           BUS A Value  BUS B Value
                -------------------           -----------  -----------
                IMT Rx Packet CRC Error               -             0
                IMT Rx Packet Format Error            -             0
                IMT Rx Violation Error                -          1165
                IMT Rx Command Error                  -             0
                IMT Rx FIFO Full                      -             0
                IMT Rx FIFO Half Full                 -             0
                IMT Tx FIFO Full                      -             0
                IMT Tx FIFO Half Full                 -             1

                High Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                IMT Rx Packet Format Error            -             0
                IMT Rx Disparity Error                -             0
                IMT Rx Sync Lost Error                -             0
                IMT Rx Code Word Error                -             0
                IMT Rx Packet SOM Before EOM          -             0
                IMT Rx Packet CRC Error               -             0
                IMT Bypass FIFO Full                  -             1
                IMT Bypass FIFO Half Full             -             1
                IMT Rx FIFO Full                      -             0
                IMT Rx FIFO Half Full                 -             0
                IMT Tx FIFO Full                      -             0
                IMT Tx FIFO Half Full                 -             0
                IXP Rx FIFO Full                      -             0
                IXP Rx FIFO Half Full                 -             0

                Misc Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                Shelf ID UART Framing Error           -            35
```

```
                Shelf ID UART Overrun Error           -            0
;
```

This example shows the output when at least one card on the IMT Bus does not respond when statistics are collected:

`rept-imt-info:report=hiprerr:sbucket=0`

```
    rlghncxa03w 10-01-27 00:10:20 PST  EAGLE 42.0.0
    HIPR Summary Report: Summed across all requested cards for each bucket

    HIPR Hourly Bucket Statistics

    ==========================================================================

    Bucket Loc   Low Speed Statistic           BUS A Value  BUS B Value
    ------ ----  ------------------            -----------  -----------
    00     ----  IMT Rx Packet CRC Error              0            0
                 IMT Rx Packet Format Error           0            0
                 IMT Rx Violation Error             128            0
                 IMT Rx Command Error                 0            0
                 IMT Rx FIFO Full                     0            0
                 IMT Rx FIFO Half Full                0            0
                 IMT Tx FIFO Full                    36            0
                 IMT Tx FIFO Half Full              182            0

                 High Speed Statistic          BUS A Value  BUS B Value
                 --------------------          -----------  -----------
                 IMT Rx Packet Format Error           0            0
                 IMT Rx Disparity Error               0            0
                 IMT Rx Sync Lost Error               0            0
                 IMT Rx Code Word Error               0            0
                 IMT Rx Packet SOM Before EOM         0            0
                 IMT Rx Packet CRC Error              0            0
                 IMT Bypass FIFO Full                 0            0
                 IMT Bypass FIFO Half Full            0            0
                 IMT Rx FIFO Full                     0            0
                 IMT Rx FIFO Half Full                0            0
                 IMT Tx FIFO Full                     0            0
                 IMT Tx FIFO Half Full                0            0
                 IXP Rx FIFO Full                     0            0
                 IXP Rx FIFO Half Full                0            0

                 Misc Speed Statistic          BUS A Value  BUS B Value
                 --------------------          -----------  -----------
                 Shelf ID UART Framing Error          2            0
                 Shelf ID UART Overrun Error          0            0

    HIPR CUMULATIVE Statistics
    ==========================================================================

                 Low Speed Statistic           BUS A Value  BUS B Value
                 -------------------           -----------  -----------
                 IMT Rx Packet CRC Error              0           0*
                 IMT Rx Packet Format Error           0           0*
                 IMT Rx Violation Error            1415           0*
                 IMT Rx Command Error                 0           0*
                 IMT Rx FIFO Full                     0           0*
                 IMT Rx FIFO Half Full                0           0*
                 IMT Tx FIFO Full                   120           0*
                 IMT Tx FIFO Half Full             1113           0*
```

```
                High Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                IMT Rx Packet Format Error            0           0*
                IMT Rx Disparity Error                0           0*
                IMT Rx Sync Lost Error               15           0*
                IMT Rx Code Word Error                0           0*
                IMT Rx Packet SOM Before EOM          0           0*
                IMT Rx Packet CRC Error               0           0*
                IMT Bypass FIFO Full                  1           0*
                IMT Bypass FIFO Half Full             1           0*
                IMT Rx FIFO Full                      0           0*
                IMT Rx FIFO Half Full                 0           0*
                IMT Tx FIFO Full                      0           0*
                IMT Tx FIFO Half Full                 0           0*
                IXP Rx FIFO Full                      0           0*
                IXP Rx FIFO Half Full                 0           0*

                Misc Speed Statistic          BUS A Value  BUS B Value
                --------------------          -----------  -----------
                Shelf ID UART Framing Error          59           0*
                Shelf ID UART Overrun Error           0           0*
;
```

Legend

IMT Statistics:

- **Bucket**—The hourly time periods (*buckets*) for which a report was requested.
- **Statistic**—The error statistic type for the IMT buses A and B.
- **Bus A Value**—The number of occurrences of the type of error displayed in the Statistic column for the IMT bus A.
- **Bus B Value**—The number of occurrences of the type of error displayed in the Statistic column for the IMT bus B.
- **Low Speed Statistic**—The error statistic type for the low speed 125 Mbps secondary rings with MUX cards installed on buses A (xy09 card locations) and B (xy10 card locations).
- **High Speed Statistic**—The error statistic type for the high-speed 1 Gbps primary ring with MUX cards installed on buses A (xy09 card locations) and B (xy10 card locations).
- **Misc Speed Statistics**—Shelf ID Universal Asynchronous Receiver Transmitter (UART) error counts on the MUX cards installed on buses A (xy09 card locations) and B (xy10 card locations).
- **Bucket Summary**—The error count for each parameter for one hour for HMUX cards installed on buses A (*xy*09 card locations) and B (*xy*10 card locations). (The count is for the most recent part of an hour if the card was booted within an hour of executing the `rept-imt-info` command.)
- **Cumulative**—The running total error count for each parameter since card initialization for HMUX cards installed on buses A (*xy*09 card locations) and B (*xy*10 card locations).

MUX Statistics:

- **Bucket**—The hourly time periods (*buckets*) for which a report was requested.
- **Loc**—The card location (shelf and slot) for which information is displayed.
- **Low Speed Statistic**—The error statistic type for the low speed 125 Mbps secondary rings with MUX cards installed on buses A (xy09 card locations) and B (xy10 card locations).
- **High Speed Statistic**—The error statistic type for the high-speed 1 Gbps primary ring with MUX cards installed on buses A (xy09 card locations) and B (xy10 card locations).
- **Misc Speed Statistic**—The miscellaneous error statistic type.

- **Bus A**—The number of occurrences of the type of error displayed in the Statistic column for the IMT bus A.
- **Bus B**—The number of occurrences of the type of error displayed in the Statistic column for the IMT bus B.

Related Commands

clr-imt-stats, *init-imt-gpl*, *rept-imt-lvl1*, *rept-imt-lvl2*, *tst-imt*

rept-imt-lvl1 Report IMT Level 1

Use this command to display IMT level 1 statistics for a card or a range of cards. A summary report of totals for all cards is also generated.

Parameters

e (optional)

End address. The IMT address of the last card in the range. A decimal value or a hexadecimal value can be specified for this parameter (see *Table 42: Hexadecimal/Decimal Values for s and e Parameters* to map the values by card location).

Range:

0 - 251

The value can be specified in decimal (*0-251* or hexadecimal (*h'00 – h'fe*)

Default:

If the s parameter is specified, the default value is the s parameter value.

If the s parameter is not specified, the e parameter cannot be specified and the sloc parameter must be specified.

eloc (optional)

End location. The card location of the last card in the range.

Range:

1101 - 1108, 1111 - 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

If sloc is specified—current sloc value; displays information for one card

If sloc is not specified— *1115*, which corresponds to IMT address 251 (e=251); displays information for entire range of locations.

eshelf (optional)

End Shelf location. The shelf location of the last shelf in the range.

Range:

1100, 1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300, 5100, 5200, 5300, 6100

Default:

if the sshelf parameter is specified—current sshelf value

if the sshelf parameter is not specified— *6100*, which displays information for entire range of shelves

filter (optional)

The filter that determines the information that is displayed in the report.

Range:

error

display all error counts

perf

display performance counts

erroronly

display non-zero error counts

full

display zero and non-zero error counts and performance counts

Default:

full

hs (optional)

This parameter specifies whether to include High Speed interface counts in the report.

Range:

no

do not include High Speed interface counts

yes

include High Speed interface counts

Default:

no

r (optional)

Report type value

Range:

full

Displays information for each card along with a summary report.

stats

Displays only individual card statistics.

summary

Displays the summary portion of the report.

Default:

full

s (optional)

Start address. The IMT address of the first (or only) card in the range. A decimal value or a hexadecimal value can be specified for this parameter (see *Table 42: Hexadecimal/Decimal Values for s and e Parameters* to map the values by card location).

Range:

0 - 251

The value can be specified in decimal (0-251) or hexadecimal (h'00 – h'fb)

sloc (optional)

Start location. The card location of the first card in the range.

Range:

1101 - 1108, 1111 - 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

If eloc is specified—current eloc value

If eloc is not specified— *1201*, which corresponds to IMT address 0 (s=0).

sshelf (optional)

Start Shelf location. The shelf location of the first shelf in the range.

Note: This parameter specified alone is the equivalent to specifying the IMT address range. For example, "sshelf=1200" is equivalent to specifying the IMT address range as "s=h'00:e=h'0f".

Range:

1100, 1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300, 5100, 5200, 5300, 6100

Default:

if the eshelf parameter is specified—the current eshelf value

if the eshelf parameter is not specified— *1100*, which displays information for the entire range of shelves

trm (optional)

This parameter specifies the terminal port where the report is sent.

Range:

1 - 40

Default:

Report displays on the terminal where the command was issued

Example

This example requests low speed interface counts.

```
rept-imt-lvl1:s=h'00:e=h'00
```

This example requests a summary report of low speed interface counts.

```
rept-imt-lvl1:s=h'00:e=h'00:r=summary
```

This example requests low speed interface counts.

```
rept-imt-lvl1:sshelf=1200
```

This example requests low speed interface counts for individual cards.

```
rept-imt-lvl1:sshelf=1200:r=stats
```

This example requests low speed and high speed interface counts.

```
rept-imt-lvl1:sshelf=1200:hs=yes
```

This example requests low speed and high speed interface counts.

```
rept-imt-lvl1:s=h'00:e=h'00:hs=yes
```

This example requests an error report for non-zero error counts.

```
rept-imt-lvl1:s=h'00:e=h'00:filter=error-only
```

This example requests an error report for zero and non-zero error counts.

```
rept-imt-lvl1:s=h'00:e=h'00:filter=error
```

Dependencies

Only one report status command can be in progress at a time.

The s, sloc, or sshelf parameter must be specified in the command.

This command cannot be entered during IMT statistics collection following an hourly boundary.

The command cannot be entered if the `clr-imt-stats`, `rept-imt-info`, `rept-imt-lvl2`, or `tst-imt` command is running.

Only one of the sloc/eloc, s/e, and sshelf/eshelf parameter combinations can be specified in the command.

A card location that is valid and defined in the database must be specified.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

Notes

Table 42: Hexadecimal/Decimal Values for s and e Parameters maps each card location to the decimal and hexadecimal *Converting ITU National Point Code Formats* values that can be specified for the s and e parameters.

Table 42: Hexadecimal/Decimal Values for s and e Parameters

Card Location	Hexadecimal Value	Decimal Value	Card location	Hexadecimal Value	Decimal Value
Control Shelf 11					
1101	h'f0	240	1102	h'f1	241
1103	h'f2	242	1104	h'f3	243
1105	h'f4	244	1106	h'f5	245
1107	h'f6	246	1108	h'f7	247
1111	h'f8	248	1112	h'f9	249
1113	h'fa	250	1115	h'fb	251
Extension Shelf 12					
1201	h'00	0	1202	h'01	1
1203	h'02	2	1204	h'03	3
1205	h'03	4	1206	h'05	5
1207	h'06	6	1208	h'07	7
1211	h'08	8	1212	h'09	9
1213	h'0a	10	1214	h'0b	11
1215	h'0c	12	1216	h'0d	13
1217	h'0e	14	1218	h'0f	15
Extension Shelf 13					
1301	h'10	16	1302	h'11	17
1303	h'12	18	1304	h'13	19
1305	h'14	20	1306	h'15	21
1307	h'16	22	1308	h'17	23
1311	h'18	24	1312	h'19	25
1313	h'1a	26	1314	h'1b	27
1315	h'1c	28	1316	h'1d	29
1317	h'1e	30	1318	h'1f	31
Extension Shelf 21					
2101	h'20	32	2102	h'21	33

Card Location	Hexadecimal Value	Decimal Value	Card location	Hexadecimal Value	Decimal Value
2103	h'22	34	2104	h'23	35
2105	h'24	36	2106	h'25	37
2107	h'26	38	2108	h'27	39
2111	h'28	40	2112	h'29	41
2113	h'2a	42	2114	h'2b	43
2115	h'2c	44	2116	h'2d	45
2117	h'2e	46	2118	h'2f	47
Extension Shelf 22					
2201		48	2202		49
2203		50	2204		51
2205		52	2206		53
2207		54	2208		55
2211		56	2212		57
2213		58	2214		59
2215		60	2216		61
2217		62	2218		63
Extension Shelf 23					
2301	h'40	64	2302	h'41	65
2303	h'42	66	2304	h'43	67
2305	h'44	68	2306	h'45	69
2307	h'46	70	2308	h'47	71
2311	h'48	72	2312	h'49	73
2313	h'4a	74	2314	h'4b	75
2315	h'4c	76	2316	h'4d	77
2317	h'4e	78	2318	h'4f	79
Extension Shelf 31					
3101	h'50	80	3102	h'51	81
3103	h'52	82	3104	h'53	83
3105	h'54	84	3106	h'55	85
3107	h'56	86	3108	h'57	87
3111	h'58	88	3112	h'59	89

Card Location	Hexadecimal Value	Decimal Value	Card location	Hexadecimal Value	Decimal Value
3113	h'5a	90	3114	h'5b	91
3115	h'5c	92	3116	h'5d	93
3117	h'5e	94	3118	h'5f	95
Extension Shelf 32					
3201	h'60	96	3202	h'61	97
3203	h'62	98	3204	h'63	99
3205	h'64	100	3206	h'65	101
3207	h'66	102	3208	h'67	103
3211	h'68	104	3212	h'69	105
3213	h'6a	106	3214	h'6b	107
3215	h'6c	108	3216	h'6d	109
3217	h'6e	110	3218	h'6f	111
Extension Shelf 33					
3301	h'70	112	3303	h'71	113
3303	h'72	114	3304	h'73	115
3305	h'74	116	3306	h'75	117
3307	h'76	118	3308	h'77	119
3311	h'78	120	3312	h'79	121
3313	h'7a	122	3314	h'7b	123
3315	h'7c	124	3316	h'7d	125
3317	h'7e	126	3318	h'7f	127
Extension Shelf 41					
4101	h'80	128	4102	h'81	129
4103	h'82	130	4104	h'83	131
4105	h'84	132	4106	h'85	133
4107	h'86	134	4108	h'87	135
4111	h'88	136	4112	h'89	137
4113	h'8a	138	4114	h'8b	139
4115	h'8c	140	4116	h'8d	141
4117	h'8e	142	4118	h'8f	143
Extension Shelf 42					

Card Location	Hexadecimal Value	Decimal Value	Card location	Hexadecimal Value	Decimal Value
4201	h'90	144	4202	h'91	145
4203	h'92	146	4204	h'93	147
4205	h'94	148	4206	h'95	149
4207	h'96	150	4208	h'97	151
4211	h'98	152	4212	h'99	153
4213	h'9a	154	4214	h'9b	155
4215	h'9c	156	4216	h'9d	157
4217	h'9e	158	4218	h'9f	159
Extension Shelf 43					
4301	h'a0	160	4302	h'a1	161
4303	h'a2	162	4302	h'a3	163
4305	h'a4	164	4306	h'a5	165
4307	h'a6	166	4308	h'a7	167
4311	h'a8	168	4312	h'a9	169
4313	h'aa	170	4314	h'ab	171
4315	h'ac	172	4316	h'ad	173
4317	h'ae	174	4318	h'af	175
Extension Shelf 51					
5101	h'b0	176	5102	h'b1	177
5103	h'b2	178	5104	h'b3	179
5105	h'b4	180	5106	h'b5	181
5107	h'b6	182	5108	h'b7	183
5111	h'b8	184	5112	h'b9	185
5113	h'ba	186	5114	h'bb	187
5115	h'bc	188	5116	h'bd	189
5117	h'be	190	5118	h'bf	191
Extension Shelf 52					
5201	h'c0	192	5202	h'c1	193
5204	h'c2	194	5204	h'c3	195
5205	h'c4	196	5206	h'c5	197
5307	h'c6	198	5208	h'c7	199

Card Location	Hexadecimal Value	Decimal Value	Card location	Hexadecimal Value	Decimal Value
5211	h'c8	200	5212	h'c9	201
5213	h'ca	202	5214	h'cb	203
5215	h'cc	204	5216	h'cd	205
5217	h'ce	206	5218	h'cf	207
Extension Shelf 53					
5301	h'd0	208	5302	h'd1	209
5303	h'd2	210	5304	h'd3	211
5305	h'd4	212	5306	h'd5	213
5307	h'd6	214	5308	h'd7	215
5311	h'd8	216	5312	h'd9	217
5313	h'da	218	5314	h'db	219
5315	h'dc	220	5316	h'dd	221
5317	h'de	222	5318	h'df	223
Extension Shelf 61					
6101	h'e0	224	6102	h'e1	225
6103	h'e2	226	6104	h'e3	227
6105	h'e4	228	6106	h'e5	229
6107	h'e6	230	6108	h'e7	231
6111	h'e8	232	6112	h'e9	233
6113	h'ea	234	6114	h'eb	235
6115	h'ec	236	6116	h'ed	237
6117	h'ee	238	6118	h'ef	239

Low speed ring counts and performance counts

If an HMUX card is not present in the shelf, then HMUX low speed ring counts are not displayed. If HIPR or HIPR2 cards are not present in the shelf, then performance counts are not displayed.

Table 43: Level 1 IMT Statistics describes the statistics that are shown in the report for each card and in the Summary of totals for all requested cards, and their possible causes and corrective actions.

These statistics are displayed when the `rept-imt-lvl1:sloc=xxxx:eloc=yyyy:r=full` command is entered.

Table 43: Level 1 IMT Statistics

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
Rx CRC Error	Receive CRC error: Bad Checksum in received IMT packet. Caused by corrupted data within the received packet. Detected by hardware.	Maintenance activity: Card insertion, removal, or boot. Does not occur in a normal system. Indicates a hardware failure: defective LIM card, MUX card, FC cable or backplane.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue is present. Contact Customer Care Center.
Rx Format Error	Receive Format Error: Occurs when the End of Message byte of an IMT packet is found missing. Detected by hardware.	Service/Maintenance activity: Card insertion, removal, or boot. Does not occur in a normal system. Indicates a hardware failure: defective LIM card, MUX card, FC cable or backplane.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue is present. Contact Customer Care Center.
Rx Inv Len	Receive Packet with Invalid Length: Card received an IMT packet where the actual length of the packet did not match the length indicated in the length field. Detected by software	Software defect. Does not occur in a normal system.	Contact Customer Care Center.
Rx FIFO Half Full	Receive FIFO Half Full: Watermark indication that this interface receiving data off the TAXI line has received substantial traffic.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is an indication; no action required.
Rx FIFO Full	Receive FIFO Full: Watermark indication that this interface receiving data off the TAXI line is receiving traffic in excess of what it can handle. Some traffic will have been discarded. May cause retransmissions, CRC	Relatively heavy traffic on this interface can cause these counts to increment. Seeing these counts in the field may indicate a software problem.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact the Customer Care Center.

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
	errors and Format errors. Detected by hardware		
CPU Rx FIFO Half Full	CPU Receive FIFO Half Full: Communication CPU on the card is becoming congested. Detected by hardware. This stat is only meaningful for cards that contain a BPxxxx GPL.	Relatively heavy traffic on this interface can cause these counts to increment. May indicate a SW problem.	None: FIFO Half Full is an indication; no action required.
CPU Rx FIFO Full	CPU Receive FIFO Full: Communication CPU on the card is becoming congested. Data has been dropped. May cause retransmissions, format and large packet errors. Detected by hardware. This stat is only meaningful for cards that contain a BPxxxx GPL.	Relatively heavy traffic on this interface can cause these counts to increment. May indicate a SW problem.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue is present. Contact Customer Care Center.
CPU Rx MSU FIFO Full	CPU Receive MSU FIFO Full: Watermark indication that the MSU traffic is in excess of what the card can handle. Traffic will have been discarded. Expect retransmissions and possibly other errors. This stat is only meaningful for cards that contain the IMTPCI GPL; the FIFO stores data determined to be a MSU with no CRC error.	Relatively heavy traffic on this interface can cause these counts to increment. May indicate a SW problem.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue is present. Contact Customer Care Center.
CPU Rx LSSU FIFO Full	CPU Receive LSSU FIFO Full: Watermark indication that the LSSU	May indicate a hardware failure (i.e.: a defective board),	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
	traffic is in excess of what the card can handle. This stat is only meaningful for cards that contain the IMTPCI GPL; the FIFO stores data determined to be a LSSU with no CRC error.	although a software issue is also possible.	perform. If errors continue, a hardware issue exists. Contact Customer Care Center.
CPU Rx XSU FIFO Full	CPU Receive XSU FIFO Full: Watermark indication that the XSU traffic is in excess of what the card can handle. This stat is only meaningful for cards that contain the IMTPCI GPL; the FIFO stores data determined not to be a MSU, LSSU or ASU, and no CRC error. Data internal to this card has been lost.	Relatively heavy traffic on this interface can cause these counts to increment.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue exists. Contact Customer Care Center.
ASU Rx FIFO Half Full	CPU Receive ASU FIFO Half Full: Watermark indication that this interface has received substantial ASU traffic. This stat is only meaningful for cards that contain a BPxxxx GPL; the FIFO stores data determined to be an ASU with no CRC error.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is an indication. No action required.
ASU Rx FIFO Full	CPU Receive ASU FIFO Full: Watermark indication that the ASU traffic is in excess of what the card can handle. ASUs will have been lost resulting in retransmission and	Relatively heavy traffic on this interface can cause these counts to increment. Seeing these counts in the field may indicate a software problem.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a hardware issue exists. Contact Customer Care Center.

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
	other possible LVL1 errors. This stat is only meaningful for cards that contain a BPxxxx or IMTPCI GPL; the FIFO stores data determined to be an ASU with no CRC error.		
SSU Packet Rx	Safety Packets Received: This message type detects the loss of a card in the system if virtual connections between cards are lost.	Card insertion, removal, or boot, heavy traffic, abnormal conditions and/or software/hardware problems can result in these packets being generated.	None. These counts are an indication. No action required.
ASU Safety Pkt	ASU Safety Packets: ASU Unit has timed out on the IMT.	Card insertion, removal, or boot	None. These counts are only an indication. No action required.
TSU Safety Pkt	TSU Safety Packets: TSU Unit has timed out on the IMT	Card insertion, removal, or boot	None. These counts are only an indication. No action required.
BSU Safety Pkt	BSU Safety Packets: BSU Unit has timed out on the IMT.	Card insertion, removal, or boot	None. These counts are only an indication. No action required.
SSU Safety Pkt	SSU Safety Packets: SSU Unit has timed out on the IMT	Card insertion, removal, or boot	None. These counts are only an indication. No action required.
Other Safety Pkt	Other Safety Packets Received: Possible message types are MSU, DSU, ISU, and/or HSU.	Card insertion, removal, or boot	None. These counts are only an indication. No action required.
Pri Ctrl Rx Error	Primary control receive error: Corrupted packet received. Detected by hardware	Card insertion, removal, or boot	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
Pri Ctrl Sanity Err	Primary Control Sanity Error: Internal hardware monitoring self check failed. Detected by hardware	Indicates that the hardware receive logic was unable to successfully process the incoming packet. May indicate a hardware problem.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
RX HW flow control event	Indicates the number of times the HW RX FIFO's backed up to a point to request the other end to HOLD until room is made available in the RX FIFO. Counts in the MUX column indicate the receiver was backed up on the MUX. Counts in the COM side indicate the LIM receiver was backed up.	Does not indicate a problem just an indication of low level congestion. Should excessive counts be seen it could indicate a problem.	None. RX HW flow control event is an indication. No action is required.
Pri Ctrl No SOM	Primary Control No Start of Message Error: Incoming data was detected without a start of message (SOM.) This stat is only meaningful for cards that contain a BPxxxx GPL.	Card insertion, removal, or boot.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
Pri Ctrl Tx Err	Primary Control Transmit Error: Transmit logic encountered a problem sending a packet. Detected by hardware. This stat is only meaningful for application cards.	Card insertion, removal, or boot.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
Tx FIFO Half Full	Transmit FIFO Half Full: Watermark indication that this interface is backed up through ½ of its available storage. This stat is only meaningful for MUX card columns.	Indicates that data was transmitted at a relatively high rate for a short period.	None. FIFO Half Full is an indication. No action is required.
Tx FIFO Full	Transmit FIFO Full: The FIFO has overflowed and data has been lost. This stat is only meaningful for MUX card columns.	Relatively heavy traffic on this interface can cause these counts to increment. May indicate a software problem	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
Future Field	Reserved	Reserved	Reserved
Future Field	Reserved	Reserved	Reserved
IMT Tx FIFO Half Full	Transmit FIFO Half Full: Watermark indication that this interface is backed up through ½ of its available storage. This stat is only meaningful for MUX card columns.	Indicates that data was transmitted at a relatively high rate for a short period.	None. FIFO Half Full is just an indication; no action is required.
IMT Tx FIFO Full	Transmit FIFO Full: The FIFO has overflowed and data has been lost. This stat is only meaningful for MUX card columns.	May indicate a software problem.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
Tx FIFO 3/4 Full	Reserved	Reserved	Reserved
IMT By-pass FIFO Half Full	Watermark indication that this interface has backed to fill half on the FIFO.	May indicate that data was transmitted at a relatively high rate for a short period.	None. FIFO Half Full is an indication. No action is required.

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
	This stat is only meaningful for cards that contain a BLMCAP GPL.		
IMT By-pass FIFO Full	By-pass FIFO overflowed data has been lost. This stat is only meaningful for cards that contain a BLMCAP GPL.	Very little if any data flows through this FIFO. May indicate a hardware problem	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center. The card may need to be replaced.
Pass thru CRC Error	Reserved	Reserved	Reserved
Lost Multicast Pkt	Lost Multicast Packets: This counter increments when the interface detects that one of these packets has not been delivered to a card in the list. This stat is only meaningful for application card columns.	Card insertion, removal, or boot. These events may indicate a software problem.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
Invalid Interrupt	The interface generated a spurious interrupt. This stat is only meaningful for cards that contain an IMTPCI GPL.	May indicate a software or hardware defect.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center. The card may need to be replaced.
Error Int Overflow	Deprecated	Deprecated	Deprecated
Large Pkt Error	Large Packet Error: The interface has detected packets larger than allowed in the data stream.	Card insertion, removal, boot, or a hardware error. May indicate a hardware problem.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
	This stat is meaningful for all cards except those containing the IMTPCI GPL.		may exist. Contact Customer Care Center.
MSU Retran / MUX LVL1 Cong	COM - Retransmissions occur when a transmitted MSU does not receive an acknowledgment (ASU) within an engineered timeout value. Detected by software. This stat is only meaningful for application cards. MUX - Count of occurrences that the MUX has reached level 1 congestion on the transmit path to the LIM (works in conjunction with MFC)	COM - Card insertion, removal, or boot. May indicate hardware, software or configuration problems. MUX - Nothing specific to do except for monitor for excessive counts	COM - Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center. MUX - Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
MSU ROE / MUX LVL2 Cong	COM - MSU Returned On Error: Number of MSUs returned to the application as undeliverable. Each application is responsible for indicating their need for MSUs to be returned if undeliverable. This count is for messages that the application has deemed important and requested that they be returned if undeliverable. Detected by software. MUX - Count of occurrences that the MUX has reached level 2 congestion on the transmit path to the LIM (works in conjunction with MFC)	COM - Destination card is not available to receive packets. MUX - Nothing specific to do except monitor for excessive counts	COM - None. MSU Returned on Error is an indication. No action is required. MUX - Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
VC OS Cnt / MUX Cong Disc	COM - Virtual Circuit Out of Service Count: Count of times a Virtual Circuit (VC) on this card has gone Out of Service. **Note:** The A and B bus counts will be the same. For the VC to drop, communications on both busses must be lost. This stat is only meaningful for application cards. MUX - Count of occurrences that the MUX has reached congestion discard on the transmit path to the LIM. More data is being delivered to the transmit queue than can be transmitted to the slot/LIM.	COM - Destination card is not available to receive packets, or software/hardware errors that cause the virtual connection(s) to be dropped. Could occur during normal maintenance (card replacement/upgrades, or booting). MUX - Packets are being dropped or retransmitted internally. This should not occur.	COM - Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center. MUX - Contact Customer Care Center.
Bus Disconnect Count	Bus Disconnect Count: Counts the times that the card has been disconnected from the bus. Note: The A and B bus counts can be different. This stat is only meaningful for application cards.	Any event that disconnects the card from the bus can cause this counter to increment (e.g. connectivity problems to the IMT bus, or issuing the `disc-imt` or `inh-imt` command)	If commands that disconnect the card from the bus have not been issued, clear IMT stats, wait 1 hour and retrive stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.
Violation Error	Received an illegal character from the physical IMT transport (TAXI Interface). Detected by hardware	Card insertion, removal, or boot or defective hardware	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue, a problem may exist. Contact Customer Care Center.

IMT Statistic	Explanation Of Statistic	Probable Causes	Recommended Action
Info: MSU Dropped no Rept	MSU Dropped With No Report: Number of undeliverable MSUs that are not being returned to the application. Note: This statistic may be non-zero after executing the `rept-imt-lvl1` or `clr-imt-stats` command. During execution of these commands, the active MASP generates MSUs to unpopulated card slots. These MSUs result in an "MSU Dropped With No Report" count. To determine the number of unexpected "MSU Dropped With No Report" occurrences, the active MASP must be excluded from the `rept-imt-lvl1` card range.	Destination card is not available to receive packets.	None. MSU Dropped is an indication. No action is required.

Level 1 IMT Statistics, Low Speed Performance Counts

The probable cause for all Level 1 IMT Statistics, Low Speed Performance Counts is normal behavior. These counts are information only, and no action is required.

These statistics are displayed when the `rept-imt-lvl1:sloc=xxxx:eloc=yyyy:r=full` command is entered.

- All Packets—Number of packets transmitted on the IMT, all types
- All bytes—Number of bytes transmitted on the IMT, all types
- MSU Packets—Number of reliable delivery message data packets transmitted on the IMT
- MSU Bytes—Number of reliable delivery message data bytes transmitted on the IMT
- ASU Packets—Number of acknowledgment packets transmitted on the IMT
- ASU Bytes—Number of acknowledgment bytes transmitted on the IMT
- DSU Bytes—Number of best effort delivery message data bytes transmitted on the IMT
- HSU Packets—Number of mux card data packets transmitted on the IMT
- HSU Bytes—Number of mux card data bytes transmitted on the IMT
- TSU Bytes—Number of test bytes transmitted on the IMT
- TSU Packets—Number of test packets transmitted on the IMT
- LSSU Packets—Number of virtual circuit alignment packets transmitted on the IMT

- LSSU Bytes—Number of virtual circuit alignment bytes transmitted on the IMT
- BSU Packets—Number of broadcast data packets transmitted on the IMT
- BSU Bytes—Number of broadcast data bytes transmitted on the IMT
- SSU Packets—Number of Safety packets transmitted on the IMT
- SSU Bytes—Number of safety bytes transmitted on the IMT
- Othr Packets—Number of all packets types not counted by one of the above
- Othr Bytes—Number of all data bytes not counted by one of the above
- TAXI Util—Approximate percentage utilization of Low Speed data bus

High Speed Error Summary for Level 1 IMT Statistics

Table 44: Level 1 IMT Statistics, High Speed Error Summary displays the High Speed Error Summary for Level 1 IMT Statistics.

These statistics are displayed when the `rept-imt-lvl1:sloc=xxxx:eloc=yyyy:r=full` command is entered.

Table 44: Level 1 IMT Statistics, High Speed Error Summary

Stat Label	Explanation of Stat	Probable Cause	Recommended Action
HS Rx Packet CRC Error	Fibre Channel Receive Packet with CRC Errors: Checksum error in received packet. Caused by corrupted data.	May indicate a hardware failure	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.
HS Rx Packet Format Error	Fibre Channel Receive Packet with Format Errors: Format error in received packet. Usually caused by corrupted data.	May indicate a hardware failure	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.
HS Rx Disparity Error	Fibre Channel Receive Packet with Disparity Errors: Error in received packet. Caused by corrupted data.	May indicate a hardware failure	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.
HS Rx Sync Lost Error	Fibre Channel Receive Lost Synchronization Errors: The interface lost sync on the received stream.	May indicate a hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors

Stat Label	Explanation of Stat	Probable Cause	Recommended Action
			continue a problem may exist. Contact Customer Care Center.
HS Rx Code Word Error	Fibre Channel Receive code Word Errors: Error in received packet. Caused by corrupted data.	May indicate a hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.
HS Rx Packet SOM Before EOM	Fibre Channel Receive Packet with Start of Message without a previous End of Message Errors: The software received detected the start of a new packet before the end of the previous packet was detected.	May indicate a hardware failure.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.
HS Bypass FIFO Half Full	Fibre Channel Bypass FIFO Half Full: Watermark indication that this interface has backed up to the half way point of its capabilities.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is an indication. No action is required.
HS Bypass FIFO Full	Fibre Channel Bypass FIFO Full: The FIFO has over run and data has been lost. May result is significant downstream errors.	Indicates a software or hardware failure	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.
HS Rx FIFO Half Full	Fibre Channel Receive FIFO Half Full: Watermark indication that this interface has backed up to the half way point of its capabilities.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is an indication. No action is required.

Stat Label	Explanation of Stat	Probable Cause	Recommended Action
HS Rx FIFO Full	Fibre Channel Receive FIFO Full: The FIFO has over run and data has been lost. May result is significant downstream errors.	Indicates a software or hardware failure	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.
HS Tx FIFO Half Full	Fibre Channel Transmit FIFO Half Full: Watermark indication that this interface has backed up to the half way point of its capabilities.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is an indication. No action is required.
HS Tx FIFO Full	Fibre Channel Transmit FIFO Full: Watermark indication that this interface has transmitted substantial traffic.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Full is an indication. No action is required.
IXP RX FIFO Half Full	Fibre Channel IXP Receive FIFO Half full: Watermark indication that this interface has backed up to the half way point of its capabilities.	Relatively heavy traffic on this interface can cause these counts to increment.	None. FIFO Half Full is an indication. No action is required.
IXP Rx FIFO Full	Fibre Channel IXP Receive FIFO Full: The FIFO has over run and data has been lost. May result in significant downstream errors.	Indicates a software or hardware failure	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.
HS RX Large PKT Discard	A packet larger than allowed was processed on the receive path of the Fibre Channel. May result in significant downstream errors.	Indicates a software or hardware failure, unless the BUS is being brought up or being taken down.	Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to perform. If errors continue a problem may exist. Contact Customer Care Center.

Output

rept-imt-lvl1:sloc=1201

```
Command Accepted - Processing

    tklc1070501 02-02-11 23:10:45 MST  UNKNOWN ??.?.?-65.10.0
    rept-imt-lvl1:sloc=1201
    Command entered at terminal #5.
;
```

```
    tklc1070501 02-02-11 23:10:45 MST  UNKNOWN ??.?.?-65.10.0
    Retrieving LVL1 data from Eagle cards...
    ---------------------------------------------------------------------------
    Card:  H'0000     Elapsed Time (day - h:m:s):   0 - 04:56:52.0

                                            A Bus                   B Bus
    Error Counts                        COM        MUX          COM        MUX
    ------------                 ---------- ----------   ---------- ----------
    Rx CRC Error                          0          0            0          0
    Rx Format Error                       0          0            0          0
    Rx Inv Len                            0        N/A            0          0
    Rx FIFO Half Full                     0          0            0          0
    Rx FIFO Full                          0          0            0          0
    CPU Rx FIFO Half Full                 0        N/A            0        N/A
    CPU Rx FIFO Full                      0        N/A            0        N/A
    CPU Rx MSU FIFO Full                  0        N/A            0        N/A
    CPU Rx LSSU FIFO Full                 0        N/A            0        N/A
    CPU Rx XSU FIFO Full                  0        N/A            0        N/A
    ASU Rx FIFO Half Full                 0        N/A            0        N/A
    ASU Rx FIFO Full                      0        N/A            0        N/A
    SSU Packet Rx                         0        N/A            0        N/A
    ASU Safety Pkt                        0        N/A            0        N/A
    TSU Safety Pkt                        0        N/A            0        N/A
    BSU Safety Pkt                        0        N/A            0        N/A
    SSU Safety Pkt                        0        N/A            0        N/A
    Other Safety Pkt                      0        N/A            0        N/A
    Pri Ctrl Rx Err                       0        N/A            0        N/A
    Pri Ctrl Sanity Err                   0        N/A            0        N/A
    RX HW flow control event              0        N/A            0        N/A
    Pri Ctrl No SOM                       0        N/A            0        N/A
    Pri Ctrl Tx Err                       0        N/A            0        N/A
    Tx FIFO Half Full                     0        N/A            0        N/A
    Tx FIFO Full                          0        N/A            0        N/A
    Future Field                          0        N/A            0        N/A
    Future Field                          0        N/A            0        N/A
    IMT Tx FIFO Half Full                 0          0            0          0
    IMT Tx FIFO Full                      0          0            0          0
    Tx FIFO 3/4 Full                      0        N/A            0        N/A
    IMT By-pass FIFO Half Full            0        N/A            0        N/A
    IMT By-pass FIFO Full                 0        N/A            0        N/A
    Pass thru CRC Error                   0        N/A            0        N/A
    Lost Multicast Pkt                    0        N/A            0        N/A
    Invalid Interrupt                     0        N/A            0        N/A
    Error Int Overflow                    0        N/A            0        N/A
    Large Pkt Error                       0        N/A            0        N/A
    MSU Retran / MUX LVL1 Cong            0          0            0          0
    MSU ROE    / MUX LVL2 Cong            0          0            0          0
```

```
    VC OS Cnt  / MUX Cong Disc            0          0            0          0
    Bus Disconnect Count                  0        N/A            0        N/A
    Violation Error                       0          0            0          0

                                      A Bus                     B Bus
    Low Speed Perf Counts           Rx           Tx           Rx           Tx
    -------------------- ----------- -----------   ----------- -----------
    All  Packets                120K        3440K         3328K         135K
    All  Bytes                   13M          69M           63M          15M
    MSU  Packets                  --           --            0K          17K
    MSU  Bytes                    --           --            8K        2042K
    ASU  Packets                  --           --           17K          31K
    ASU  Bytes                    --           --          209K         374K
    DSU  Packets                  --           --            0K           0K
    DSU  Bytes                    --           --            0K           0K
    HSU  Packets                  --           --            0K           0K
    HSU  Bytes                    --           --            0K           0K
    TSU  Packets                  --           --           87K          87K
    TSU  Bytes                    --           --        12522K       12522K
    LSSU Packets                  --           --         3223K           0K
    LSSU Bytes                    --           --        51575K           0K
    BSU  Packets                  --           --            0K           0K
    BSU  Bytes                    --           --            0K           0K
    SSU  Packets                  --           --            0K           0K
    SSU  Bytes                    --           --            0K           0K
    Othr Packets                  --           --            0K           0K
    Othr Bytes                    --           --            0K           0K
    TAXI Util                     --           --            0            0

;
```

```
    tklc1070501 02-02-11 23:10:54 MST  UNKNOWN ??.?.?-65.10.0

    ==========================================================================
    SUMMARY REPORT:  Totals accumulated from 1 User slots


                                        A Bus                     B Bus
    Error Counts                      COM          MUX          COM          MUX
    ------------                  ---------- ----------   ---------- ----------
    Rx CRC Error                         0          0            0          0
    Rx Format Error                      0          0            0          0
    Rx Inv Len                           0          0            0          0
    Rx FIFO Half Full                    0          0            0          0
    Rx FIFO Full                         0          0            0          0
    CPU Rx FIFO Half Full                0          0            0          0
    CPU Rx FIFO Full                     0          0            0          0
    CPU Rx MSU FIFO Full                 0        N/A            0        N/A
    CPU Rx LSSU FIFO Full                0        N/A            0        N/A
    CPU Rx XSU FIFO Full                 0        N/A            0        N/A
    ASU Rx FIFO Half Full                0        N/A            0        N/A
    ASU Rx FIFO Full                     0        N/A            0        N/A
    SSU Packet Rx                        0        N/A            0        N/A
    ASU Safety Pkt                       0        N/A            0        N/A
    TSU Safety Pkt                       0        N/A            0        N/A
    BSU Safety Pkt                       0        N/A            0        N/A
    SSU Safety Pkt                       0        N/A            0        N/A
    Other Safety Pkt                     0        N/A            0        N/A
    Pri Ctrl Rx Err                      0        N/A            0        N/A
    Pri Ctrl Sanity Err                  0        N/A            0        N/A
    RX HW flow control event             0        N/A            0        N/A
    Pri Ctrl No SOM                      0        N/A            0        N/A
```

```
Pri Ctrl Tx Err                        0        N/A            0        N/A
Tx FIFO Half Full                      0        N/A            0        N/A
Tx FIFO Full                           0        N/A            0        N/A
Future Field                           0        N/A            0        N/A
Future Field                           0        N/A            0        N/A
IMT Tx FIFO Half Full                  0          0            0          0
IMT Tx FIFO Full                       0          0            0          0
Tx FIFO 3/4 Full                       0        N/A            0        N/A
IMT By-pass FIFO Half Full             0        N/A            0        N/A
IMT By-pass FIFO Full                  0        N/A            0        N/A
Pass thru CRC Error                    0        N/A            0        N/A
Lost Multicast Pkt                     0        N/A            0        N/A
Invalid Interrupt                      0        N/A            0        N/A
Error Int Overflow                     0        N/A            0        N/A
Large Pkt Error                        0        N/A            0        N/A
MSU Retran / MUX LVL1 Cong             0          0            0          0
MSU ROE    / MUX LVL2 Cong             0          0            0          0
VC OS Cnt  / MUX Cong Disc             0          0            0          0
Bus Disconnect Count                   0        N/A            0        N/A
Violation Error                        0          0            0          0

                                   A Bus                    B Bus
Low Speed Perf Counts          Rx          Tx           Rx          Tx
---------------------- ----------- -----------  ----------- -----------
All  Packets                  0M          3M           3M          0M
All  Bytes                   13M         69M          63M         15M
MSU  Packets                  --          --           0K         17K
MSU  Bytes                    --          --           8K       2042K
ASU  Packets                  --          --          17K         31K
ASU  Bytes                    --          --         209K        374K
DSU  Packets                  --          --           0K          0K
DSU  Bytes                    --          --           0K          0K
HSU  Packets                  --          --           0K          0K
HSU  Bytes                    --          --           0K          0K
TSU  Packets                  --          --          87K         87K
TSU  Bytes                    --          --       12522K      12522K
LSSU Packets                  --          --        3223K          0K
LSSU Bytes                    --          --       51575K          0K
BSU  Packets                  --          --           0K          0K
BSU  Bytes                    --          --           0K          0K
SSU  Packets                  --          --           0K          0K
SSU  Bytes                    --          --           0K          0K
Othr Packets                  --          --           0K          0K
Othr Bytes                    --          --           0K          0K

------------------------------------------------------------------------------

SUMMARY REPORT HS Totals accummlated from        1  HIPR2 Slots
                                                 1  HIPR Slots
                                                 0  HMUX Slots


High Speed Error Summary             A Bus       B Bus
------------------------            ----------  ----------
HS Rx Packet CRC Error                    --           0
HS Rx Packet Format Error                 --           0
HS Rx Disparity Error                     --           0
HS Rx Sync Lost Error                     --           0
HS Rx Code Word Error                     --           0
HS Rx Packet SOM Before EOM               --           0
HS Bypass FIFO Half Full                  --           0
HS Bypass FIFO Full                       --           0
HS Rx FIFO Half Full                      --           0
HS Rx FIFO Full                           --           0
```

```
    HS Tx FIFO Half Full                    --          0
    HS Tx FIFO Full                         --          0
    IXP Rx FIFO Half Full                   --          0
    IXP Rx FIFO Full                        --          0
    HS RX Large PKT discard                 --          0

    ------------------------------------------------------------------------
    ;END OF REPORT
;
```

```
tklc1070501 02-02-11 23:11:06 MST UNKNOWN ??.?.?-65.10.0
 Command Completed.
```

Note: In the top portion of this sample output "Error Counts" there are three types of possible output for each field:

1) A decimal number (indicates a count)

2) “—“ (indicates NO DATA)

3) “N/A” (indicates this field is not supported)

Legend

- **Card**—IMT address of the card in hexadecimal
- Elapsed Time (day - h:m:s)— Amount of time that has elapsed since a card reset has occurred or the IMT statistics were cleared with the `clr-imt-stats` command. This is shown in the format *day - h:m:s*, where *day* is the number of days that have elapsed, and *h:m:s* is the amount of time in the current day in hours, minutes, and seconds (and tenths of seconds).
- "--"—"--" in the statistics column signifies that the statistics count is not applicable for the corresponding Card type.
- **Error Count**—IMT level 1 error statistics displayed in this report.
- **Perf Count**—IMT level 1 performance statistics displayed in this report.
- **A Bus value** and **B Bus value—**Values of the IMT level 1 statistics on IMT bus A and IMT bus B. Refer to the Notes section for descriptions of the statistics that are shown in the report for each card and in the Summary of totals for all requested cards, and their possible causes and corrective actions. Contact the Customer Care Center if the count is excessive in relation to other cards.

"Excessive" count is primarily determined by the operator based upon:

- Overall system behavior
- Duration of time from when the last statistics were taken
- Statistics of an individual card in relation to other cards

The following types of Packets are included in the counts:

- **Safety Packet—**When an IMT packet goes around the IMT, a pre-determined value in the packet is decremented by each card. When this value reaches zero, the card that receives the value equal to zero logs this as a safety packet and removes the IMT packet from the IMT.
- **Message Signaling Unit (MSU)**—IMT packet containing data
- **Acknowledgement Signaling Unit (ASU)**—ACK for an MSU that is sent from the destination card back to the originating card.

- **Test Signaling Unit (TSU)**—Typically used to keep the card on the bus. There are many types of TSUs one of which performs a heartbeat function.
- **Broadcast Signaling Unit (BSU)**—Function is the same as an MSU except that each card will process the BSU and then copy it to the next card for processing. Used for IMT maintenance functions.
- **Safety Signaling Unit (SSU)**—Anytime a packet times out (Safety Packet), the card that logged a safety packet sends an SSU to make sure the original destination card is still on the IMT bus.
- **Isolation Signaling Unit (ISU)**—These are only used by the Fault Isolation test (tst-imt), in an attempt to isolate a hard failure on an IMT bus.
- **Other Packets and Other Bytes**—These include the ISUs when Fault Isolation test (tst-imt) is run (IMT bus is inhibited) and TVG packets when the IMT bus is allowed.

Related Commands

clr-imt-stats, *conn-imt*, *disc-imt*, *rept-imt-info*, *rept-imt-lvl2*, *rept-stat-imt*, *rmv-imt*, *rst-imt*, *tst-imt*

rept-imt-lvl2 Report IMT Level 2

Use this command to display IMT level 2 statistics for a card. This report displays IMT traffic statistics for one or both IMT busses in the system. The report can be filtered as follows:

- Report statistics between the source card (specified with the loc or l parameter), whose statistics pool is queried for report information, and another card (specified with the sloc or s parameter).
- Report statistics between the source card and a range of cards (specified with the sloc/eloc or s/e parameter combination).

Parameters

b (optional)

IMT bus identification.

Range:

a

Displays statistics for IMT bus A.

b

Displays statistics for IMT bus B.

both

Displays statistics for both IMT busses, A and B.

Default:

both

e (optional)

End address. The IMT address of the last card in the range. A decimal value or a hexadecimal value can be specified for this parameter (see *Table 42: Hexadecimal/Decimal Values for s and e Parameters* to map the values by card location).

Range:

0 - 251

The value can be specified in decimal (0 – 251) or hexadecimal (*h'00 – h'fe*).

Default:

If the s parameter is specified, the default is the s parameter value.

If the s parameter is not specified, the default is *251*.

eloc (optional)

End location. Specifies the card location of the last card in the range.

Range:

1101 - 1108, 1111 - 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

If sloc is specified—current sloc value; displays information for one card.

If sloc is not specified— *1115*, which corresponds to IMT address *251* (e=251); displays information for entire range of locations.

l (optional)

Source card IMT address. The IMT address of the card whose statistics pool is to be queried for report information.

Range:

0 - 251

loc (optional)

Source card location. The location of the card whose statistics pool is to be queried for report information.

Range:

1101 - 1108, 1111 - 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

s (optional)

Start address. The IMT address of the first (or only) card in the range. A decimal value or a hexadecimal value can be specified for this parameter (see *Table 42: Hexadecimal/Decimal Values for s and e Parameters* to map the values by card location).

Range:

0 - 251

The value can be specified in decimal (0 – 251) or hexadecimal (*h'00 – h'fe*)

Default:

If e is specified—current l parameter value.

If e is not specified— *0*.

sloc (optional)

Start location. The card location of the first card in the range.

Range:

1101 - 1108, 1111 - 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

If eloc is specified—current sloc value.

If eloc is not specified—IMT address 0 (s=0).

trm (optional)

Serial port (printer location) where the report is to be sent.

Range:

1 - 40

Default:

The report displays on the terminal where the command was issued.

Example

```
rept-imt-lvl2:l=00:s=00:e=02:b=a
```

Dependencies

The s/e parameters and sloc/eloc parameters cannot be specified together in the command.

This command cannot be entered if the `clr-imt-stats`, `rept-imt-info`, `rept-imt-lvl1`, or `tst-imt` command is running.

The l or loc parameter must be specified.

This command cannot be entered during IMT statistics collection following an hourly boundary.

The l parameter or the loc parameter must be specified. Both parameters cannot be specified.

A card location must be specified that is valid and defined in the database.

This command cannot be entered during an Extended Bit Error Rate Test (BERT).

Notes

Table 42: Hexadecimal/Decimal Values for s and e Parameters maps each card location to the decimal and hexadecimal values that can be specified for the s and e parameters.

Table 42: Hexadecimal/Decimal Values for s and e Parameters maps each card location to the decimal and hexadecimal values that can be specified for the s and e parameters.

Output

If the source card location falls within the range of cards specified with the sloc/eloc or s/e parameters, then the output report for the source card shows zeros. The zeros are reported because the source card location does not use the IMT to communicate with itself and, therefore, does not report any values or pegs for traffic routed to itself. This command reports the values or pegs received, transmitted, or re-transmitted across the IMT bus.

```
rept-imt-lvl2:sloc=1101:eloc=1115:loc=1101
```

```
    rlghncxa03w 10-09-08 14:49:58 EST  EAGLE5 43.0.0
    Retrieving data from card...
    ------------------------------------------------------------------------------
    Card:  H'00f0     Bus:  A

    Field                    f0    f1    f2    f3    f4    f5    f6    f7
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             ALGN  ALGN  ALGN  -OS-  -OS-  -OS-  ALGN  -OS-
    OS Count         (dec)     2     7     4     0     0     0    16     0
    Transmit BSN     (dec)     0   148     1     0     0     0     0     0
    Transmit FSN     (dec)     0   139   151     0     0     0     0     0
    Receive BSN      (dec)     0   139   151     0     0     0     0     0
    Receive FSN      (dec)     1   149     2     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:49:59 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------------
    Card:  H'00f0     Bus:  A

    Field                    f8    f9    fa    fb
    -----                   ----  ----  ----  ----
    Link Status             ALGN  -OS-  ALGN  ALGN
    OS Count         (dec)    16     0     1     2
    Transmit BSN     (dec)     0     0   158   168
    Transmit FSN     (dec)     1     0     9   106
    Receive BSN      (dec)     1     0     9   106
    Receive FSN      (dec)     1     1   159   169
    Unack Messages   (dec)     0     0     0     0
    Invalid Length   (dec)     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000
```

```
    Retx Count       (dec)     0     0     0     0
    Minimum ack time (ms)      0     0     0     0
    Maximum ack time (ms)      0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:00 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  A

    Field                    00    01    02    03    04    05    06    07
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             ALGN  -OS-  -OS-  -OS-  ALGN  ALGN  ALGN  -OS-
    OS Count         (dec)    11     0     0     0     4     4     4     0
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     1     0     0     0     1     1     1     0
    Receive BSN      (dec)     1     0     0     0     1     1     1     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:01 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  A

    Field                    08    09    0a    0b    0c    0d    0e    0f
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             -OS-  -OS-  ALGN  ALGN  ALGN  ALGN  -OS-  -OS-
    OS Count         (dec)     0     0     4     4     1     1     0     0
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     0     0     0     0     0     0     0     0
    Receive BSN      (dec)     0     0     0     0     0     0     0     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:02 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  A

    Field                    10    11    12    13    14    15    16    17
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             ALGN  ALGN  -OS-  -OS-  ALGN  ALGN  -OS-  ALGN
    OS Count         (dec)     1     4     0     0     1    11     0    20
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     0     1     0     0   251     0     0     0
    Receive BSN      (dec)     0     1     0     0   251     0     0     0
```

```
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:03 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  A

    Field                    18    19    1a    1b    1c    1d    1e    1f
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             ALGN  -OS-  ALGN  ALGN  ALGN  -OS-  -OS-  ALGN
    OS Count         (dec)    19     0     4     1     1     9     0     1
    Transmit BSN     (dec)     0     0     0     0     0     0     0     6
    Transmit FSN     (dec)     1     0     0     0     0     0     0     0
    Receive BSN      (dec)     1     0     0     0     0     0     0     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     7
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:04 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  A

    Field                    20    21    22    23    24    25    26    27
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             -OS-  -OS-  -OS-  -OS-  -OS-  -OS-  -OS-  -OS-
    OS Count         (dec)     0     0     0     0     0     0     0     0
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     0     0     0     0     0     0     0     0
    Receive BSN      (dec)     0     0     0     0     0     0     0     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:05 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  A
```

```
    Field                   28
    -----                  ----
    Link Status            -OS-
    OS Count         (dec)    0
    Transmit BSN     (dec)    0
    Transmit FSN     (dec)    0
    Receive BSN      (dec)    0
    Receive FSN      (dec)    1
    Unack Messages   (dec)    0
    Invalid Length   (dec)    0
    Invalid rx BSN   (dec)    0
    Invalid rx FSN   (dec)    0
    Invalid LSSU     (dec)    0
    Invalid ASU      (dec)    0
    RTB Address      (hex) 0000
    Retx Count       (dec)    0
    Minimum ack time (ms)     0
    Maximum ack time (ms)     0
;

    rlghncxa03w 10-09-08 14:50:07 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  B

    Field                   f0    f1    f2    f3    f4    f5    f6    f7
    -----                  ----  ----  ----  ----  ----  ----  ----  ----
    Link Status            ALGN  ALGN  ALGN  -OS-  -OS-  -OS-  ALGN  -OS-
    OS Count         (dec)    6     6     3     0     0     0    13     0
    Transmit BSN     (dec)    0     0     0     0     0     0     0     0
    Transmit FSN     (dec)    0     0     0     0     0     0     0     0
    Receive BSN      (dec)    0     0     0     0     0     0     0     0
    Receive FSN      (dec)    1     1     1     1     1     1     1     1
    Unack Messages   (dec)    0     0     0     0     0     0     0     0
    Invalid Length   (dec)    0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)    0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)    0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)    0     0     0     0     0     0     0     0
    Invalid ASU      (dec)    0     0     0     0     0     0     0     0
    RTB Address      (hex) 0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)    0     0     0     0     0     0     0     0
    Minimum ack time (ms)     0     0     0     0     0     0     0     0
    Maximum ack time (ms)     0     0     0     0     0     0     0     0
;
    rlghncxa03w 10-09-08 14:50:08 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  B

    Field                   f8    f9    fa    fb
    -----                  ----  ----  ----  ----
    Link Status            ALGN  -OS-  ALGN  ALGN
    OS Count         (dec)   15     0     0     0
    Transmit BSN     (dec)    0     0     0     0
    Transmit FSN     (dec)    0     0     0     0
    Receive BSN      (dec)    0     0     0     0
    Receive FSN      (dec)    1     1     1     1
    Unack Messages   (dec)    0     0     0     0
    Invalid Length   (dec)    0     0     0     0
    Invalid rx BSN   (dec)    0     0     0     0
    Invalid rx FSN   (dec)    0     0     0     0
    Invalid LSSU     (dec)    0     0     0     0
    Invalid ASU      (dec)    0     0     0     0
    RTB Address      (hex) 0000  0000  0000  0000
    Retx Count       (dec)    0     0     0     0
```

```
    Minimum ack time (ms)      0     0     0     0
    Maximum ack time (ms)      0     0     0     0
;
    rlghncxa03w 10-09-08 14:50:09 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  B

    Field                    00    01    02    03    04    05    06    07
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             ALGN  -OS-  -OS-  -OS-  ALGN  ALGN  ALGN  -OS-
    OS Count         (dec)    10     0     0     0     4     4     4     0
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     0     0     0     0     0     0     0     0
    Receive BSN      (dec)     0     0     0     0     0     0     0     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:10 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  B

    Field                    08    09    0a    0b    0c    0d    0e    0f
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             -OS-  -OS-  ALGN  ALGN  ALGN  ALGN  -OS-  -OS-
    OS Count         (dec)     0     0     4     4     2     2     0     0
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     0     0     0     0     0     0     0     0
    Receive BSN      (dec)     0     0     0     0     0     0     0     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:11 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  B

    Field                    10    11    12    13    14    15    16    17
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             ALGN  ALGN  -OS-  -OS-  ALGN  ALGN  -OS-  ALGN
    OS Count         (dec)     1     6     0     0     1    11     0    21
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     0     0     0     0     0     0     0     0
    Receive BSN      (dec)     0     0     0     0     0     0     0     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
```

```
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:12 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  B

    Field                    18    19    1a    1b    1c    1d    1e    1f
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             ALGN  -OS-  ALGN  ALGN  ALGN  -OS-  -OS-  ALGN
    OS Count         (dec)    19     0     5     2     1     9     0     2
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     0     0     0     0     0     0     0     0
    Receive BSN      (dec)     0     0     0     0     0     0     0     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:13 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  B

    Field                    20    21    22    23    24    25    26    27
    -----                   ----  ----  ----  ----  ----  ----  ----  ----
    Link Status             -OS-  -OS-  -OS-  -OS-  -OS-  -OS-  -OS-  -OS-
    OS Count         (dec)     0     0     0     0     0     0     0     0
    Transmit BSN     (dec)     0     0     0     0     0     0     0     0
    Transmit FSN     (dec)     0     0     0     0     0     0     0     0
    Receive BSN      (dec)     0     0     0     0     0     0     0     0
    Receive FSN      (dec)     1     1     1     1     1     1     1     1
    Unack Messages   (dec)     0     0     0     0     0     0     0     0
    Invalid Length   (dec)     0     0     0     0     0     0     0     0
    Invalid rx BSN   (dec)     0     0     0     0     0     0     0     0
    Invalid rx FSN   (dec)     0     0     0     0     0     0     0     0
    Invalid LSSU     (dec)     0     0     0     0     0     0     0     0
    Invalid ASU      (dec)     0     0     0     0     0     0     0     0
    RTB Address      (hex)  0000  0000  0000  0000  0000  0000  0000  0000
    Retx Count       (dec)     0     0     0     0     0     0     0     0
    Minimum ack time (ms)      0     0     0     0     0     0     0     0
    Maximum ack time (ms)      0     0     0     0     0     0     0     0
;

    rlghncxa03w 10-09-08 14:50:14 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    Card:  H'00f0     Bus:  B

    Field                    28
```

```
    -----                   ----
    Link Status             -OS-
    OS Count         (dec)     0
    Transmit BSN     (dec)     0
    Transmit FSN     (dec)     0
    Receive BSN      (dec)     0
    Receive FSN      (dec)     1
    Unack Messages   (dec)     0
    Invalid Length   (dec)     0
    Invalid rx BSN   (dec)     0
    Invalid rx FSN   (dec)     0
    Invalid LSSU     (dec)     0
    Invalid ASU      (dec)     0
    RTB Address      (hex)  0000
    Retx Count       (dec)     0
    Minimum ack time (ms)      0
    Maximum ack time (ms)      0
;

    rlghncxa03w 10-09-08 14:50:15 EST  EAGLE5 43.0.0
    ------------------------------------------------------------------------
    ;END OF REPORT
;

    rlghncxa03w 10-09-08 14:50:15 EST  EAGLE5 43.0.0
    Command Completed.
;

    rlghncxa03w 10-09-08 14:50:25 EST  EAGLE5 43.0.0
    9940.1004    CARD 1311,B   INFO    MTP rcvd unknown DPC
                 SIO=83   OPC=   03338          DPC=   03346
                 LSN=ls1311i0
                 Report Date: 10-09-08  Time:14:50:25
;
```

Legend

- **Card—**IMT address of the card location specified by the l parameter in this command in hexadecimal
- **Bus**—IMT bus for which the IMT level 2 statistics are being reported
- **Field**—IMT level 2 statistics displayed in this report
- **00 - ef**—IMT address of the cards on the IMT bus in hexadecimal
- **Link Status**—Status of the link: ALGN (aligned) or OS (out of service)
- **OS Count**—Number of times the link has cycled between being aligned and being out of service
- **Transmit BSN**—Number of BSNs transmitted.
- **Transmit FSN**—Number of FSNs transmitted
- **Receive BSN**—Number of BSNs received
- **Receive FSN**—Sequence number for the next FSN that the source card location expects to receive
- **Unack Messages**—Number of unacknowledged messages received
- **Invalid Length**—Number of messages received with invalid length indicators
- **Invalid rx BSN**—Number of invalid BSNs received
- **Invalid rx FSN**—Number of invalid FSNs received
- **Invalid LSSU**—Number of invalid LSSUs received
- **Invalid ASU**—Number of invalid ASUs received
- **RTB Address**—Address of the retransmission buffer, in hexadecimal

- **Retx count**—Number of re-transmitted MSUs
- **Minimum ack time**—Minimum amount of time for an acknowledgment, in milliseconds
- **Maximum ack time**—Maximum amount of time for an acknowledgment, in milliseconds

Related Commands

clr-imt-stats, *conn-imt*, *disc-imt*, *rept-imt-info*, *rept-imt-lvl1*, *rept-stat-imt*, *rmv-imt*, *rst-imt*, *tst-imt*

rept-meas

Report Measurements

Use this command to generate measurement reports on demand. The reports display on the UI terminal, and are not transferred to the customer FTP server when the Measurements Platform feature is enabled.

Parameters

enttype (mandatory)

Entity type to report on.

Range:

idpr

Measurements for IDPR

link

Measurements for signaling links

lnkset

Measurements for linksets

lnp

Measurements for local number portability

lsdestni

Measurements for linkset destination network identifiers

lsonismt

Measurements for ISUP message type screening

lsorigni

Measurements for linkset originating network identifiers

mapscrn

Measurements for GSM MAP message screening

np

Measurements for INP, INP CRP, G-Port, A-Port, MO-based GSM SMS NP, MO-based IS41 SMS NP, IGM, MT-Based GSM SMS NP, and MT-Based IS41 SMS NP

origni

Measurements for originating network identifiers greater than 5

origninc

Measurements for originating network identifiers (less than 5, small networks) for network clusters

sctpasoc

Measurements per association for the SCTP protocol (used to carry M3UA, M2PA, SUA and DIAM traffic)

sctpcard

Measurements per card for the SCTP protocol (used to carry M3UA, M2PA, SUA and DIAM traffic)

sip

Measurements for SIP

stp

Measurements pertaining to the Signaling Transfer Point in general or summarized totals recorded on the STP

stplan

Measurements for STP Local Area Network data links

tt

Measurements for translation types

ua

Measurements per application server/association for the M3UA and SUA protocols

type (mandatory)

Type of measurement report.

Range:

avl

Availability measurements

avld

Daily availability measurements

avldth

Day to hour availability measurements.

comp

Component measurements

gtwy

Internetwork gateway-related data from the STP for ANSI and ITU measurements. ANSI gateway measurements are pegged on a per-linkset, per-Network Indicator basis, whereas ITU measurements are pegged on a per-linkset basis.

mtcd

Daily maintenance measurements

mtcdth

Day-to-hour maintenance measurements

mtch

Hourly maintenance measurements

mtcs

Link/linkset maintenance status

nm

Network management, on-demand

rbase

Schedule-report type record base measurements

systot

STP system totals

aname (optional)

Association name. This parameter specifies the name assigned to the association in the IPAPSOCK table.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

appl (optional)

GPL to report measurements on.

This parameter can be used only with the *stplan-avl* (enttype=stplan:type=avl) measurement report.

Range:

xyyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters. Valid GPLs are:

atmhc —Used by E5-ATM or E5-ATM-B cards to allow the card to support up to 3 signaling links

ipghc —Used by E5-ENET or E5-ENET-B cards to support point-to-multipoint IP connectivity for ANSI and ITU point codes

iplhc —Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ANSI and ITU point codes

sccphc —Used by E5-SM4G and E5-SM8G-B cards to support EPAP-based features and the LNP ELAP Configuration feature. If no EPAP-based or LNP ELAP Configuration feature is turned on, and an E5-SM4G or E5-SM8G-B card is present, then the GPL processes normal GTT traffic.

slanhc —Used by E5-ENET and E5-ENET-B cards to support the STPLAN application

ss7hc —Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards. Allows the card to support up to 32 (E5-E1T1) or 64 (HC-MIM and E5-E1T1-B) signaling links for E1 and T1 functions.

asname (optional)

Application server name. The name of the application server.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter.

day (optional)

Day of the week for daily measurement reports.

Range:

mon

tue

wed

thu

fri

sat

sun

Default:

The previous single day report is generated.

hh (optional)

Half-hour interval. The ending time for the collection interval; for example, *hh=0300* generates a report for 2:30-3:00.

Range:

0000 - 2400

hhmm where *hh*= 00-24 (hour) and *mm*= 00 or 30 (minute)

Default:

The hh parameter value is not given.

link (optional)

The link on the card specified in the loc parameter

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling link ports.

Default:

none

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

none

lsn (optional)

Linkset name for the linkset where link or linkset measurements are reported.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Default:

none

nc (optional)

Network cluster for the specified GTWY measurement report.

Range:

0 - 255

Default:

none

ni (optional)

Network indicator for the specified GTWY measurement report.

Range:

0 - 255

Default:

none

nzo (optional)

Print non-zero measurements only.

Range:

yes

no

Default:

yes for types *avl*, *avld*, and *avldth*.

This parameter is not used with the other report types.

period (optional)

Relative time period to report.

Range:

last

The previous collection interval

specific

A specific half-hourly interval (specified with the hh parameter)

active

The current collection interval

all

All collection intervals.

Default:

none

qh (optional)

Quarter-hour interval. This parameter implies the ending time for the collection interval; for example, *qh=0315* generates a report for **3:00-3:15**.

Range:

0000 - 2400

hhmm where *hh*= 00-24 (hour) and *mm*= 00, 15, 30, or 45 (minute)

Default:

none

trm (optional)

Serial port (printer location) where the report is to be sent.

Range:

1 - 16

Default:

none

tt (optional)

Translation type to be reported.

Range:

0 - 255

Default:

none

Example

```
rept-meas:enttype=link:type=avl:loc=1201:link=a
rept-meas:enttype=lnp:type=mtch:period=specific:hh=1300
rept-meas:enttype=lnp:type=mtcd:period=specific:day=tue
rept-meas:type=systot:enttype=tt:tt=26
rept-meas:type=mtcd:enttype=sctpasoc:aname=assoc01
rept-meas:type=mtcdth:enttype=ua:aname=assoc01:asname=appserv01
rept-meas:enttype=sip:type=mtcd
```

Dependencies

This command cannot be used to specify a report type if that report type is currently printing.

Valid parameter combinations depend on the report type specified. These combinations are shown in *Table 45: Valid Parameter Combinations for the type Parameter* . An X in a cell indicates that the parameter is valid for the report type shown.

Table 45: Valid Parameter Combinations for the type Parameter

Parameter Value	Report Types (type parameter)											
	systot	comp	mtcd	mtcdth	mtch	mtcs	nm	avl	avld	avldth	gtwy	rbase
enttype:												
link		X	X	X		X	X	X	X	X		X
Parameter Value	Report Types (type parameter)											
	systot	comp	mtcd	mtcdth	mtch	mtcs	nm	avl	avld	avldth	gtwy	rbase
linkset		X	X	X		X	X				X	X
lnp			X		X							
lsdestni											X	
lsonismt											X	
lsorigni											X	
mapscrn			X		X							
np			X		X							
origni											X	

origninc											X	
sctpasoc		X	X	X								
sctpcard		X	X	X								
sip	X		X									
stp	X		X	X		X					X	X
stplan	X		X	X				X				
tt	X											
ua		X	X	X								
period:												
last	X	X	X	X	X		X	X	X	X	X	
specific	X	X			X			X			X	
active		X				X	X	X				X
all			X					X				
nzo								X	X	X		

When the Enhanced GSM MAP Screening (EGMS) feature is turned on, this command cannot be used to generate EGMS measurements reports.

The entity specified by the loc parameter must be equipped in the database.

When enttype=link is specified, the card in the location specified by the loc parameter must be a LIM.

Hourly collection and report processing cannot be in progress when report type *mtch* is specified.

Quarter-hourly collection and report processing cannot be in progress when report type *comp*, *systot*, *avl*, or *gtwy* is specified.

The *mtcdth* report type is unavailable between midnight and 1:00 AM (0100).

Day-to-hour collection and report processing cannot be in progress when report type *mtcd* or *mtcdth* is specified.

Daily collection and report processing cannot be in progress when report type *mtcd* is specified.

Half-hourly collection and report processing cannot be in progress when report type *comp*, *systot*, *avl*, or *gtwy* is specified.

5-minute collection and report processing cannot be in progress when report type *nm* is specified.

If the nc parameter is specified for origin reports, then the ni parameter must be specified.

If the ni parameter is specified for origin reports, then measurements data must be available at the time the command is entered.

The **day** parameter can be specified only for report type *mtcd* and entity types *lnp* and *mapscrn*.

The LNP feature must be turned on before the enttype=lnp parameter can be specified.

The GSM Map Screening feature must be turned on before the enttype=mapscrn parameter can be specified.

A primary MCPM card must be available when the Measurements Platform collection option is enabled and this command is entered.

The 15 Minute Measurements feature must be turned on and the 15 Minute Measurements collection option must be on before the qh parameter can be specified.

The hh parameter must specify a half-hourly boundary (the end of the requested half-hour for the report) for valid report types. An hourly boundary must be specified for report type *mtch* (that is, only half hours ending in 00, such as 0100, 0200 or 0300).

The hh and qh parameters cannot be specified together in the command.

When the period=last parameter is specified, the hh, qh, and day parameters cannot be specified.

If the period=active parameter is specified, then the hh and qh parameters cannot be specified.

When the period=specific parameter is specified, the hh, qh, or day parameter must be specified. The hh, qh, and day parameters can be specified only if the period=specific parameter is specified.

A quarter-hour boundary must be specified for the qh parameter, except for report type *mtch*. An hourly boundary must be specified for report type *mtch* (only quarter hours ending in 00, such as 0100, 0200, or 0300).

The hh and qh parameters cannot be specified if a value of *avld, mtcd, nm, rbase*, or *mtcs* is specified for the type parameter.

If the link parameter is specified, the loc parameter must be specified.

The lsn and loc parameters cannot be specified together in the command.

If the enttype=link parameter is specified, then the loc and port parameters or the lsn parameter must be specified.

The enttype=stplan and the type=avl parameters must be specified before the appl parameter can be specified.

The period=active parameter cannot be specified when the enttype=stp parameter or the enttype=tt parameter is specified.

If a value of *idpr, lnp, mapscrn, np, origni, origninc, stp, stplan*, or *tt* is specified for the enttype parameter, or if the type=systot parameter is specified, then the lsn parameter cannot be specified.

For entity type *avl*, if period=all is specified, the loc and port parameters must be specified.

A value of *avl*, *avld*, or *avldth* must be specified for the type parameter before the nzo=yes parameter can be specified.

The appl and loc parameters cannot be specified in the same command.

When the enttype=lnp parameter is specified, the trm parameter cannot be specified because LNP measurements can be written only to the FTA. To retrieve this data, use the procedure described with the `act-file-trns` command information.

The type=systot and loc parameters cannot be specified in the same command.

If the type=gtwy parameter is specified, and the value of the enttype parameter is *lsorigni*, *lsdestni*, or *lsonismt*, then the ni parameter cannot be specified for ITU linksets. The ni parameter is allowed only for ANSI linksets.

If the type=gtwy parameter is specified, and a value of *lsdestni*, *lsonismt*, or *lsorigni* is specified for the enttype parameter for an ITU linkset, then only the lsn parameter can be specified.

If the enttype=sctpcard parameter is specified, then the card in the location specified by the loc parameter must be an IPLIMx, IPGWx, or IPSG card.

The enttype=sctpasoc or enttype=ua parameter must be specified before the aname parameter can be specified.

The enttype=ua parameter must be specified before the asname parameter can be specified.

The G-Port, INP, or AINPQ feature must be turned on before the enttype=np parameter can be specified.

If the enttype=sctpcard parameter is specified, then the loc parameter must be specified.

If the enttype=sctpcard parameter is specified, then a card must be installed in the location specified by the loc parameter.

The enttype=link parameter must be specified before the link parameter can be specified.

The type=gtwy parameter and the enttype=origninc parameter must be specified before the nc parameter can be specified. If the enttype=lnp parameter is specified, then the nc parameter cannot be specified.

The type=gtwy parameter must be specified, and a value of *lsdestni*, *lsonismt*, *lsorigni*, *origni*, or *origninc* must be specified for the enttype parameter before the ni parameter can be specified. If the enttype=lnp parameter is specified, then the ni parameter cannot be specified.

The enttype=tt parameter must be specified before the tt parameter can be specified. If the enttype=tt parameter is specified, then the tt parameter must be specified.

If a value of *sctpasoc* or *ua* is specified for the enttype parameter, then the aname parameter must be specified.

The association specified by the aname parameter must be provisioned in the system.

If the enttype=ua parameter is specified, then the asname parameter must be specified.

The application server specified by the asname parameter must be provisioned in the system.

The association specified by the aname parameter must be assigned to the application server specified by the asname parameter.

The lsn and link parameters cannot be specified together in the command.

If the period=all parameter is specified, then the hh and qh parameters cannot be specified.

Either the specified Linkset does not exist or no link is configured for it.

The A-Port, G-Port, IS41 GSM Migration, or Prepaid SMS Intercept Ph1 feature must be enabled, or the INP, MO SMS IS41-to-GSM Migration, MO-based GSM SMS NP, or MO-based IS41 SMS NP feature must be turned on before the mtchnp=on parameter or the mtcdnp=on parameter can be specified.

The value specified for the appl parameter must be a supported GPL.

If the Integrated Measurements feature is turned on, then a value of *lnp*, *np*, or *mapscrn* cannot be specified for the enttype parameter.

If the loc parameter is specified, then a value of *stplan*, *link*, or *sctpcard* must be specified for the enttype parameter. If the enttype=lnkset parameter is specified, then the loc parameter cannot be specified.

If the enttype=link parameter is specified, then the values specified for the loc and link parameters must already exist in the database.

Period/type combinations:

- If a value of *rbase* or *mtcs* is specified for the type parameter, then a value of *active* must be specified for the period parameter.
- If a value of *avld, avldth, mtcdth*, or *nm* is specified for the type parameter, then the period=specific parameter cannot be specified.
- If the period=active parameter is specified, then a value of *avld, avldth, mtcd, mtch, mtcdth*, or *systot* cannot be specified for the type parameter.
- The type=avl parameter or the enttype=lnp and type=mtcd parameters must be specified before the period=all parameter can be specified.
- If the type=mtcd and period=specific parameters are specified, then a value of *lnp*, *mapscrn*, or *np* must be specified for the enttype parameter.

SIPNP Feature must be enabled before the enttype=sip and type=mtcd/systot parameters can be specified.

The location specified must be in the range from 1101 to 6118, except for MUX cards.

If the enttype=tt parameter is specified, then the tt parameter must be specified.

The type parameter must be one of the AVL, AVLD, AVLDTH, COMP, GTWY, MTCD, MTCDTH, MTCH, MTCS, NM, RBASE, or SYSTOT range values.

An entity type (ENTTYPE) of DEIR, EIR, LNP, MAPSCRN, NP, or VFLX requires the DAY parameter to be specified.

Notes

INP, GSM MAP screening, LNP, G-Port, A-Port, and IGM measurements are sent to the FTA (file transfer area) rather than to the EAGLE terminal.

If an on-demand report is requested while the collection for that interval is in progress, the requested report will not be generated. The `rept-meas` command must be entered again.

If this command is executed, and one or more cards did not respond to the request for measurements because the card was Out-Of-Service, then the following warning message may appear:

```
Measurement data represents an incomplete interval
```

This message does not indicate that data was lost.

If this command is executed, and measurements data does not exist for the specified time, then the following message may appear:

```
LINK-COMP MEASUREMENT:  LOC: 1201, LINK: A, LSN: (MTP2)
Measurement data are not current.
```

Default values are shown for LOC, LINK, and LSN. These values always appear in the message, no matter what values were specified in command.

Output

Note: Refer to *Measurements Reference* for `rept-meas` output examples.

Related Commands

chg-meas, *copy-meas*, *rept-ftp-meas*, *rtrv-meas-sched*

rept-stat-alm — Report Status Alarm

Use this command to provide status of all alarms.

Parameters

clli (optional)

CLLI string. Displays only alarms that pertain to a particular CLLI.

Range:

ayyyyyyyyyy

dev (optional)

Device. The type of device for which alarms are displayed.

Range:

applsock

as

card

cdt

clock

dlk

ls

lsmsconn

route

slk

trm

rtx

e1port

t1port

tps

enet

display (optional)

Type of alarms to be displayed. When the display=inhb parameter is specified, the Alarm Inhibit Report appears in the command output and provides information about inhibited alarms in the system. The dev parameter can be specified with this parameter to display the Alarm Inhibit Report for a specific device type.

Range:

inhb

dur (optional)

Duration. This parameter indicates whether to display permanently inhibited alarms, temporarily inhibited alarms, or timed inhibited alarms. This parameter is valid only when the display=inhb parameter is specified.

Range:

perm

temp

timed

edate (optional)

Expiry date. This parameter allows the user to see timed alarm inhibits that will expire on the specified date.

Range:

101 - 991231

Specify the date in the format *year*, followed by *month*, followed by *day*.

Example

```
rept-stat-alm
rept-stat-alm:display=inhb:dev=card
rept-stat-alm:display=inhb:clli=slkset1:dev=ls
rept-stat-alm:display=inhb
rept-stat-alm:display=inhb:dur=timed
rept-stat-alm:display=inhb:dur=timed:edate=040520
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

The dur parameter can be specified only if the display=inhb parameter is specified.

The dur, dev, or clli parameter can be specified only if the display=inhb parameter is specified.

The edate parameter can be specified only if the dur=timed parameter is specified.

The dev parameter can have only the values *slk*, *ls*, or *route* if the clli parameter is specified.

The dur parameter must be compatible with the specified device.

The value specified for the clli parameter must already exist in the DSTN table.

The value specified for the edate parameter must be greater than the system date.

Notes

None

Output

This example shows the output when the system is clean and before a maintenance baseline has been established:

```
rept-stat-alm
```

```
    rlghncxa03w 10-02-27 15:00:53 EST  EAGLE 42.0.0
    ALARM  TRANSFER= LMC
    ALARM  MODE      CRIT= SILENT     MAJR= SILENT     MINR= SILENT
    ALARM  FRAME 1      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 2      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 3      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 4      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 5      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 6      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME GPF    CRIT=   0         MAJR=   0         MINR=   0
    TOTAL ALARMS        CRIT=   0         MAJR=   0         MINR=   0
    PERM. INH. ALARMS   CRIT=   0         MAJR=   0         MINR=   0
    TEMP. INH. ALARMS   CRIT=   0         MAJR=   0         MINR=   0
    TIMED.INH. ALARMS   CRIT=   0         MAJR=   0         MINR=   0
    ACTIVE ALARMS       CRIT=   0         MAJR=   0         MINR=   0

    Command Completed.
;
```

This example shows the output after critical and minor alarms are generated. Major alarms still show SILENT.

```
rept-stat-alm
```

```
    rlghncxa03w 10-02-27 15:00:53 EST  EAGLE 42.0.0
    ALARM  TRANSFER= LMC
    ALARM  MODE      CRIT= AUDIBLE     MAJR= SILENT     MINR= AUDIBLE
    ALARM  FRAME 1      CRIT=   7         MAJR=   0         MINR=  10
    ALARM  FRAME 2      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 3      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 4      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 5      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 6      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME GPF    CRIT=   0         MAJR=   0         MINR=   0
    PERM. INH. ALARMS   CRIT=   2         MAJR=   0         MINR=   0
    TEMP. INH. ALARMS   CRIT=   3         MAJR=   0         MINR=   0
    TIMED.INH. ALARMS   CRIT=   0         MAJR=   0         MINR=   0
    ACTIVE ALARMS       CRIT=   2         MAJR=   0         MINR=  10
    TOTAL ALARMS        CRIT=   7         MAJR=   0         MINR=  10

    Command Completed.
;
```

This example shows inhibited alarms:

```
rept-stat-alm
```

```
    rlghncxa03w 10-02-27 15:00:53 EST  EAGLE 42.0.0
    ALARM  TRANSFER= RMC
    ALARM  MODE      CRIT= AUDIBLE     MAJR= SILENT     MINR= AUDIBLE
    ALARM  FRAME 1      CRIT=   3         MAJR=  16         MINR=  22
    ALARM  FRAME 2      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 3      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 4      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 5      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 6      CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME GPF    CRIT=   1         MAJR=   2         MINR=   1
    PERM. INH. ALARMS   CRIT=   0         MAJR=   10        MINR=   0
    TEMP. INH. ALARMS   CRIT=   0         MAJR=   8         MINR=   0
    TIMED.INH. ALARMS   CRIT=   0         MAJR=   0         MINR=   0
    ACTIVE ALARMS       CRIT=   4         MAJR=   0         MINR=  22
    TOTAL ALARMS        CRIT=   4         MAJR=  18         MINR=  23

    Command Completed.
;
```

This example includes the Alarm Inhibit report for the card in location 1301.

```
rept-stat-alm:display=inhb:dev=card
```

```
    rlghncxa03w 10-02-27 15:00:53 EST  EAGLE 42.0.0
    ALARM  TRANSFER= RMC
    ALARM  MODE      CRIT= SILENT      MAJR= SILENT      MINR= SILENT
    ALARM  FRAME 1     CRIT=  11        MAJR=  24        MINR=  17
    ALARM  FRAME 2     CRIT=   0        MAJR=   0        MINR=   0
    ALARM  FRAME 3     CRIT=   0        MAJR=   0        MINR=   0
    ALARM  FRAME 4     CRIT=   0        MAJR=   0        MINR=   0
    ALARM  FRAME 5     CRIT=   0        MAJR=   0        MINR=   0
    ALARM  FRAME 6     CRIT=   0        MAJR=   0        MINR=   0
    PERM. INH. ALARMS  CRIT=   0        MAJR=   4        MINR=   2
    TEMP. INH. ALARMS  CRIT=   1        MAJR=   3        MINR=   1
    TIMED.INH. ALARMS  CRIT=   0        MAJR=   0        MINR=   0
    ACTIVE ALARMS      CRIT=  11        MAJR=  23        MINR=  15
    TOTAL ALARMS       CRIT=  13        MAJR=  30        MINR=  18

    ALARM INHIBIT REPORT
    --------------------
    DEVICE   DEVICE IDENTIFIER    DURATION  INH LVL  ALM LVL  DATE     TIME
    ------   -----------------    --------  -------  -------  -----    ----
    CARD     1301                   PERM     MAJR     MAJR     ---      ---

    Command Completed.
;
```

This example includes the Alarm Inhibit report for multiple device types. It includes point codes with point code subtype prefixes, and exception routes that require a second line of display to uniquely identify the exception class/criteria of the routes. A plus sign (+) following the alarm level indicates that the current alarm is not inhibited because the level of the inhibit is less than the level of the alarm.

```
rept-stat-alm:display=inhb
```

```
    rlghncxa03w 10-02-27 15:00:53 EST  EAGLE 42.0.0
    ALARM  TRANSFER= RMC
    ALARM  MODE      CRIT= AUDIBLE     MAJR= SILENT      MINR= SILENT
```

```
    ALARM  FRAME 1     CRIT=   2         MAJR=   8         MINR=   0
    ALARM  FRAME 2     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 3     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 4     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 5     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 6     CRIT=   0         MAJR=   0         MINR=   0
    PERM. INH. ALARMS  CRIT=   0         MAJR=   1         MINR=   0
    TEMP. INH. ALARMS  CRIT=   0         MAJR=   1         MINR=   0
    TIMED INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0
    ACTIVE ALARMS      CRIT=   2         MAJR=   6         MINR=   0
    TOTAL ALARMS       CRIT=   2         MAJR=   8         MINR=   0

    ALARM INHIBIT REPORT
    --------------------
    DEVICE   DEVICE IDENTIFIER    DURATION  INH LVL  ALM LVL  DATE     TIME
    ------   -----------------    --------  -------  -------  -----    ----
    CARD     1101                   PERM     MINR     MAJR+    ---      ---
    ENET     1201,A                 PERM     MAJR     MAJR     ---      ---
    ENET     1201,B                 TEMP     MAJR     MAJR     ---      ---
    ENET     1101,A                 PERM     MINR     MAJR+    ---      ---

    Command Completed.
;
```

This example shows timed inhibited alarm information:

```
rept-stat-alm:display=inhb:dur=timed
```

```
    rlghncxa03w 10-02-27 15:00:53 EST  EAGLE 42.0.0
    ALARM  TRANSFER= RMC
    ALARM  MODE      CRIT= SILENT      MAJR= SILENT      MINR= SILENT
    ALARM  FRAME 1     CRIT=   5         MAJR=   3         MINR=   6
    ALARM  FRAME 2     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 3     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 4     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 5     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 6     CRIT=   0         MAJR=   0         MINR=   0
    PERM. INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0
    TEMP. INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0

    TIMED.INH. ALARMS  CRIT=   1         MAJR=   2         MINR=   1
    ACTIVE ALARMS      CRIT=   4         MAJR=   1         MINR=   5
    TOTAL ALARMS       CRIT=   5         MAJR=   3         MINR=   6

    ALARM INHIBIT REPORT
    --------------------
    DEVICE   DEVICE IDENTIFIER    DURATION  INH LVL  ALM LVL  DATE     TIME
    ------   -----------------    --------  -------  -------  -----    ----
    ROUTE ps-004-005-006           TIMED    CRIT     CRIT     06-08-01 1000
    E1PORT   1101,1                TIMED    MAJR     MAJR     06-10-05 1200
    T1PORT   1301,3                TIMED    MAJR     MAJR     06-08-01 1100
    APPLSOCK sock1234567890        TIMED    MINR     MAJR     06-10-05 1100

    Command Completed.
;
```

This example shows timed inhibited alarm information for alarms that will expire on the specified date:

```
rept-stat-alm:display=inhb:dur=timed:edate=061001
```

```
    upg1040403 10-02-27 14:09:58 EST  EAGLE 42.0.0
    ALARM  TRANSFER= RMC
    ALARM  MODE      CRIT= SILENT      MAJR= SILENT      MINR= SILENT
    ALARM  FRAME 1     CRIT=   5         MAJR=   3         MINR=   6
    ALARM  FRAME 2     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 3     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 4     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 5     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 6     CRIT=   0         MAJR=   0         MINR=   0
    PERM. INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0
    TEMP. INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0
    TIMED.INH. ALARMS  CRIT=   1         MAJR=   2         MINR=   1
    ACTIVE ALARMS      CRIT=   4         MAJR=   1         MINR=   5
    TOTAL ALARMS       CRIT=   5         MAJR=   3         MINR=   6

    ALARM INHIBIT REPORT
    --------------------
    DEVICE   DEVICE IDENTIFIER    DURATION  INH LVL  ALM LVL  DATE     TIME
    ------   -----------------    --------  -------  -------  -----    ----
    ROUTE ps-004-005-006           TIMED    CRIT     CRIT    06-10-01 1000
    E1PORT   1101,1                TIMED    MAJR     MAJR    06-10-01 1200

    Command Completed.
;
```

This example shows inhibited alarm information for the linksets with the specified CLLI:

```
rept-stat-alm:display=inhb:clli=slkset1:dev=ls
```

```
    upg1040403 10-03-27 14:09:58 EST  EAGLE 42.0.0
    ALARM  TRANSFER= RMC
    ALARM  MODE      CRIT= SILENT      MAJR= SILENT      MINR= SILENT
    ALARM  FRAME 1     CRIT=   5         MAJR=   3         MINR=   6
    ALARM  FRAME 2     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 3     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 4     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 5     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 6     CRIT=   0         MAJR=   0         MINR=   0
    PERM. INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0
    TEMP. INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0
    TIMED.INH. ALARMS  CRIT=   1         MAJR=   2         MINR=   1
    ACTIVE ALARMS      CRIT=   4         MAJR=   1         MINR=   5
    TOTAL ALARMS       CRIT=   5         MAJR=   3         MINR=   6

    ALARM INHIBIT REPORT
    --------------------
    DEVICE   DEVICE IDENTIFIER    DURATION  INH LVL  ALM LVL  DATE     TIME
    ------   -----------------    --------  -------  -------  -----    ----
    LS       slkset1               TIMED    MAJR     MAJR    06-10-01 1200

    Command Completed.
```

Legend

- **ALARM TRANSFER**—The destination of the alarms. LMC=Local Maintenance Center, RMC=Remote Maintenance Center.
- **ALARM MODE**—Displays whether the critical, major, and minor alarms are silent or audible

- **ALARM FRAME 1**—Number of critical, major, and minor alarms detected in the control frame CF-00 (frame 1)
- **ALARM FRAME 2**—Number of critical, major, and minor alarms detected in extension frame EF-00 (frame 2)
- **ALARM FRAME 3**—Number of critical, major, and minor alarms detected in extension frame EF-01 (frame 3)
- **ALARM FRAME 4**—Number of critical, major, and minor alarms detected in extension frame EF-02 (frame 4)
- **ALARM FRAME 5**—Number of critical, major, and minor alarms detected in extension frame EF-03 (frame 5)
- **ALARM FRAME 6**—Number of critical, major, and minor alarms detected in extension frame EF-04 (frame 6)
- **ALARM FRAME GPF**—Number of critical, major, and minor alarms detected at the MPS (multi-purpose server). If the LNP feature is turned on, the number includes alarms for any applications running on the MPS. If the G-Flex, G-Port, INP, or AINP Q feature is turned on, the number includes alarms for any applications running on the GSM subsystem and the Service Module/EPAP links.
- **PERM. INH. ALARMS**—Number of alarms that are permanently inhibited per alarm level
- **TEMP. INH. ALARMS**—Number of alarms that are temporarily inhibited per alarm level
- **TIMED. INH. ALARMS**—Number of alarms that are timed inhibited per alarm level
- **ACTIVE ALARMS**—Number of alarms still active per alarm level.
- **TOTAL ALARMS**—Total number of alarms per alarm level. The inhibited alarm count plus the active alarm count equals the total alarm count.
- **CRIT**—Critical alarms with silent/audible indicator
- **MAJOR**—Major alarms with silent/audible indicator
- **MINOR**—Minor alarms with silent/audible indicator

Alarm Inhibit Report:

- **DEVICE**—Device for which alarms are currently inhibited. Only devices that are alarm inhibited are shown.
- **ELEMENT**—Element of the device for which alarms are inhibited (such as card location, port, routing key, socket or association name)
- **DURATION**—Indicates whether the device is alarm inhibited permanently or temporarily or for a specific length of time
- **INH LVL**—Level in which devices are alarm inhibited (Critical, Major, Minor). The `inh-alm` command defaults the level to Major. Devices cannot be alarm inhibited at a critical level unless the `chg-stpopts` command's *critalminh* parameter is turned on.
- **ALM LVL**—Level of the current alarm on the device (Critical, Major, Minor). "None" indicates that there is currently no alarm on the device (DURATION should show "PERM"). A plus sign (+) seen following the alarm level indicates that the current alarm is not inhibited because the level of the inhibit is less than the level of the alarm.
- **DATE**—Date on which a timed inhibited alarm will automatically clear at the specified time
- **TIME**—Time at which a timed inhibited alarm will automatically clear on the specified date

Related Commands

dact-alm-trns, *rept-stat-clk*, *rept-stat-trbl*, *rtrv-obit*, *rtrv-trbl*

rept-stat-applsock

Report Status Application Socket

Use this command to display the status of the IP application sockets.

Parameters

lhost (optional)

Local host name. The logical name assigned to the local host device.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters up to 60 characters in length. The first character must be a letter.

Valid characters are *a-z, A-Z, 0-9,* - (dash), . (period)

Default:

Current value

port (optional)

The signaling link port associated with this socket.

Range:

a, b, a1..a31, b1..b31

Not all card types support all *port* parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid port parameter range values for each type of card that can have signaling links.

Default:

Current value

rhost (optional)

Remote host name. The logical name assigned to the remote host device.

Range:

*a*zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters up to 60 characters in length. The first character must be a letter.

Valid characters are *a-z, A-Z, 0-9,* - (dash), . (period)

Default:

Current value

sname (optional)

Socket name. The name of the IP application socket to be reported.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

Default:

All IP application sockets are reported

Example

```
rept-stat-applsock
```

```
rept-stat-applsock:port=b
```

Dependencies

The name parameter value, if specified, must exist in the Socket table.

A valid value must be specified for the host parameter. If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

Notes

This command displays the primary states (PST) and the secondary state (SST). Primary states are:

- IS-NR—In-service normal
- IS-ANR—In-service abnormal (congested)
- OOS-MT—Out of service
- OOS-MT-DSBLD—Out-of-service maintenance-disabled (provisioned to be out of service by closing, prohibiting, or deactivation)

Secondary states are:

- ALMINH—Alarm inhibited
- OOS—Out-of-service
- NEA—Near-end allowed
- FEA—Far-end allowed
- NEP—Near-end prohibited
- FEP—Far-end prohibited

Output

```
rept-stat-applsock
```

```
rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
SOCKET           PST           SST
socred           OOS-MT        ALMINH
socyellow        IS-ANR        ----
socblue          OOS-MT-DSBLD  ----
```

```
    Command Completed
;
```

`rept-stat-applsock`

```
    rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
    SOCKET            PST           SST
    ipg11051          IS-NR         NEA-FEA
    ipg11071          IS-NR         NEA-FEA
    ipl1201           IS-NR         NEA-FEA
    Command Completed.
;
```

`rept-stat-applsock:link=b`

```
    rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 34.0.0
    SOCKET            PST           SST
    ipl1201b          IS-NR         NEA-FEA
    Command Completed.
;
```

Related Commands

None.

rept-stat-as — Report Status AS Association

Use this command to generate a report of the Application Server (AS) association status.

Parameters

aname (optional)

Association name to report on. This parameter causes the ASP states for a given association and all of the AS's that it is assigned to be displayed.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

asname (optional)

Application Server name; the AS name to report on. This parameter causes the the PST, SST, ASP state, and ASP-ID for each association in the AS to be displayed.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

Example

```
rept-stat-as
```

Dependencies

If an association is specified in the command, the specified association must exist in the AS table.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If the command is specified without a parameter, status for all AS associations is displayed.

This command displays the following states: ACTIVE, UP, DOWN, PENDING.

Output

`rept-stat-as`

```
    rlghncxa03w 04-02-04 12:57:21 EST  EAGLE 34.0.0
    ASNAME            PST            SST
    m3ua0001          OOS-MT         AS-INACTIVE
    m3ua0002          IS-NR          AS-ACTIVE
    m3ua0003          OOS-MT-DSBLD   AS-DOWN
    m3ua0004          IS-ANR         AS-PENDING

    Command Completed.
;
```

`rept-stat-as:asname=m3ua0001`

```
    rlghncxa03w 05-02-04 12:57:21 EST  EAGLE 34.0.0
    ASNAME            PST            SST
    m3ua0001          OOS-MT         AS-INACTIVE

    ANAME             PST            SST           ASP STATE      ASPID
    m3ua_1301         OOS-MT-DSBLD   ----          ASP-DOWN       undefined
    m3ua_1302         OOS-MT         CONNECTING    ASP-DOWN       undefined
    m3ua_1303         IS-NR          ESTABLISHED   ASP-INACTIVE   123456789

    Command Completed.
;
```

`rept-stat-as:aname=m3ua_1303`

```
    rlghncxa03w 05-02-04 12:57:21 EST  EAGLE 34.0.0
    ASNAME            ANAME            ASP STATE
    m3ua0001          m3ua_1303        ASP-INACTIVE
    m3ua0002          m3ua_1303        ASP-ACTIVE
    m3ua0003          m3ua_1303        ASP-DOWN
```

```
    Command Completed.
;
```

Related Commands

chg-as, *ent-as*, *rtrv-as*

rept-stat-assoc — Report Status SCTP Association

Use this command to generate a report of the SCTP association's status.

Parameters

aname (optional)

Name of association to report on.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

lhost (optional)

The Local Host name as defined in the IP Host table.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters up to 60 characters in length; the first character must be a letter

Valid characters are *a-z, A-Z, 0-9*, - (dash), and . (period).

link (optional)

The signaling link associated with this socket.

Synonym:

port

Range:

a, b, a1-a31, b1-b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links ports.

rhost (optional)

Name of Remote Host as defined in the IP Host table.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters up to 60 characters in length. The first character must be a letter.

Valid characters are *a-z, A-Z, 0-9*, - (dash), and . (period).

Example

`rept-stat-assoc`

`rept-stat-assoc:aname= a23456789012345`

Dependencies

If an association is specified in the command, the specified association must exist in the AS table.

A valid value must be specified for the host parameter. If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

This command displays the primary states (PST) and the secondary state (SST).

Primary states are:

- IS-NR—In-service normal
- IS-ANR—In-service abnormal (congested)
- OOS-MT—Out of service
- OOS-MT-DSBLD—Out-of-service maintenance-disabled (provisioned to be out of service by closing, prohibiting, or deactivation)

Connection states are:

- RESTRICTED
- OUT-OF-SERVICE
- CONNECTING
- ESTABLISHED—Valid only for M2PA associations

The **LINK** field values in the output are displayed as:

- "**"—If the association is assigned to multiple links.
- "--"—If the association is not assigned to any link.
- Appropriate LINK ID—If the association is assigned to only one link.

Output

`rept-stat-assoc`

```
   eagle10212 08-01-29 10:41:52 EST  EAGLE 38.0.0
```

```
                  CARD IPLNK
    ANAME         LOC  PORT   LINK PST            SST             ASPID
    ipgi1303a     1303 A      A    OOS-MT         OOS             undefined
    ipl1301b      1301 A      B    IS-NR          ESTABLISHED
    a1            1305 A      **   OOS-MT-DSBLD   OOS             undefined
    ipg1308a1     1308 A      A    OOS-MT-DSBLD   OOS             undefined
    sca           1306 A      A    IS-ANR         CONGESTED
    a2            1304 A      A    IS-ANR         EXCESS RETRANS  undefined
    sca7          1307 A,B    A    IS-NR          ESTABLISHED     undefined
    lavern        1305 A      A    IS-NR          ESTABLISHED
    ipl1313b      1313 A      B    OOS-MT-DSBLD   OOS
    ipl1302a      1302 A      A    IS-NR          ESTABLISHED
    n             1315 A      A    OOS-MT         CONNECTING
    ipg1305a1     1305 A      A    OOS-MT-DSBLD   OOS             undefined
    ipl1301b3     1301 A      B3   IS-NR          ESTABLISHED
    m2pa1107a0    1107 A      --   OOS-MT-DSBLD   OOS
    m2pa1107a1    1107 A      --   OOS-MT-DSBLD   OOS
    ipg1215a01    1215 A      **   IS-NR          ESTABLISHED     undefined
    ipg1215a02    1215 A      **   IS-NR          ESTABLISHED     undefined
    ipg1215a03    1215 A      --   OOS-MT-DSBLD   OOS             undefined
    ipg1215a04    1215 A      **   OOS-MT         OOS             undefined
    ipg1215a05    1215 A      --   OOS-MT-DSBLD   OOS             undefined
    sg1305a       1305 A      A    IS-NR          ESTABLISHED     undefined
    Command Completed.
```

This example shows the output when the aname parameter is specified for an IPGWx association:

`rept-stat-assoc:aname=a2`

```
    eagle10212 08-01-29 10:41:52 EST  EAGLE 38.0.0
                  CARD IPLNK
    ANAME         LOC  PORT  LINK  PST          SST             ASPID
    a2            1304 A     A     IS-ANR       EXCESS RETRANS  undefined
    ALARM STATUS = *  0536 IP Connection Excess Retransmits

    ASNAME          ANAME           ASP-STATE
    as1             a2              ASP-UP

    Command Completed.
```

This example shows the output when the aname parameter is specified for an M2PA association:

`rept-stat-assoc:aname=assocm2pa`

```
    eagle10212 07-05-29 10:41:52 EST  EAGLE 37.0.0
                  CARD  IPLNK
    ANAME         LOC  PORT   LINK PST            SST
    assocm2pa     1301 A      A    IS-NR          ESTABLISHED

    Command Completed.
```

This example shows the output when the aname parameter is specified for an IPSG-M3UA association:

`rept-stat-assoc:aname=sg1305a`

```
eagle10212 08-02-06 17:00:42 EST  EAGLE 38.0.0
                  CARD IPLNK
    ANAME         LOC  PORT   LINK PST            SST             ASPID
    sg1305a       1305 A      A    IS-NR          ESTABLISHED     undefined
```

```
    LSN         ANAME             ASP STATE
    ls1305a     sg1305a           ACTIVE

    Command Completed.
```

This example shows the output when the port/link parameter is specified for IPSG associations:

```
rept-stat-assoc:port=a15
```

```
    tekelecstp 10-01-05 10:47:26 EST  EAGLE 42.0.0
                    CARD IPLNK
    ANAME           LOC  PORT   LINK PST            SST             ASPID
    ipsgm3ua        1101 A      A15  IS-NR          ESTABLISHED     undefined
    ipsgm2pa        1102 B      A15  IS-NR          ESTABLISHED

    Command Completed.
```

This example shows the output when no parameter is specified for DIAM association:

```
rept-stat-assoc
```

```
    tekelecstp 13-04-24 11:24:19 EST  EAGLE 45.1.0
    rept-stat-assoc
    Command entered at terminal #26.
;
```

```
Command Accepted - Processing
    tekelecstp 13-04-24 11:24:19 EST  EAGLE 45.1.0
                    CARD IPLNK
    ANAME           LOC  PORT   LINK PST            SST             ASPID
    abc1            1105 B       --  IS-NR          ESTABLISHED     undefined
    abc2            1105 B       --  IS-NR          ESTABLISHED     undefined

    Command Completed.
;
```

Related Commands

chg-assoc, *ent-assoc*, *rtrv-assoc*

rept-stat-card

Report Status Card

Use this command to display the card status and maintenance activity states. The output includes card location, the GPL version being used by the card, device type, device primary state, device secondary state, and device associated state.

Parameters

appl (optional)

Application. The status of cards running the specified application.

Range:

xyyyyyy

1 alphabetic character followed by up to 6 alphanumeric characters. Valid applications are:

atmansi —Used by E5-ATM and E5-ATM-B cards to support ATM high-speed signaling links and T1 functions.

atmitu —Used by E5-ATM and E5-ATM-B cards to support E1 high-speed signaling links and E1 functions.

ccs7itu —Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards for ITU MTP functions.

elap —Used by E5-APP-B cards to support the ELAP application.

enumhc —Used by E5-SM8G-B cards to support the ENUM Mobile Number Portability and Tier One Address Resolution application.

epap —Used by E5-APP-B cards to support the EPAP application.

eroute —Used by STC cards and E5-STC cards for the EAGLE 5 Integrated Monitoring Support functions

gls —Used by E5-TSM cards for downloading gateway screening to LIM and Service Module cards

ipgwi —Used by E5-ENET and E5-ENET-B cards for point-to-multipoint IP connectivity for ITU point codes. A maximum of 125 cards can be assigned the IPGWI application.

iplim —Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ANSI point codes

iplimi —Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ITU point codes

ips —Used by E5-IPSM and E5-ENET-B cards for the IP User Interface feature.

ipsg —Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA

lsms - Used by E5-APP-B cards to support LSMS application.

mcp —Used by E5-MCPM-B cards for the Measurements Platform feature.

nas - Used by E5-APP-B cards to support the NAS application.

siphc — Used by E5-SM8G-B cards to support the SIP application.

ss7ansi —Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards for ANSI MTP functions

ss7ipgw —Used by E5-ENET and E5-ENET-B cards for point-to-multipoint IP connectivity. The system allows a maximum of 125 cards to be assigned the SS7IPGW application.

stplan —Used by E5-ENET and E5-ENET-B cards to support STP LAN functions.

switch - Used by Telco switch to add power consumed by Telco Switch to Frame Power Budget. This is not an application gpl.

vsccp —Used by Service Module cards to support EPAP-based features and the LNP ELAP Configuration features. If no EPAP-based or LNP ELAP Configuration feature is turned on, and a Service Module card is present, then normal GTT traffic is processed.

links (optional)

Filter specification. Report the maximum number of links, only equipped links, or only unequipped links on the card in the specified card location (loc).

Range:

all

Reports the maximum number of links available on the card in the specified loc

equip

Reports only links that are equipped

unequip

Reports only links that are unequipped

Default:

equip

loc (optional)

Card address. The card location as stenciled on the shelf of the system.

Range:

1101 - 1117, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118, 6201 - 6218, 6301 - 6318

Default:

A status of all cards is displayed.

mode (optional)

Mode. The type of report to display (full or summary).

Range:

full

Default:

A summary report is displayed.

stat (optional)

Primary state filter. This parameter cannot be used with the loc or mode parameters. This filter allows printing of cards in a specified state (all in-service cards, for example).

Range:

all

All of the primary states

alminh

Alarms inhibited

anr

In service abnormal (IS-ANR)

dsbld

Out of service maintenance disabled (OOS-MT-DSBLD)

mt

Out of service maintenance (OOS-MT)

nr

In service normal (IS-NR)

Default:

all

Example

```
rept-stat-card
rept-stat-card:loc=1201
rept-stat-card:loc=1201:mode=full
rept-stat-card:stat=alminh
rept-stat-card:appl=ss7ansi
rept-stat-card:appl=siphc
rept-stat-card:loc=1205:links=equip:mode=full
rept-stat-card:appl=epap
rept-stat-card:appl=switch
rept-stat-card:appl=elap
rept-stat-card:appl=lsms
rept-stat-card:appl=nas
rept-stat-card:appl=enumhc
```

Dependencies

No other command can be in progress when this command is entered.

The mode parameter can be specified only when the loc parameter is specified.

Only one of the loc or stat parameters can be specified in the command.

No other parameter can be specified with the appl parameter.

The shelf and card must be equipped.

The card location (loc) must be within the allowed range.

A valid value must be specified for the appl parameter.

The card location specified by the loc parameter must be equipped.

Notes

LIM cards show MFC results for SNM, SLAN, SCCP, EROUTE, INM and MTP3. SCCP cards show MFC results for SNM, INM and MTP3 when the mode=full and loc parameters are specified.

The status displayed is for the previous 5 minutes and the previous 24 hours.

TVG status and MFC status both use G to indicate service request GRANTED, D to indicate service request DENIED, and N to indicate NO OPERATIONAL SERVERS AVAILABLE. In addition, TVG status only uses H for HARDWARE TIMEOUT, S for SOFTWARE TIMEOUT, and I to indicate INVALID RESULTS FROM HARDWARE.

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

The mode=full parameter gives more information than the summary report.

A plus (+) symbol in the output indicates that the flash GPL currently being run has not yet been activated on the card. See the `act/init-flash` command for a list of flash GPLs.

E1 alarms are displayed in the alarm status field. When the mode=full parameter is specified, separate fields display status information from the UAM for each E1 interface on the card. For each E1 interface, the display shows the highest priority E1 failure that exists on that E1 card. When no E1 errors exist, the clearing E1 UAM text is displayed. When an E1 interface is not assigned to the card, no output is generated for that E1 position.

T1 alarms are displayed in the alarm status field. When the mode=full parameter is specified, separate fields display status information from the UAM for each T1 interface on the card. For each T1 interface, the display shows the highest priority T1 failure that exists on that T1 card. When no T1 errors exist, the clearing T1 UAM text is displayed. When an T1 interface is not assigned to the card, no output is generated for that T1 position.

If the links=all parameter is specified, then the maximum number of supported SS7 links on the card is displayed as shown. If the links=unequip parameter is specified, then the number of links displayed is equal to the maximum supported links minus the provisioned links. If the links=equip parameter is specified, then only the provisioned links are displayed.

Multiple cards of the same card type but different capacity can be installed into a slot configured with the `ent-card` command. The number of links supported cannot be determined until the card is physically installed into the configured slot.

Table 46: Maximum Supported Links based on Card Type and GPL

GPL with Card Type	Maximum Supported Links	
	Card Hardware Verified	Card Hardware Unknown
ATMHC on E5-ATM/E5-ATM-B	3	3
SS7HC on E5-E1T1	32	64
SS7HC on E5-E1T1-B	64	64

SS7HC on HC-MIM	64	64
IPLHC on E5-ENET/E5-ENET-B	16	16
IPGHC on E5-ENET/E5-ENET-B	1	1
IPSG on E5-ENET/E5-ENET-B	32	32
SIPHC on E5-SM8G-B	17 (16 TCP & 1 UDP)	17 (16 TCP & 1 UDP)
ENUMHC on E5-SM8G-B	1 (UDP)	1 (UDP)

The CARD WARNING field in the command output indicates a specific condition that can hinder the normal functioning of a card. For HC-MIM, E5-E1T1 and E5-E1T1-B cards, the "Obsolete Framer" warning indicates that a port configured on the card may get stuck in a Loss of Frame (LOF) state. If an HC-MIM, E5-E1T1 or E5-E1T1-B card displaying this warning is reloaded, and one of the ports on the card is reporting LOF, then the OAM reboots the card up to 5 times to attempt to clear the LOF condition when the card changes state from IS-ANR to IS-NR.

Fast Copy Cards

E5-ENET or E5-ENET-B cards running the IPSG or IPGHC GPL are considered to be *FC- capable*. A card running the IPGHC GPL must be in the IS-NR State before the card can be considered *FC- capable*. This restriction does not apply to cards running the IPSG GPL. An *FC- capable* card is considered *FC-enabled* when Fast Copy monitoring is enabled for the respective GPL.

If the 3 Links per E5-ATM feature is turned on, then E5-ATM and E5-ATM-B cards can support 3 links.

Output

The clock status fields are reported when the mode=full report is selected. The clock status report includes a CLOCK A, CLOCK B, and CLOCK I status. The High Speed clock status report (displayed for ATM, E1 and T1 cards) includes HS CLOCK A, HS CLOCK B, and HS CLOCK I. The valid values for each clock status are *Idle*, *Active*, and *Fault*. The meanings of these values are:

- *Idle* —Clock is available but is not being used by the card
- *Active* —Clock is available and is being used by the card
- *Fault* —Clock is unavailable

Idle and *Active* are shown when the CLK or HS CLK distribution to the card is good. The *Active* value does not denote that the card is actually using the clock source for link alignment. Use the `rtrv-slk`, `rtrv-e1`, and `rtrv-t1` commands to determine what clock source each card is using for link alignment.

If the mode=full parameter is specified for an FC-enabled card, and Fast Copy functionality has been provisioned for the GPL (see the `chg-eisopts` command), then Fast Copy status and FC Link status is shown. For an E5-ENET or E5-ENET-B card running the IPGHC GPL, Fast Copy and Fast Copy link status is shown only when the card is in IS-NR state.

Abbreviated output is indicated by 3 vertical dots as shown:

.

.

.

The E5-MCPM-B card is an MCPM card. The *Type* field displays MCPM.

```
rept-stat-card
```

```
    rlghncxa03w 12-03-09 16:35:57 IST  EAGLE 45.0.0

    CARD   VERSION      TYPE      GPL        PST            SST       AST
    1102   128-002-000  LIMATM    ATMHC      IS-NR          Active    -----
    1103   125-020-000  DSM       SCCPHC     IS-NR          Active    -----
    1105   125-020-000  DSM       SCCPHC     IS-NR          Active    -----
    1106   130-001-000  TSM       GLSHC      IS-NR          Active    -----
    1107   125-020-000  STC       EROUTE     IS-NR          Active    -----
    1108   134-000-000  MCPM      MCPHC      IS-NR          Active    -----
    1109   125-020-000  HIPR2     HIPR2      IS-NR          Active    -----
    1110   125-020-000  HIPR2     HIPR2      IS-NR          Active    -----
    1111   125-020-000  IPSM      IPS        IS-NR          Active    -----
    1113   070-019-002  E5MCAP    OAMHC      IS-NR          Standby   -----
    1114   -----------  E5TDM                IS-NR          Active    -----
    1115   070-019-002  E5MCAP    OAMHC      IS-NR          Active    -----
    1116   -----------  E5TDM                IS-NR          Active    -----
    1117   -----------  MDAL                 IS-NR          Active    -----
    1206   134-060-000  DSM       DEIRHC     IS-NR          Active    -----
    1209   125-020-000  HIPR2     HIPR2      IS-NR          Active    -----
    1210   125-020-000  HIPR2     HIPR2      IS-NR          Active    -----
    1309   125-017-000  HIPR2     HIPR2      IS-NR          Active    -----
    1310   125-017-000  HIPR2     HIPR2      IS-NR          Active    -----
    1311   125-020-000  STC       EROUTE     IS-NR          Active    -----
    2103   128-018-000  DCM       IPLHC      IS-NR          Active    -----
    2108   128-018-000  DCM       SLANHC     IS-NR          Active    -----
    2109   128-022-000  HIPR2     HIPR2      IS-NR          Active    -----
    2110   128-022-000  HIPR2     HIPR2      IS-NR          Active    -----
    2111   128-018-000  STC       ERTHC      IS-NR          Active    -----
    1213   053-000-058  E5ENET    IPSG       IS-NR          Active    -----
    Command Completed.
;
```

This example shows the card status for the OAMHC of MASP A located in slot 1113, which is currently active.

This example also shows a Hardware Verification Code. The HW VERIFICATION CODE field is shown only in the mode=full report. "-----" is shown for cards with valid hardware. A numerical value is shown when invalid hardware is detected. All such cards will be auto-inhibited. The numerical values are listed in *Table 47: Auto-Inhibit Hardware Verification Codes*. The E5-MDAL and MUX cards do not display the field in mode=full reports on their locations.

```
rept-stat-card:loc=1113:mode=full
```

```
tekelecstp 02-01-08 04:34:09 EST  EAGLE 46.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1113   134-068-000  E5MCAP    OAMHC      IS-NR          Active     -----
      ALARM STATUS       =  No Alarms
      BLMCAP  GPL version = 134-054-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Fault
      CLOCK B            = Active
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = E5-MCAP
```

```
      DBD STATUS          = Valid
      DBD TYPE            = 1G ENET
      DBD MEMORY SIZE     = 4096M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  32C ( 90F)
      PEAK TEMPERATURE:     =  32C ( 90F)     [02-01-08 04:31]
      TROUBLE TEXT VER.  = Rev 134.10.2
      APPLICATION SERVICING
                                       TVG    MFC         TVG    MFC
      IPLNK STATUS
          IPLNK  IPADDR             STATUS     PST
          A      ---------------    ----       ----

    Command Completed.
;
```

This example shows all cards that have alarms inhibited in the system:

`rept-stat-card:stat=alminh`

```
    rlghncxa03w 04-02-04 12:57:21 EST  EAGLE 31.6.0
    CARD  VERSION      TYPE    APPL      PST          SST       AST
    1211  023-001-000  LIMATM ATMANSI   IS-NR         Active  ALMINH

    Command Completed.
;
```

This example shows a full report for an HC-MIM card receiving pure MTP routed traffic. The MFC option and E5IS feature are ON.

`rept-stat-card:loc=1205:mode=full`

```
    rlghncxa03w  11-03-09 16:46:07 EST  EAGLE 44.0.0
    CARD   VERSION      TYPE      GPL        PST           SST        AST
    1205   134-000-000  LIME1     SS7HC      IS-NR         Active     -----
      ALARM STATUS       = No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Active
      CLOCK B            = Idle
      CLOCK I            = Idle
      HS CLOCK A         = Active
      HS CLOCK B         = Idle
      HS CLOCK I         = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = HC BLADE
      DBD STATUS         = Valid
      DBD TYPE           = E1T1
      DBD MEMORY SIZE    = 512M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  42C (108F)     [ALARM TEMP:  75C (167F)]
      PEAK TEMPERATURE:     =  43C (110F)     [06-02-24 08:21]
      SIGNALING LINK STATUS
          SLK    PST               LS           CLLI          E5IS
          B31    IS-NR             lsa0         -----------   INACTIVE
      APPLICATION SERVICING
                                       TVG    MFC         TVG    MFC
          SNM     REQ STATUS =   24 hr: GDNHSI ---, 5 min: GD---- ---
```

```
          SLAN    REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          EROUTE  REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          INM     REQ STATUS =   24 hr: G----- ---, 5 min: G----- ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---

    Command Completed.
;
```

This example shows a full report for a specified HIPR2 card:

```
rept-stat-card:loc=1109:mode=full
```

```
    tekelecstp 02-01-08 04:45:17 EST  EAGLE 46.0.0
    CARD   VERSION      TYPE      GPL        PST           SST        AST
    1109   134-046-000  HIPR2     HIPR2      IS-NR         Active     -----
      ALARM STATUS       = No Alarms.
      TRIAL VERSION      = HIPR2 134-069-000
      FPGA VERSION       = HIPR2 008-002-005-009
      CURRENT TEMPERATURE   = NA
      PEAK TEMPERATURE:     = NA

    Command Completed.
;
```

This example shows output for an STC card used by the E5IS feature:

```
rept-stat-card:loc=1107
```

```
    rlghncxa03w 10-01-09 16:35:57 IST  EAGLE 42.0.0
    CARD   VERSION      TYPE      GPL       PST           SST        AST
    1107   128-015-000  STC       EROUTE    IS-NR         Active     -----
      ALARM STATUS       = No Alarms.
      BPDCM   GPL version = 128-108-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Active
      CLOCK B            = Idle
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = Invalid
      DBD STATUS         = Valid
      DBD TYPE           = Invalid
      DBD MEMORY SIZE    = 512M
      HW VERIFICATION CODE = ----
      EROUTE % OCCUP     = 0%
      NTP broadcast = VALID
    Command Completed.
;
```

This example shows a full report for an STC card:

```
rept-stat-card:loc=1107:mode=full
```

```
    rlghncxa03w 10-01-09 16:35:57 IST  EAGLE 42.0.0
    CARD   VERSION      TYPE      GPL       PST           SST        AST
    1107   128-015-000  STC       EROUTE    IS-NR         Active     -----
      ALARM STATUS       = No Alarms.
```

```
      BPDCM   GPL version = 128-108-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Active
      CLOCK B             = Idle
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = Invalid
      DBD STATUS          = Valid
      DBD TYPE            = Invalid
      DBD MEMORY SIZE     = 512M
      HW VERIFICATION CODE = ----
      EROUTE % OCCUP     = 0%
      NTP broadcast = VALID
      IPLNK STATUS
          IPLNK  IPADDR             STATUS     PST
          A      ---------------    DOWN       OOS-MT
          B      192.168.63.45      UP         IS-NR
      STC IP CONNECTION
          PORT   PST             SST
          A      OOS-MT          Unavail
          B      IS-NR           Active

    Command Completed.
;
```

This example shows output for an MCPM card used by the Measurements Platform feature:

```
rept-stat-card:loc=1105
```

```
    rlghncxa03w  11-05-04 15:10:19 EST  EAGLE 44.0.0
    CARD   VERSION      TYPE    GPL        PST            SST        AST
    1105   128-001-000  MCPM    MCP        IS-NR          Idle       -----
      ALARM STATUS       = No Alarms.
      BPDCM   GPL VERSION = 128-001-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn

    Command Completed.
;
```

This example shows a full report for an E5-ENET card used as an IPGWx card with assigned associations and receiving pure MTP routed traffic. The MFC option and E5IS feature are ON.

```
rept-stat-card:loc=1103:mode=full
```

```
    rlghncxa03w 11-03-01 16:46:07 EST  EAGLE 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1103   134-000-000  DCM       IPGHC      IS-NR          Active     ---
      ALARM STATUS       = No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Active
      CLOCK B            = Idle
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = EPM A
      DBD STATUS         = Valid
      DBD TYPE           = 1G ENET
```

```
      DBD MEMORY SIZE     = 512M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  43C (110F)
      PEAK TEMPERATURE:     =  45C (113F)     [08-07-08 11:00]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI          E5IS
          A      IS-NR             ipgwm3ua1     -----------   INACTIVE
      IPLNK STATUS
          IPLNK  IPADDR            STATUS     PST
          A      10.254.101.92     UP         IS-NR
          B      ---------------   ----       OOS-MA
      ASSOCIATION STATUS
          ANAME             PST            SST             ASPID
          ipgw1103a         IS-NR          ESTABLISHED     undefined
      APPLICATION SERVICING
                                        TVG    MFC         TVG    MFC
          SNM     REQ STATUS =   24 hr: GDNHSI ---, 5 min: GD---- ---
          SLAN    REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          EROUTE  REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          INM     REQ STATUS =   24 hr: G----- ---, 5 min: G----- ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---

    Command Completed.
;
```

This example shows the output for an HC-MIM card used as a T1 card. The example displays abbreviated output.

`rept-stat-card:loc=1101`

```
    tklc1090203 10-12-09 13:59:34 EST  EAGLE 43.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1101   126-026-000  LIMT1     SS7HC      IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CURRENT TEMPERATURE   =  43C (110F)
      PEAK TEMPERATURE:     =  43C (110F)     [06-08-10 11:56]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI
          B      IS-NR             sc1a047a      sc1a047a
          A1     IS-NR             ls1101a1      tklcb1101a1
          B1     IS-NR             sc2a048a      sc2a048a
          A2     IS-NR             sc2a048a      sc2a048a
          B2     IS-NR             stpa046a      stpa046a
          A3     IS-NR             sc3a049a      sc3a049a
          B3     IS-NR             sc3a049a      sc3a049a
          A4     IS-NR             ls1101a08     tkb1101a8
          B4     IS-NR             sc1a047a      sc1a047a
          .
          .
          .
          A30    OOS-MT            stpa046a      stpa046a
          B30    IS-NR             stpa046a      stpa046a
          A31    IS-NR             sc3a049a      sc3a049a
          B31    IS-NR             sc3a049a      sc3a049a

    Command Completed.
;
```

This example shows a full report for an HC-MIM card used as a T1 card. The MFC option is ON and receiving pure MTP routed traffic. The example displays abbreviated output.

```
rept-stat-card:loc=1101:mode=full
```

```
    tklc1090203 11-02-10 13:59:48 EST  EAGLE5 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1101   134-000-000  LIMT1     SS7HC      IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Idle
      CLOCK B            = Active
      CLOCK I            = Idle
      HS CLOCK A         = Active
      HS CLOCK B         = Idle
      HS CLOCK I         = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = HC BLADE
      DBD STATUS         = Valid
      DBD TYPE           = E1T1
      DBD MEMORY SIZE    = 512M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  43C (110F)
      PEAK TEMPERATURE:     =  43C (110F)     [06-08-10 11:56]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI
          B      IS-NR             sc1a047a      sc1a047a
          A1     IS-NR             ls1101a1      tklcb1101a1
          B1     IS-NR             sc2a048a      sc2a048a
          A2     IS-NR             sc2a048a      sc2a048a
          B2     IS-NR             stpa046a      stpa046a
          A3     IS-NR             sc3a049a      sc3a049a
          B3     IS-NR             sc3a049a      sc3a049a
          A4     IS-NR             ls1101a08     tkb1101a8
          B4     IS-NR             sc1a047a      sc1a047a
          .
          .
          .
          A30    OOS-MT            stpa046a      stpa046a
          B30    IS-NR             stpa046a      stpa046a
          A31    IS-NR             sc3a049a      sc3a049a
          B31    IS-NR             sc3a049a      sc3a049a
      APPLICATION SERVICING
                                       TVG    MFC         TVG    MFC
          SNM     REQ STATUS =   24 hr: GDNHSI ---, 5 min: GD---- ---
          SLAN    REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          INM     REQ STATUS =   24 hr: G----- ---, 5 min: G----- ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---

    Command Completed.
;
```

This example shows a full report for an E5-ENET card used as an SLAN card:

```
rept-stat-card:loc=1103:mode=full
```

```
    rlghncxa03w 11-02-09 16:35:57 IST  EAGLE 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
```

```
    1103   134-000-000  DCM       SLANHC     IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Active
      CLOCK B            = Idle
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = EPM A
      DBD STATUS         = Valid
      DBD TYPE           = 1G ENET
      DBD MEMORY SIZE    = 512M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  50C (122F)
      PEAK TEMPERATURE:     =  50C (122F)     [02-09-14 14:49]
      IPLNK STATUS
          IPLNK  IPADDR             STATUS     PST
          A      10.220.9.9         UP         IS-NR
      DLK IP CONNECTION
          PORT   PST             SST             AST
          A      IS-NR           Active          -----
      SLAN % EAGLE CAPACITY    = 0%
      SLAN % HOST CAPACITY     = 0%

    Command Completed.
;
```

This example shows output for an E5-SM4G card:

```
rept-stat-card:loc=6111
```

```
    tklc1110501 10-12-09 17:26:29 EST  EAGLE5 43.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    6111   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CURRENT TEMPERATURE   =  31C ( 88F)
      PEAK TEMPERATURE:     =  32C ( 90F)     [07-04-12 15:55]
      SCCP % OCCUP       = 1%

    Command Completed.
;
```

This example shows a full report for an E5-SM4G card. The MFC option is ON.

```
rept-stat-card:loc=6111:mode=full
```

```
    rlghncxa03w 11-02-09 16:35:57 IST  EAGLE 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    6111   134-000-000  DSM       SCCPHC     IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Active
      CLOCK B            = Idle
      CLOCK I            = Idle
```

```
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = SMXG A
      DBD STATUS          = Valid
      DBD TYPE            = 1G ENET
      DBD MEMORY SIZE     = 4096M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  31C ( 88F)
      PEAK TEMPERATURE:     =  32C ( 90F)     [07-04-12 15:55]
      SCCP % OCCUP        = 1%
      APPLICATION SERVICING
                                      TVG    MFC          TVG    MFC
          SNM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          INM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---
      IPLNK STATUS
          IPLNK  IPADDR            STATUS     PST
          A      10.220.9.9        UP         IS-NR
          B      10.220.9.8        UP         IS-NR
      DSM IP CONNECTION
          PORT   PST             SST
          A      OOS-MT          Unavail
          B      OOS-MT          Unavail
    Command Completed.

;
```

This example shows the output for all cards running the VSCCP application:

```
rept-stat-card:appl=vsccp
```

```
    tklc1110501 07-04-12 17:28:02 EST  EAGLE5 46.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1107   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    1317   -----------  DSM       SCCPHC     OOS-MT         Isolated   -----
    2217   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    2317   -----------  DSM       SCCPHC     OOS-MT         Isolated   -----
    3103   -----------  DSM       SCCPHC     OOS-MT-DSBLD   Manual     -----
    3201   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    3203   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    3205   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    3207   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    3211   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    3213   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    3215   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    3217   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    5317   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    6101   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    6103   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    6105   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    6107   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    6111   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    6113   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    6115   128-015-000  DSM       SCCPHC     IS-NR          Active     -----
    6117   128-015-000  DSM       SCCPHC     IS-NR          Active     -----

    Command Completed.
;
```

This example shows a full report for a HIPR2 card:

```
rept-stat-card:loc=2109:mode=full
```

```
    rlghncxa03w  09-06-04 15:10:19 EST  EAGLE 5 41.1.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    2109   128-022-000  HIPR2     HIPR2      IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      TRIAL VERSION      = HIPR2 023-099-008
      FPGA VERSION       = HIPR2 008-001-003-002
      CURRENT TEMPERATURE   =  73C (164F)
      PEAK TEMPERATURE:     =  73C (164F)     [02-01-05 10:12]

    Command Completed.
;
```

This example shows a full report for a card running the IPSG GPL. Fast Copy functionality has been provisioned for the IPSG GPL.

```
rept-stat-card:loc=1102:mode=full
```

```
    stpc9070501 11-05-04 17:43:56 EDT  EAGLE5 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1102   009-054-000  E5ENET    IPSG       IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLIXP   GPL version = 009-054-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Idle
      CLOCK B            = Active
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = EPM A
      DBD STATUS         = Valid
      DBD TYPE           = 1G ENET
      DBD MEMORY SIZE    = 512M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  42C (108F)
      PEAK TEMPERATURE:     =  43C (110F)     [11-05-04 13:55]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI          E5IS
          A      IS-NR             stpa113n      stpa113n      INACTIVE
          B      IS-NR             sc2a115n      sc2a115n      INACTIVE
          A1     IS-NR             stpa113n      stpa113n      INACTIVE
          B1     IS-NR             sc2a115n      sc2a115n      INACTIVE
          A4     IS-NR             sp2a115n      sp2a115n      INACTIVE
          B4     IS-NR             sp3a116n      sp3a116n      INACTIVE
          A5     IS-NR             sp2a115n      sp2a115n      INACTIVE
          B5     IS-NR             sp3a116n      sp3a116n      INACTIVE
      IPLNK STATUS
          IPLNK  IPADDR            STATUS     PST
          A      10.251.100.166    UP         IS-NR
          B      10.251.102.27     UP         IS-NR
      FCLNK STATUS
          A1     172.21.48.242     UP         IS-NR
          B1     172.22.48.242     UP         IS-NR
      FASTCOPY STATUS
          ONLINE
      ASSOCIATION STATUS
          ANAME             PST            SST
          ipn1102am2pa      IS-NR          ESTABLISHED
          ipn1102a1m2pa     IS-NR          ESTABLISHED
          gwn1102bm3ua      IS-NR          ESTABLISHED
```

```
          gwn1102b1m3ua      IS-NR           ESTABLISHED
          ipns1102a4m2pa     IS-NR           ESTABLISHED
          ipns1102a5m2pa     IS-NR           ESTABLISHED
          gwns1102b4m3ua     IS-NR           ESTABLISHED
          gwns1102b5m3ua     IS-NR           ESTABLISHED
      APPLICATION SERVICING
                                        TVG    MFC         TVG    MFC
          SNM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SLAN    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          EROUTE  REQ STATUS =   24 hr: ------ G--, 5 min: ------ G--
          INM     REQ STATUS =   24 hr: ------ G--, 5 min: ------ ---
          MTP3    REQ STATUS =   24 hr:        G--, 5 min:        G--

    Command Completed.
;
```

This example shows a full report for a card running the IPSG application and receiving pure MTP routed traffic. The MFC option and E5IS feature are ON.

`rept-stat-card:loc=1105:mode=full`

```
    e1080403 11-03-10 14:46:53 EST  EAGLE 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1105   134-000-000  E5ENETB   IPSG       IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLMCAP   GPL version = 056-042-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Active
      CLOCK B             = Idle
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = EPM A
      DBD STATUS          = Valid
      DBD TYPE            = 1G ENET
      DBD MEMORY SIZE     = 512M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  43C (110F)
      PEAK TEMPERATURE:     =  45C (113F)     [11-03-08 10:18]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI          E5IS
          B2     IS-NR             ipsg1105b2    -----------   INACTIVE
      IPLNK STATUS
          IPLNK  IPADDR            STATUS     PST
          A      10.254.101.121    UP         IS-NR
          B      10.254.100.4      UP         IS-NR
      ASSOCIATION STATUS
          ANAME              PST             SST
          m3ua1105b2         IS-NR           ESTABLISHED
      APPLICATION SERVICING
                                        TVG    MFC         TVG    MFC
          SNM     REQ STATUS =   24 hr: GDNHSI ---, 5 min: GD---- ---
          SLAN    REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          EROUTE  REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          INM     REQ STATUS =   24 hr: G----- ---, 5 min: G----- ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---

    Command Completed.
;
```

This example shows a full report for an E5-IPSM card:

```
rept-stat-card:loc=1107:mode=full
```

```
    tekelecstp 10-12-09 04:18:45 EST  EAGLE 43.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1107   131-010-000  IPSM      IPSHC      IS-NR          Active     -----
      ALARM STATUS       =  *  0021 Clock A for card failed, Clock B normal
      BLIXP   GPL version = 133-044-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Fault
      CLOCK B             = Active
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = EPM A
      DBD STATUS          = Valid
      DBD TYPE            = 1G ENET
      DBD MEMORY SIZE     = 2048M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  45C (113F)
      PEAK TEMPERATURE:     =  45C (113F)     [11-12-12 03:57]
      IPLNK STATUS
          IPLNK  IPADDR             STATUS     PST
          A      10.254.101.121     UP         IS-NR

    Command Completed.
;
```

This example shows a full report for an E5-E1T1 card when an obsolete framer IC version (v2.1) is used and receiving pure MTP routed traffic. The MFC option and E5IS feature are ON.

```
rept-stat-card:loc=1204:mode=full
```

```
    tekelecstp 11-02-25 12:06:24 IST  EST  EAGLE 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1204   134-000-000  LIME1     SS7HC      IS-NR          Active     -----
      ALARM STATUS       =  No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Active
      CLOCK B             = Fault
      CLOCK I             = Idle
      HS CLOCK A          = Fault
      HS CLOCK B          = Fault
      HS CLOCK I          = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = EPM A
      DBD STATUS          = Valid
      DBD TYPE            = E1T1
      DBD MEMORY SIZE     = 512M
      HW VERIFICATION CODE = ----
      CARD WARNING        = OBSOLETE FRAMER
      CURRENT TEMPERATURE   =  36C ( 97F)
      PEAK TEMPERATURE:     =  37C ( 99F)     [04-01-05 11:33]
      SIGNALING LINK STATUS
          SLK    PST              LS            CLLI          E5IS
          A      IS-NR            lsb           -----------   INACTIVE
      APPLICATION SERVICING
                                      TVG    MFC         TVG    MFC
```

```
          SNM     REQ STATUS =   24 hr: GDNHSI ---, 5 min: GD---- ---
          SLAN    REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          EROUTE  REQ STATUS =   24 hr: ------ GDN, 5 min: ------ G--
          INM     REQ STATUS =   24 hr: G----- ---, 5 min: G----- ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---

    Command Completed.
;
```

This example shows a full report for an E5-TSM card:

```
rept-stat-card:loc=1106:mode=full
```

```
    tekelecstp 10-12-09 19:15:28 EST  EAGLE 43.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1106   130-001-000  TSM       GLSHC      IS-NR          Active     -----
      ALARM STATUS       =  No Alarms.
      BLIXP   GPL version = 133-044-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Active
      CLOCK B             = Idle
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = EPM A
      DBD STATUS          = Valid
      DBD TYPE            = None
      DBD MEMORY SIZE     = 512M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  44C (112F)
      PEAK TEMPERATURE:     =  44C (112F)     [10-10-05 19:10]

    Command Completed.
```

This example shows the output when E5-MCAP, E5-TDM, and E5-MDAL cards are used:

```
rept-stat-card
```

```
    e5oam 14-12-01 15:38:32 EST  EAGLE 46.2.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1109   030-009-000  HIPR2     HIPR2      IS-NR          Active     -----
    1110   030-009-000  HIPR2     HIPR2      IS-NR          Active     -----
    1113   030-010-008  E5MCAP    OAMHC      IS-NR          Standby    -----
    1114   -----------  E5TDM                IS-NR          Active     -----
    1115   030-010-008  E5MCAP    OAMHC      IS-NR          Active     -----
    1116   -----------  E5TDM                IS-NR          Active     -----
    1117   -----------  E5MDAL               OOS-MT         Isolated   -----

    Command Completed.
;
```

This example shows the output for a HIPR2 card, which does not support thermal monitoring:

```
rept-stat-card:loc=2109
```

```
    rlghncxa03w  09-06-04 15:10:19 EST  EAGLE 5 41.1.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    2109   128-022-000  HIPR2     HIPR2      IS-NR          Active     -----
```

```
      ALARM STATUS       = No Alarms.
      TRIAL VERSION      = HIPR2 023-099-008
      FPGA VERSION       = HIPR2 008-001-003-002
      CURRENT TEMPERATURE   = NA
      PEAK TEMPERATURE:     = NA

    Command Completed.
;
```

This example shows the output for a HIPR2 card when the card is not in-service:

```
rept-stat-card:loc=1109
```

```
    rlghncxa03w  09-06-04 15:10:19 EST  EAGLE 5 41.1.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1209   -----------  HIPR2     HIPR2      OOS-MT         Isolated   -----
      ALARM STATUS       = No Alarms.
      TRIAL VERSION      = HIPR2 023-099-008
      FPGA VERSION       = HIPR2 ---------------
      CURRENT TEMPERATURE   = ----
      PEAK TEMPERATURE:     = ----

    Command Completed.
;
```

This example shows the output for an E5-OAM card when the Integrated Measurements feature is turned on:

```
rept-stat-card:loc=1113
```

```
    tekelecstp 02-01-08 04:50:35 EST  EAGLE 46.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1113   134-068-000  E5MCAP    OAMHC      IS-NR          Active     -----
      ALARM STATUS       =  No Alarms
      BLMCAP  GPL version = 134-054-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CURRENT TEMPERATURE   =  31C ( 88F)
      PEAK TEMPERATURE:     =  32C ( 90F)     [02-01-08 04:31]

    Command Completed.
;
```

This example shows a full report for the E5-MASP of MASP A located in slot 1113, which is currently active:

```
rept-stat-card:loc=1113:mode=full
```

```
    tekelecstp 10-01-07 09:37:39 EST  EAGLE 42.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1113   030-002-022  E5MCAP    OAMHC      IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLMCAP  GPL version = 030-004-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Active
      CLOCK B             = Idle
```

```
  CLOCK I             = Idle
  MBD BIP STATUS      = Valid
  MOTHER BOARD ID     = E5-MCAP
  DBD STATUS          = Valid
  DBD TYPE            = 1G ENET
  DBD MEMORY SIZE     = 2048M
  HW VERIFICATION CODE = ----
  CURRENT TEMPERATURE   =   0C ( 32F)
  PEAK TEMPERATURE:     =   0C ( 32F)     [00-00-00 00:00]
  TROUBLE TEXT VER.  = Rev 133.1.2
  TVG STATUS
  IPLNK STATUS
      IPLNK  IPADDR             STATUS     PST
      A      192.168.1.1        UP         IS-NR
```

This example shows a full report for an E5-MASP card when an IP mismatch condition exists:

```
rept-stat-card:loc=1113:mode=full
```

```
tekelecstp 10-01-07 09:37:39 EST  EAGLE 42.0.0
CARD   VERSION      TYPE      GPL        PST           SST        AST
1113   030-002-022  E5MCAP    OAMHC      IS-NR         Active     -----
  ALARM STATUS       = No Alarms.
  BLMCAP  GPL version = 030-004-000
  IMT BUS A           = Conn
  IMT BUS B           = Conn
  CLOCK A             = Active
  CLOCK B             = Idle
  CLOCK I             = Idle
  MBD BIP STATUS      = Valid
  MOTHER BOARD ID     = E5-MCAP
  DBD STATUS          = Valid
  DBD TYPE            = 1G ENET
  DBD MEMORY SIZE     = 2048M
  HW VERIFICATION CODE = ----
  CURRENT TEMPERATURE   =   0C ( 32F)
  PEAK TEMPERATURE:     =   0C ( 32F)     [00-00-00 00:00]
  TROUBLE TEXT VER.  = Rev 133.1.2
  TVG STATUS
  IPLNK STATUS
      IPLNK  IPADDR             STATUS     PST
      A      192.168.1.1        UP         IS-NR
      IP Mismatch exists, reset required
```

This example lists 64 links on an E5-E1T1 card when the card is not seated. Only 16 links are provisioned on the card.

```
rept-stat-card:loc=1103:links=all
```

```
tekelecstp 10-03-01 14:16:21 EST  EAGLE 42.0.0
CARD   VERSION      TYPE      GPL        PST           SST        AST
1103   -----------  LIME1     SS7HC    OOS-MT        Isolated   -----
  ALARM STATUS       = **  0013 Card is isolated from the system
  ????    GPL version = -----------
  IMT BUS A           = -----
  IMT BUS B           = -----
  SIGNALING LINK STATUS
      SLK    PST                LS           CLLI
      A      OOS-MT-DSBLD       ls3          -----------
      B      OOS-MT-DSBLD       ls3          -----------
```

```
         A1     OOS-MT-DSBLD       ls3          -----------
         B1     OOS-MT-DSBLD       ls3          -----------
         A2     OOS-MT-DSBLD       ls3          -----------
         B2     OOS-MT-DSBLD       ls3          -----------
         A3     OOS-MT-DSBLD       ls3          -----------
         B3     OOS-MT-DSBLD       ls3          -----------
         A4     OOS-MT-DSBLD       ls3          -----------
         B4     OOS-MT-DSBLD       ls3          -----------
         A5     OOS-MT-DSBLD       ls3          -----------
         B5     OOS-MT-DSBLD       ls3          -----------
         A6     OOS-MT-DSBLD       ls3          -----------
         B6     OOS-MT-DSBLD       ls3          -----------
         A7     OOS-MT-DSBLD       ls3          -----------
         B7     OOS-MT-DSBLD       ls3          -----------
         A8     OOS-MA             --------     -----------
         B8     OOS-MA             --------     -----------
         A9     OOS-MA             --------     -----------
         B9     OOS-MA             --------     -----------
         A10    OOS-MA             --------     -----------
         B10    OOS-MA             --------     -----------
         A11    OOS-MA             --------     -----------
         B11    OOS-MA             --------     -----------
         A12    OOS-MA             --------     -----------
         B12    OOS-MA             --------     -----------
         A13    OOS-MA             --------     -----------
         B13    OOS-MA             --------     -----------
         A14    OOS-MA             --------     -----------
         B14    OOS-MA             --------     -----------
         A15    OOS-MA             --------     -----------
         B15    OOS-MA             --------     -----------
         A16    OOS-MA             --------     -----------
         B16    OOS-MA             --------     -----------
         A17    OOS-MA             --------     -----------
         B17    OOS-MA             --------     -----------
         A18    OOS-MA             --------     -----------
         B18    OOS-MA             --------     -----------
         A19    OOS-MA             --------     -----------
         B19    OOS-MA             --------     -----------
         A20    OOS-MA             --------     -----------
         B20    OOS-MA             --------     -----------
         A21    OOS-MA             --------     -----------
         B21    OOS-MA             --------     -----------
         A22    OOS-MA             --------     -----------
         B22    OOS-MA             --------     -----------
         A23    OOS-MA             --------     -----------
         B23    OOS-MA             --------     -----------
         A24    OOS-MA             --------     -----------
         B24    OOS-MA             --------     -----------
         A25    OOS-MA             --------     -----------
         B25    OOS-MA             --------     -----------
         A26    OOS-MA             --------     -----------
         B26    OOS-MA             --------     -----------
         A27    OOS-MA             --------     -----------
         B27    OOS-MA             --------     -----------
         A28    OOS-MA             --------     -----------
         B28    OOS-MA             --------     -----------
         A29    OOS-MA             --------     -----------
         B29    OOS-MA             --------     -----------
         A30    OOS-MA             --------     -----------
         B30    OOS-MA             --------     -----------
         A31    OOS-MA             --------     -----------
         B31    OOS-MA             --------     -----------
```

```
    Command Completed.
;
```

This example lists 32 links on an E5-E1T1 card when the card is seated. Only 16 links are provisioned.

`rept-stat-card:loc=1103:links=all`

```
    tekelecstp 10-12-09 14:16:21 EST  EAGLE 43.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1103   133-008-000  LIME1     SS7HC      IS-NR          Active     -----
      ALARM STATUS       =  *  0021 Clock A for card failed, Clock B normal
      BLIXP   GPL version = 133-044-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CURRENT TEMPERATURE   =  34C ( 94F)
      PEAK TEMPERATURE:     =  34C ( 94F)     [10-12-01 14:18]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI
          A      OOS-MT-DSBLD      ls3           -----------
          B      OOS-MT-DSBLD      ls3           -----------
          A1     OOS-MT-DSBLD      ls3           -----------
          B1     OOS-MT-DSBLD      ls3           -----------
          A2     OOS-MT-DSBLD      ls3           -----------
          B2     OOS-MT-DSBLD      ls3           -----------
          A3     OOS-MT-DSBLD      ls3           -----------
          B3     OOS-MT-DSBLD      ls3           -----------
          A4     OOS-MT-DSBLD      ls3           -----------
          B4     OOS-MT-DSBLD      ls3           -----------
          A5     OOS-MT-DSBLD      ls3           -----------
          B5     OOS-MT-DSBLD      ls3           -----------
          A6     OOS-MT-DSBLD      ls3           -----------
          B6     OOS-MT-DSBLD      ls3           -----------
          A7     OOS-MT-DSBLD      ls3           -----------
          B7     OOS-MT-DSBLD      ls3           -----------
          A8     OOS-MA            --------      -----------
          B8     OOS-MA            --------      -----------
          A9     OOS-MA            --------      -----------
          B9     OOS-MA            --------      -----------
          A10    OOS-MA            --------      -----------
          B10    OOS-MA            --------      -----------
          A11    OOS-MA            --------      -----------
          B11    OOS-MA            --------      -----------
          A12    OOS-MA            --------      -----------
          B12    OOS-MA            --------      -----------
          A13    OOS-MA            --------      -----------
          B13    OOS-MA            --------      -----------
          A14    OOS-MA            --------      -----------
          B14    OOS-MA            --------      -----------
          A15    OOS-MA            --------      -----------
          B15    OOS-MA            --------      -----------

    Command Completed.
;
```

This example lists 48 unequipped links (maximum supported links when card is not seated minus the provisioned links) on an E5-E1T1 card. Only 16 links are provisioned.

`rept-stat-card:loc=1103:links=unequip`

```
    tekelecstp 10-03-01 14:16:21 EST  EAGLE 42.0.0
```

```
    CARD   VERSION      TYPE      GPL        PST           SST        AST
    1103   -----------  LIME1     SS7HC    OOS-MT        Isolated   -----
      ALARM STATUS       = **  0013 Card is isolated from the system
      ????    GPL version = -----------
      IMT BUS A           = -----
      IMT BUS B           = -----
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI
          A8     OOS-MA            --------      -----------
          B8     OOS-MA            --------      -----------
          A9     OOS-MA            --------      -----------
          B9     OOS-MA            --------      -----------
          A10    OOS-MA            --------      -----------
          B10    OOS-MA            --------      -----------
          A11    OOS-MA            --------      -----------
          B11    OOS-MA            --------      -----------
          A12    OOS-MA            --------      -----------
          B12    OOS-MA            --------      -----------
          A13    OOS-MA            --------      -----------
          B13    OOS-MA            --------      -----------
          A14    OOS-MA            --------      -----------
          B14    OOS-MA            --------      -----------
          A15    OOS-MA            --------      -----------
          B15    OOS-MA            --------      -----------
          A16    OOS-MA            --------      -----------
          B16    OOS-MA            --------      -----------
          A17    OOS-MA            --------      -----------
          B17    OOS-MA            --------      -----------
          A18    OOS-MA            --------      -----------
          B18    OOS-MA            --------      -----------
          A19    OOS-MA            --------      -----------
          B19    OOS-MA            --------      -----------
          A20    OOS-MA            --------      -----------
          B20    OOS-MA            --------      -----------
          A21    OOS-MA            --------      -----------
          B21    OOS-MA            --------      -----------
          A22    OOS-MA            --------      -----------
          B22    OOS-MA            --------      -----------
          A23    OOS-MA            --------      -----------
          B23    OOS-MA            --------      -----------
          A24    OOS-MA            --------      -----------
          B24    OOS-MA            --------      -----------
          A25    OOS-MA            --------      -----------
          B25    OOS-MA            --------      -----------
          A26    OOS-MA            --------      -----------
          B26    OOS-MA            --------      -----------
          A27    OOS-MA            --------      -----------
          B27    OOS-MA            --------      -----------
          A28    OOS-MA            --------      -----------
          B28    OOS-MA            --------      -----------
          A29    OOS-MA            --------      -----------
          B29    OOS-MA            --------      -----------
          A30    OOS-MA            --------      -----------
          B30    OOS-MA            --------      -----------
          A31    OOS-MA            --------      -----------
          B31    OOS-MA            --------      -----------

    Command Completed.
;
```

This example lists 16 unequipped links (maximum supported links when card is seated minus the provisioned links) on an E5-E1T1 card. Only 16 links are provisioned.

```
rept-stat-card:loc=1103:links=unequip
```

```
    tekelecstp 10-12-09 14:16:21 EST  EAGLE 43.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1103   133-008-000  LIME1     SS7HC      IS-NR          Active     -----
      ALARM STATUS       =  *  0021 Clock A for card failed, Clock B normal
      BLIXP   GPL version = 133-044-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CURRENT TEMPERATURE   =  35C ( 95F)
      PEAK TEMPERATURE:     =  35C ( 95F)     [10-03-01 14:19]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI
          A8     OOS-MA            --------      -----------
          B8     OOS-MA            --------      -----------
          A9     OOS-MA            --------      -----------
          B9     OOS-MA            --------      -----------
          A10    OOS-MA            --------      -----------
          B10    OOS-MA            --------      -----------
          A11    OOS-MA            --------      -----------
          B11    OOS-MA            --------      -----------
          A12    OOS-MA            --------      -----------
          B12    OOS-MA            --------      -----------
          A13    OOS-MA            --------      -----------
          B13    OOS-MA            --------      -----------
          A14    OOS-MA            --------      -----------
          B14    OOS-MA            --------      -----------
          A15    OOS-MA            --------      -----------
          B15    OOS-MA            --------      -----------

    Command Completed.
;
```

This example shows a full report for an E5-ENET-B used as an STC card:

```
rept-stat-card:loc=1102:mode=full
```

```
    rlghncxa03w 11-03-09 16:35:57 EST  EAGLE 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1102   134-000-000  STC       ERTHC      IS-NR          Active     -----
      ALARM STATUS       =  No Alarms.
      BLMCAP  GPL version = 032-000-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Fault
      CLOCK B            = Fault
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = EPM B
      DBD STATUS         = Valid
      DBD TYPE           = 1G ENET
      DBD MEMORY SIZE    = 2048M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  62C (144F)
      PEAK TEMPERATURE:     =  63C (146F)     [02-04-18 19:53]
      EROUTE % OCCUP     = 0%
      SOCKET = INACTIVE
      NTP broadcast = VALID
      IPLNK STATUS
          IPLNK  IPADDR            STATUS     PST
          A      192.168.210.166   UP         IS-NR
```

```
          B      ---------------    DOWN       OOS-MT
      STC IP CONNECTION
          PORT   PST             SST
          A      IS-NR           Active
          B      OOS-MT          Unavail

    Command Completed.
;
```

This example shows a full report for an E5-ATM card:

`rept-stat-card:loc=1207:mode=full`

```
    eagle1 10-11-18 00:41:18 EST  EAGLE 43.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1207   024-038-000  LIMATM    ATMHC      IS-NR          Active     -----
      ALARM STATUS       =  *  0021 Clock A for card failed, Clock B normal
      BLIXP   GPL version = 133-044-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Fault
      CLOCK B             = Active
      CLOCK I             = Idle
      HS CLOCK A          = Fault
      HS CLOCK B          = Fault
      HS CLOCK I          = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = EPM A
      DBD STATUS          = Valid
      DBD TYPE            = ATM
      DBD MEMORY SIZE     = 512M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  48C (119F)
      PEAK TEMPERATURE:     =  49C (121F)     [02-01-01 00:34]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI
          A      OOS-MT            ls8           -----------
          B      OOS-MT            ls7           -----------
          A1     OOS-MT            ls8           -----------
      TVG STATUS
          SNM     TVG RESULT   = 24 hr: ------, 5 min: ------
          SLAN    TVG RESULT   = 24 hr: ------, 5 min: ------
          SCCP    TVG RESULT   = 24 hr: ------, 5 min: ------
          INM     TVG RESULT   = 24 hr: ------, 5 min: ------

    Command Completed.
;
```

This example shows a full report for an E5-ATM-B card. The MFC option is ON and the 3 Links per E5-ATM feature is enabled.

`rept-stat-card:loc=1107:mode=full`

```
    rlghncxa03w 11-03-10 14:00:53 EST  EAGLE5 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1107   134-000-000  LIMATM    ATMHC      IS-NR          Active     -----
      ALARM STATUS       =  *  0022 Clock B for card failed, Clock A normal
      BLMCAP  GPL version = 023-000-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
```

```
      CLOCK A             = Active
      CLOCK B             = Fault
      CLOCK I             = Idle
      HS CLOCK A          = Active
      HS CLOCK B          = Fault
      HS CLOCK I          = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = EPM B
      DBD STATUS          = Valid
      DBD TYPE            = ATM
      DBD MEMORY SIZE     = 2048M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  54C (130F)
      PEAK TEMPERATURE:     =  55C (131F)     [20-12-22 10:55]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI
          A      IS-NR             lsatm11       -----------
          B      IS-NR             lsatm11       -----------
          A1     IS-NR             lsatm12       -----------
      APPLICATION SERVICING
                                       MFC          MFC
          SNM     REQ STATUS =   24 hr: ---, 5 min: ---
          SLAN    REQ STATUS =   24 hr: ---, 5 min: ---
          SCCP    REQ STATUS =   24 hr: ---, 5 min: ---
          INM     REQ STATUS =   24 hr: G--, 5 min: G--
          MTP3    REQ STATUS =   24 hr: G--, 5 min: G--

    Command Completed.
;
```

This example shows the output for an E5-ENET-B card used as an IPSM card:

```
rept-stat-card:loc=1103:mode=full
```

```
    rlghncxa03w 11-03-09 16:35:57 IST  EAGLE 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1103   134-000-000  IPSM      IPSHC     IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLMCAP  GPL version = 032-000-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Active
      CLOCK B             = Idle
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = EPM B
      DBD STATUS          = Valid
      DBD TYPE            = 1G ENET
      DBD MEMORY SIZE     = 2048M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  62C (144F)
      PEAK TEMPERATURE:     =  63C (146F)     [02-09-14 14:49]
      IPLNK STATUS
          IPLNK  IPADDR            STATUS     PST
          A      10.220.9.9        UP         IS-NR

 Command Completed.
;
```

This example shows the output for an E5-MCPM-B card:

```
rept-stat-card:loc=1108
```

```
    tekelecstp 11-04-25 19:44:32 EST  EAGLE5 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1108   130-000-000  MCPM      MCPHC      IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLMCAP  GPL version = 134-000-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CURRENT TEMPERATURE   =  42C (108F)
      PEAK TEMPERATURE:     =  42C (108F)     [11-04-24 04:32]

    Command Completed.
;
```

This example shows a full report for an E5-MCPM-B card:

```
rept-stat-card:loc=1108:mode=full
```

```
    tekelecstp 11-04-25 19:44:35 EST  EAGLE5 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1108   134-000-000  MCPM      MCPHC      IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLMCAP  GPL version = 134-000-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Active
      CLOCK B            = Idle
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = EPM B
      DBD STATUS         = Valid
      DBD TYPE           = 1G ENET
      DBD MEMORY SIZE    = 4096M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  42C (108F)
      PEAK TEMPERATURE:     =  42C (108F)     [11-04-24 04:32]
      IPLNK STATUS
          IPLNK  IPADDR            STATUS     PST
          A      10.250.37.176     UP         IS-NR
      MCP IP CONNECTION
          PORT   PST            SST
          A      IS-NR          Active

    Command Completed.
;
```

This example shows the output for an E5-ENET-B card used as an IPSG card:

```
rept-stat-card:loc=1111:mode=full
```

```
    stpc9070501 11-05-23 15:30:39 EDT  EAGLE5 44.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1111   009-003-000  E5ENETB   IPSG       IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BLMCAP  GPL version = 009-003-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Idle
      CLOCK B            = Active
```

```
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = EPM B
      DBD STATUS          = Valid
      DBD TYPE            = 1G ENET
      DBD MEMORY SIZE     = 2048M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  46C (115F)
      PEAK TEMPERATURE:     =  46C (115F)     [11-05-23 15:09]
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI          E5IS
          A      OOS-MT            ls1111n00     tklcc1111n0   INACTIVE
          A4     OOS-MT            lr1111n08     tkc1111n8     INACTIVE
      IPLNK STATUS
          IPLNK  IPADDR            STATUS     PST
          A      10.251.105.68     UP         IS-NR
          B      ---------------   ----       ----
      ASSOCIATION STATUS
          ANAME              PST            SST
          egwn1111am3ua      OOS-MT         CONNECTING
          egwns1111a4m3ua    OOS-MT         CONNECTING
      APPLICATION SERVICING
                                        TVG    MFC         TVG    MFC
          SNM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SLAN    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          EROUTE  REQ STATUS =   24 hr: ------ G--, 5 min: ------ G--
          INM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---

    Command Completed.
;
```

This example shows a full report when the EPAP Data Split feature is enabled:

`rept-stat-card:loc=1201:mode=full`

```
    epap240m 12-01-29 11:53:07 CST  EAGLE 45.0.0
    CARD   VERSION      TYPE      GPL        PST           SST        AST
    1201   074-012-005  LIME1    SS7HC      IS-NR         Active     -----
      ALARM STATUS       = No Alarms.
      BPMPL   GPL version = 134-015-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Idle
      CLOCK B            = Active
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = MPL
      DBD STATUS         = Valid
      DBD TYPE           = None
      DBD MEMORY SIZE    = 0M
      HW VERIFICATION CODE = ----
      SIGNALING LINK STATUS
          SLK    PST               LS            CLLI
          A      OOS-MT-DSBLD      lsa1          -----------
      APPLICATION SERVICING
                                        TVG    MFC         TVG    MFC
          SNM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SLAN    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          INM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---
```

```
          SCPDN   REQ STATUS =   24 hr:        ---, 5 min:        ---
          SCPIMSI REQ STATUS =   24 hr:        ---, 5 min:        ---

    Command Completed.
;
```

This example shows a full report when the Dual ExAP Config feature is enabled:

rept-stat-card:loc=1201:mode=full

```
epap240m 12-01-29 11:53:07 CST  EAGLE 45.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1201   074-012-005  LIMDS0    SS7ML      IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BPMPL   GPL version = 134-015-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Idle
      CLOCK B            = Active
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = MPL
      DBD STATUS         = Valid
      DBD TYPE           = None
      DBD MEMORY SIZE    = 0M
      HW VERIFICATION CODE = ----
      SIGNALING LINK STATUS
          SLK    PST               LS           CLLI
          A      OOS-MT-DSBLD      lsa1         -----------
      APPLICATION SERVICING
                                       TVG    MFC         TVG    MFC
          SNM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SLAN    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          INM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---
          SCPEPAP REQ STATUS =   24 hr:        ---, 5 min:        ---
          SCPELAP REQ STSTUS =   24 hr:        ---, 5 min:        ---


    Command Completed.
;
```

This example shows a full report when both EPAP Data Split feature and Dual ExAP Config features are enabled:

rept-stat-card:loc=1201:mode=full

```
    epap240m 12-01-29 11:53:07 CST  EAGLE 45.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1201   074-012-005  LIMDS0    SS7ML      IS-NR          Active     -----
      ALARM STATUS       = No Alarms.
      BPMPL   GPL version = 134-015-000
      IMT BUS A          = Conn
      IMT BUS B          = Conn
      CLOCK A            = Idle
      CLOCK B            = Active
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
```

```
      MOTHER BOARD ID     = MPL
      DBD STATUS          = Valid
      DBD TYPE            = None
      DBD MEMORY SIZE     = 0M
      HW VERIFICATION CODE = ----
      SIGNALING LINK STATUS
          SLK    PST                LS            CLLI
          A      OOS-MT-DSBLD       lsa1          -----------
      APPLICATION SERVICING
                                        TVG    MFC          TVG    MFC
          SNM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SLAN    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          SCCP    REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          INM     REQ STATUS =   24 hr: ------ ---, 5 min: ------ ---
          MTP3    REQ STATUS =   24 hr:        ---, 5 min:        ---
          SCPDN   REQ STATUS =   25 hr:        ---, 5 min:        ---
          SCPIMSI REQ STATUS =   25 hr:        ---, 5 min:        ---
          SEPELAP REQ STATUS =   25 hr:        ---, 5 min:        ---

    Command Completed.
;
```

This example shows output for an E5-SM8G-B card running the SIP application:

`rept-stat-card:loc=1205`

```
tekelecstp 12-06-29 15:03:34 EST EAGLE 45.0.0
CARD   VERSION      TYPE      GPL        PST            SST          AST
1205   134-045-000  DSM       SIPHC      IS-NR          Active       -----
  ALARM STATUS       = No Alarms.
  BLIXP   GPL version = 134-045-000
  IMT BUS A          = Conn
  IMT BUS B          = Conn
Command Completed.
;
```

This example shows output for an E5-SM8G-B card running the SIP application with mode=full:

`rept-stat-card:loc=1101:mode=full`

```
    tekelecstp 12-06-29 15:03:34 EST EAGLE 45.0.0
    rept-stat-card:loc=1101:mode=full
    Command entered at terminal #18.
;

Command Accepted - Processing
    tekelecstp 12-06-29 15:03:34 EST EAGLE 45.0.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1101   029-042-007  DSM       SIPHC      IS-NR          Active     -----
      ALARM STATUS       =  *  0022 Clock B for card failed, Clock A normal
      BLIXP   GPL version = 059-042-000
      IMT BUS A          = Conn
      IMT BUS B          = Disc
      CLOCK A            = Active
      CLOCK B            = Fault
      CLOCK I            = Idle
      MBD BIP STATUS     = Valid
      MOTHER BOARD ID    = SMXG A
      DBD STATUS         = Valid
      DBD TYPE           = None
      DBD MEMORY SIZE    = 4096M
```

```
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  46C (115F)
      PEAK TEMPERATURE:     =  46C (115F)     [02-13-06 17:11]
      IPLNK STATUS
          IPLNK  IPADDR             STATUS     PST
          A      192.168.120.132    UP         IS-NR
          B      ---------------    ----       ----
      DSM IP CONNECTION
          PORT   PST             SST
          A      IS-NR           Active
      SIP CONNECTION STATUS
          CNAME         PROT            PST             OPEN
          conn1         TCP             IS-NR           YES
          conn2         UDP             IS-NR           YES
    Command Completed.
;
```

This example shows output for an E5-SM8G-B card running the ENUM application:

`rept-stat-card:loc=1205`

```
tekelecstp 14-05-26 15:03:34 EST EAGLE 46.1.0
CARD   VERSION      TYPE      GPL        PST            SST          AST
1205   135-016-000  DSM       ENUMHC     IS-NR          Active       -----
  ALARM STATUS       = No Alarms.
  BLIXP   GPL version = 135-016-000
  IMT BUS A           = Conn
  IMT BUS B           = Conn
Command Completed.
;
```

This example shows output for an E5-SM8G-B card running the ENUM application with mode=full:

`rept-stat-card:loc=1101:mode=full`

```
tekelecstp 14-05-26 15:03:34 EST EAGLE 46.1.0
    rept-stat-card:loc=1101:mode=full
    Command entered at terminal #18.
;

Command Accepted - Processing
    tekelecstp 14-05-26 15:03:34 EST EAGLE 46.1.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1101   135-016-000  DSM       ENUMHC     IS-NR          Active     -----
      ALARM STATUS       =  *  0022 Clock B for card failed, Clock A normal
      BLIXP   GPL version = 136-016-000
      IMT BUS A           = Conn
      IMT BUS B           = Disc
      CLOCK A             = Active
      CLOCK B             = Fault
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = SMXG A
      DBD STATUS          = Valid
      DBD TYPE            = None
      DBD MEMORY SIZE     = 4096M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  46C (115F)
      PEAK TEMPERATURE:     =  46C (115F)     [02-13-06 17:11]
      IPLNK STATUS
          IPLNK  IPADDR             STATUS     PST
          A      192.168.120.132    UP         IS-NR
```

```
          B      ---------------    ----       ----
      DSM IP CONNECTION
          PORT   PST            SST
          A      IS-NR          Active
      ENUM CONNECTION STATUS
          CNAME         PROT            PST             OPEN
          conn1         UDP             IS-NR           YES
    Command Completed.
;
```

This example shows the output when E5-APP-B cards exist in the system:

`rept-stat-card`

```
tekelecstp 12-14-13 11:48:18 EST  46.1.0-0.0.0
rept-stat-card
Command entered at terminal #4.
CARD   VERSION      TYPE      GPL        PST            SST        AST
1105   -----------  E5APPB    EPAP       RSRVD          Avail      -----
1107   -----------  E5APPB    ELAP       RSRVD          Avail      -----
1109   000-000-000  HIPR2     HIPR2      IS-NR          Active     -----
1110   000-000-000  HIPR2     HIPR2      IS-NR          Active     -----
1113   255-255-255  GPSM      EOAM       IS-NR          Active     -----
1114   -----------  E5TDM                IS-NR          Active     -----
1115   255-255-255  GPSM      EOAM       IS-NR          Standby    -----
1116   -----------  TDM                  IS-NR          Active     -----
1117   -----------  E5MDAL               IS-NR          Active     -----
6202   -----------  TELCO     SWITCH     RSRVD          Avail      -----
6203   -----------  TELCO     SWITCH     RSRVD          Avail      -----
Command Completed.
;
```

This example shows the report for a card location equipped with an E5-APP-B card:

`rept-stat-card:loc=1105`

```
    tekelecstp 12-07-13 11:49:35 EST  45.0.0-64.37.0
    rept-stat-card:loc=1105
    Command entered at terminal #4.
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1105   -----------  E5APPB    EPAP       RSRVD          Avail    -----
    Command Completed.
;
```

These examples show the report for E5-APP-B application cards:

`rept-stat-card:appl=epap`

```
    tekelecstp 12-07-13 11:52:44 EST  45.0.0-64.37.0
    rept-stat-card:appl=epap
    Command entered at terminal #4.
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1105   -----------  E5APPB    EPAP       RSRVD          Avail      -----


    Command Completed.
;
```

`rept-stat-card:appl=elap`

```
tekelecstp 12-07-13 11:54:41 EST  45.0.0-64.37.0
    rept-stat-card:appl=elap
    Command entered at terminal #4.
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1107   -----------  E5APPB    ELAP       RSRVD          Avail    -----


    Command Completed.
;
```

`rept-stat-card:appl=lsms`

```
tekelecstp 12-07-13 11:54:41 EST  45.0.0-64.37.0
    rept-stat-card:appl=lsms
    Command entered at terminal #4.
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1103   -----------  E5APPB    LSMS       RSRVD          Avail    -----


    Command Completed.
;
```

`rept-stat-card:appl=nas`

```
tekelecstp 12-07-13 11:54:41 EST  45.0.0-64.37.0
    rept-stat-card:appl=nas
    Command entered at terminal #4.
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1101   -----------  E5APPB    NAS        RSRVD          Avail    -----


    Command Completed.
;
```

This example shows the report for a card location equipped with a Telco Switch:

`rept-stat-card:loc=6202`

```
tekelecstp 12-09-06 11:43:37 EST 45.0.0
rept-stat-card:loc=6202
Command entered at terminal #4.
CARD   VERSION      TYPE      GPL       PST         SST         AST
6202   -------      TELCO     SWITCH    RSRVD       Avail     -----

Command Completed.
;
```

This example shows the report for Telco Switches with parameter appl=switch:

`rept-stat-card:appl=switch`

```
tekelecstp 12-09-06 11:44:19 EST 45.0.0
rept-stat-card:appl=switch
```

```
Command entered at terminal #4.
CARD   VERSION      TYPE      GPL       PST         SST        AST
6201   -------      TELCO     SWITCH    RSRVD       Avail      ----
6202   -------      TELCO     SWITCH    RSRVD       Avail      ----
Command Completed.
;
```

This example shows output for an E5-SM8G-B card running the DEIRHC GPL:

`rept-stat-card:loc=1105`

```
    tekelecstp 13-04-24 11:18:57 EST  EAGLE 45.1.0
    rept-stat-card:loc=1105
    Command entered at terminal #26.
;
```

```
Command Accepted - Processing
    tekelecstp 02-01-24 11:18:57 EST  EAGLE 45.1.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1105   011-056-006  DSM       DEIRHC     IS-NR          Active     ---
      ALARM STATUS        = No Alarm
      BLIXP   GPL version = 008-056-003
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CURRENT TEMPERATURE =  33C ( 92F)
      PEAK TEMPERATURE:   =  33C ( 92F)     [13-04-24 11:00]
      DEIR SM DATA TYPE   = IMSI

    Command Completed.
;
```

This example shows output for an E5-SM8G-B card running the DEIRHC GPL with mode=full:

`rept-stat-card:loc=1105:mode=full`

```
    tekelecstp 13-04-24 11:28:54 EST  EAGLE 45.1.0
    rept-stat-card:loc=1105:mode=full
    Command entered at terminal #26.
;
```

```
Command Accepted - Processing
    tekelecstp 02-01-24 11:22:54 EST  EAGLE 45.1.0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1105   011-056-006  DSM       DEIRHC     IS-NR          Active     -----
      ALARM STATUS        =   normal
      BLIXP   GPL version = 008-056-003
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Active
      CLOCK B             = Fault
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = SMXG B
      DBD STATUS          = Valid
      DBD TYPE            = None
```

```
      DBD MEMORY SIZE     = 8192M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  33C ( 92F)
      PEAK TEMPERATURE:     =  33C ( 92F)     [13-04-24 11:00]
      DEIR SM DATA TYPE   = IMSI
      IPLNK STATUS
          IPLNK  IPADDR             STATUS     PST
          A      192.168.120.135    UP         IS-NR
          B      10.248.13.166      UP         IS-NR
      DSM IP CONNECTION
          PORT   PST             SST
          A      OOS-MT          Unavail
      DEIR CONNECTION STATUS
          DCNAME             STATUS    ANAME              STATUS
          abc1               UP        abc1               IS-NR
          abc2               UP        abc2               IS-NR
          abc3               DOWN      abc3               IS-NR

    Command Completed.
;
```

Legend

- **CARD**—Location of the card
- **VERSION**—Version number of the application loaded on the card. Dashes (- - - - -) in the version column indicate one of the following conditions about the card:
  - The card is configured but is not physically present in the system.
  - The card does not run a GPL, such as TDM or MDAL cards.
  - The card is IS-ANR or is in the process of being loaded.
- **TYPE**—Card type entered in the database.
- **APPL**—Application loaded on the card
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST* .
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST* .
- **AST**—Associated state of the card. See *Possible Values for PST/SST/AST* .

If Message Flow Control (MFC) is OFF, then Group Ticket Voucher status is displayed in these fields: SNM REQ STATUS (SNM messages), SLAN REQ STATUS (STPLAN messages), SCCP REQ STATUS (for SCCP messages), EROUTE REQ STATUS (EROUTE messages) and INM REQ STATUS (INM messages).

If MFC is ON, then Message Flow Control status is displayed in these fields: SNM REQ STATUS (SNM messages), SLAN REQ STATUS (STPLAN messages), SCCP REQ STATUS (SCCP messages), EROUTE REQ STATUS (EROUTE messages), INM REQ STATUS (INM messages) and MTP3 REQ STATUS (MTP3 messages).

For card type STC (EROUTE application), the TVG and MFC status are not displayed.

Group ticket voucher status output is displayed as a series of these letters:

- **G**—Service Granted. Indicates normal system behavior.
- **D—**Service Denied. Indicates an overload, but the group ticket voucher hardware and software are working correctly.

- **N—**No granter in the system. For GTT, STPLAN or EROUTE traffic, there can be no Service Module cards, STPLAN or EROUTE in the system. If there are Service Module cards, STPLAN or EROUTE in the system, then a serious failure is indicated (hardware or software bug or hardware failure).
- **H**—Hardware time-out. Indicates the hardware timed out waiting for a group ticket voucher packet to return. Group ticket voucher packets can be lost when a card is plugged in or booted. This is a serious condition if cards have not been connecting or disconnecting from the IMT. If this occurs, the IMT must be scrubbed (see the Scrub IMT procedure in *Maintenance Guide*) or the card must be replaced..
- **S**—Software time-out. No result was ever returned from hardware, indicating a probable hardware failure.
- **I**—Invalid result from hardware. If this occurs, the IMT must be scrubbed (see the Scrub IMT procedure in *Maintenance Guide*) or the card must be replaced.

Message Flow Control status output is displayed as a series of these letters:

- **G**—MFC found a service with available capacity. Indicates normal system behavior.
- **D—**Servers were present in the system, but no server had available capacity. Indicates an overload, but MFC is working correctly.
- **N—**No operational server cards were available in the system for use by this card over the corresponding interval.

The HW VERIFICATION CODE field is shown only in the mode=full report. ----- is shown in the HW VERIFICATION CODE field for cards with valid hardware detected. One of the following numerical values is shown when invalid hardware is detected, and all such cards will be auto-inhibited.

* It is possible that the card will continually boot in these cases, before the alarm is ever displayed.

Table 47: Auto-Inhibit Hardware Verification Codes

HW Verification Code	Card or Application Code	Description	Associated UAM Code
059	VSCCP	MPS database has been detected to exceed capacity of Service Module extended memory (only for GPORT, GFLEX, INP, EIR features). UAMs 281, 283, and 285 are used for LNP and LNP ELAP Configuration features.	422
099	E5-TSM	E5-TSM card equipped has one or more daughterboard.	99
101	SS7IPGW, IPGWI, IPLIM, IPLIMI	E5-ENET only supports SLK link A-7 and B-7.	276
102*	SS7IPGW, IPGWI	Non-DCM detected in slot.	99

HW Verification Code	Card or Application Code	Description	Associated UAM Code
103	SS7IPGW, IPGWI, IPLIM, IPLIMI	E5-ENET or E5-ENET-B does not support >16 associations (IPLIMx). E5-ENET or E5-ENET-B does not support >50 associations (IPGWx).	276
104	SS7IPGW, IPGWI, IPLIM, IPLIMI	E5-ENET or E5-ENET-B does not support >0 sockets (IPLIMx). E5-ENET or E5-ENET-B does not support >0 sockets (IPGWx).	276
106	SS7IPGW, IPGWI, IPLIM, IPLIMI	E5-ENET or E5-ENET-B does not support >3200Kb SCTP buffers (IPLIMx). E5-ENET or E5-ENET-B does not support >3200Kb SCTP buffers (IPGWx).	276
124	HC-MIM	Card is not an HC-MIM and is provisioned as a T1 card.	99
129	HC-MIM, E5-E1T1	Card does not support CAS framing.	297
134	E5-E1T1	E5-E1T1 card with SLK provisioned on link greater than 15.	99
135	E5-E1T1	E5-E1T1 card supports only 1 SE-HSL link.	276
141	IPS	E5-IPSM card not running with D2G memory.	422
142	MCP	E5-MCPM-B card not running with D4G memory.	422
150	various	Card is obsolete.	47

HW Verification Code	Card or Application Code	Description	Associated UAM Code
165	VSCCP	Hardware configuration does not support configured feature set.	99
170	EROUTE	Non-E5-ENET/E5-ENET-B card detected in slot provisioned for eroute with card type STC.	99
171	STPLAN	Non-E5-ENET/E5-ENET-B card detected in slot provisioned for STPLAN with card type DCM.	99
179	E5-ATM-B, E5-ENET-B, E5-E1T1-B	EPM-B based card detected and MFC is OFF.	99
180	SCCP, SS7ANSI	SCCP card equipped with DCM with MOBR on.	441

Related Commands

dlt-card, *ent-card*, *init-card*, *rmv-card*, *rst-card*, *rtrv-card*

rept-stat-cdl

Report Command Driven Loopback Status

Use this command to generate a report of the signaling links currently in Command Driven Loopback (CDL) testing, including the amount of time the link has been in CDL testing.

Command Driven Loopback is the ability to locally drive a signaling link into a manual line loopback. The data received on the signaling link is echoed (transmitted) back. This is effectively the reverse of the `tst-slk:loopback=lxvr` command, which loops the transmitted data back to the receive.

Parameters

link (optional)

SS7 signaling links. The signaling links that is being tested.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling link ports.

Default:

All signaling links that are in CDL testing are displayed.

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

All cards containing signaling links that are in CDL testing are displayed.

loopback (optional)

Loopback test type.

Range:

line

payload

Note: The payload value is valid only on LIM-ATM and E1-ATM cards.

Default:

All loopback tests are displayed.

Example

```
rept-stat-cdl
rept-stat-cdl:loc=1201
rept-stat-cdl:loc=1203:link=a
rept-stat-cdl:loopback=payload
```

Dependencies

If the link parameter is specified, the loc parameter must be specified.

The card location specified in the loc parameter must be equipped.

The signaling link specified in the link parameter must be equipped.

This command is not available during upgrade.

The card location specified in the loc parameter cannot be reserved by the system.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information

Output

`rept-stat-cdl`

```
    tekelecstp 03-11-27 01:29:06 EST  EAGLE 31.3.0
    SLK        CDL      CDL-TIME
    1102,A1    LINE     00:04:01
    1201,A     PAYLOAD  01:04:11
    1203,A     LINE     00:22:21
    1203,B     LINE     20:04:01
    1208,A     LINE     01:05:22
    1211,A     PAYLOAD  00:14:01
;
```

Legend

- **SLK**—The card and assigned signaling link that is in CDL testing
- **CDL**—Command Driven Loopback test type (LINE or PAYLOAD)
- **CDL-TIME**—Time that the signaling link has been in CDL testing. This value can be up to 99:59:59. The test can run longer than 100 hours, but this field will not record times longer than 100 hours.

Related Commands

act-cdl, *dact-cdl*

rept-stat-cdt

Report Status Customer Defined Troubles

Use this command to display the customer-defined troubles. The Customer-Definable Alarms feature can be used to connect up to 10 external devices to the system for alarm reporting. These devices are defined in the system database as customer-defined troubles, and they are monitored so that any change in the state of these devices is reported as an unsolicited alarm message (UAM).

Parameters

This command has no parameters.

Example

`rept-stat-cdt`

Dependencies

No other status command can be in progress when this command is entered.

Notes

These troubles are customer-defined and configured by the factory.

Output

`rept-stat-cdt`

```
    rlghncxa03w 04-01-07 20:20:43 EST  EAGLE 31.3.0
    ID                 ALARM STATUS
     1    *C 0058  Critical Customer Trouble detected
     2    *C 0050  Critical Holdover Clock trouble detected
     3    *C 0058  Critical Customer Trouble detected
     4    *C 0058  Critical Customer Trouble detected
     5  I ** 0059  Major Customer Trouble detected
     6    ** 0052  Major Holdover Clock trouble detected
     7    ** 0059  Major Customer Trouble detected
     8    ** 0059  Major Customer Trouble detected
     9  I *  0060  Minor Customer Trouble detected
    10    *  0054  Minor Holdover Clock trouble detected
    11    *  0060  Minor Customer Trouble detected
    12    *  0060  Minor Customer Trouble detected
    13    *  0060  Minor Customer Trouble detected
    14  I *  0060  Minor Customer Trouble detected
    15    *  0060  Minor Customer Trouble detected
    16    *  0060  Minor Customer Trouble detected
;
```

Legend

- **ID**—The customer defined trouble ID number followed by the status of the customer-defined trouble.
- **ALARM STATUS**—The status of the alarm for the specified device.

Related Commands

act-alm-trns, *canc-alm-trns*, *dact-alm-trns*, *rept-stat-clk*, *rept-stat-trbl*, *rls-alm*, *rtrv-obit*, *rtrv-trbl*

rept-stat-clk — Report Status Clock

Use this command to display the clock status summary for cards in the system.

Parameters

mode (optional)

Display mode. When mode=full is specified, the "Cards with bad clock source" section of the report is displayed

Range:

full

Example

```
rept-stat-clk
rept-stat-clk:mode=full
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

Notes

The clock status report includes the status of all the clocks in the system (Clock A, Clock B, Clock I, High Speed (HS) Clock A, HS Clock B, etc.).

The Time Slot Counter Synchronization (TSC) clock appears only if the Time Slot Counter Synchronization (TSCSYNC) feature is turned on. See the `chg-feat` command.

The Composite clock sections of the report are the *Primary Comp Clock (CLK)* and *Secondary Comp CLK* fields in the COMPOSITE SYSTEM CLOCK section: the summary of the number of cards having bad status or using COMP CLKs: and the *CLK* columns in the "Cards with bad clock source" section that appears when the mode=full parameter is specified.

The HS clock sections of the report are the *Primary HS Clock (CLK)*, *Secondary HS CLK*, *HS CLK TYPE*, and *HS CLK LINELEN* fields in the HIGH SPEED SYSTEM CLOCK section: the summary of the number of cards having bad status or using HS CLKs: and the *HS CLK* columns in the "Cards with bad clock source" section that appears when the mode=full parameter is specified.

HS clock capable cards can support a link that is provisioned to use HS Master Timing. These cards include all cards with type LIME1 or LIMT1 and all cards that run the ATMANSI or ATMITU applications. The clock status values are the same as those listed in the `rept-stat-card:mode=full:loc=xxx` report.

For a complete list of the cards and their applications, see *Table 62: Valid Card Applications and Types* .

If HS clock A and B status is included in the "Cards with bad clock source" section, then cards that cannot be provisioned to use HS Master Timing display dashes for HS clock A and B status.

The PST/SST for the Primary Composite Clock (Comp Clk) 1114, Primary Comp Clk 1116, Secondary Comp Clk 1114, Secondary Comp Clk 1116, Primary HS Clk 1114, Primary HS Clk 1116, Secondary HS Clk 1114, and Secondary HS Clk 1116 can be one of the following values:

- IS-NR/active—clock source is valid, clock chosen as source
- IS-NR/idle—clock source is valid, clock not chosen as source
- OOS-MT/fault—clock source is invalid

The PST/ SST for the Composite System Clock and High Speed System Clock can be one of the following values:

- IS-NR/Idle—all cards showing good clock, clock not required
- IS-ANR/Idle—some cards showing bad clock, clock not required

- OOS-MT/Idle—all cards showing bad clock, clock not required
- IS-NR/Active—all cards “requiring clocks” showing good clock, clocks required
- IS-ANR/Fault—some cards “requiring clocks” showing bad clock, clocks required
- OOS-MT/Fault—all cards “requiring clocks” showing bad clock, clocks required

Note: An asterisk (*) indicates that the card requires the indicated clock.

Output

Note: A TDM card can use a local clock that is generated independently on each TDM as a clock source for the corresponding internal system clock. The system does not report the “cards bad” status for these internal clocks.

Note: The use of HS CLK I is not automatic when both the high-speed primary and secondary clocks are invalid. An E5-ATM or E5-ATM-B card must be provisioned (using the `ent-slk:atmtsel=internal` command) to use the high-speed internal clock.

Note: The *Using* field in the Composite Clock section describes all of the cards that are using the Composite Clock, not just HS clock capable cards.

The following example shows output when two GPSM-II cards are configured, and HS clock capable cards are not configured. The TSCSYNC feature is not turned on.

`rept-stat-clk`

```
    tekelecstp 08-06-07 14:40:13 EST  EAGLE 39.0.0
    COMPOSITE                           PST          SST       AST
        SYSTEM CLOCK                    IS-NR        Idle      -----
    ALARM STATUS = No Alarms.
        Primary Comp Clk 1114   (CLK A) IS-NR        Active    -----
        Primary Comp Clk 1116   (CLK B) IS-NR        Active    -----
        Secondary Comp Clk 1114 (CLK A) IS-NR        Idle      -----
        Secondary Comp Clk 1116 (CLK B) IS-NR        Idle      -----

    Clock      Using         Bad
    CLK A        2            0
    CLK B        0            0
    CLK I        0            --

    HIGH SPEED                          PST          SST       AST
        SYSTEM CLOCK                    IS-NR        Idle      -----
    ALARM STATUS = No Alarms.
        Primary HS Clk 1114    (HS CLK A)  IS-NR     Active    -----
        Primary HS Clk 1116    (HS CLK B)  IS-NR     Active    -----
        Secondary HS Clk 1114  (HS CLK A)  IS-NR     Idle      -----
        Secondary HS Clk 1116  (HS CLK B)  IS-NR     Idle      -----

    HS CLK TYPE 1114     = RS422
    HS CLK LINELEN 1114  = -----
    HS CLK TYPE 1116     = RS422
    HS CLK LINELEN 1116  = -----

    Clock      Using         Bad
    HS CLK A     0            0
    HS CLK B     0            0
    HS CLK I     0            --

    Command Completed.
;
```

The following example shows output when two GPSM-II cards are configured and an HS clock capable card is configured. The TSCSYNC feature is not turned on.

```
rept-stat-clk
```

```
    tekelecstp 08-06-07 14:40:13 EST  EAGLE 39.0.0
    COMPOSITE                             PST           SST       AST
        SYSTEM CLOCK                      IS-NR         Idle      -----
    ALARM STATUS = No Alarms.
        Primary Comp Clk 1114   (CLK A)   IS-NR         Active    -----
        Primary Comp Clk 1116   (CLK B)   IS-NR         Active    -----
        Secondary Comp Clk 1114 (CLK A)   IS-NR         Idle      -----
        Secondary Comp Clk 1116 (CLK B)   IS-NR         Idle      -----

    Clock      Using         Bad
    CLK A        3            0
    CLK B        0            0
    CLK I        0            --

    HIGH SPEED                            PST           SST       AST
        SYSTEM CLOCK                      IS-NR         Active    -----
    ALARM STATUS = No Alarms.
        Primary HS Clk 1114    (HS CLK A) IS-NR         Active    -----
        Primary HS Clk 1116    (HS CLK B) IS-NR         Active    -----
        Secondary HS Clk 1114  (HS CLK A) IS-NR         Idle      -----
        Secondary HS Clk 1116  (HS CLK B) IS-NR         Idle      -----

    HS CLK TYPE 1114     = RS422
    HS CLK LINELEN 1114  = -----
    HS CLK TYPE 1116     = RS422
    HS CLK LINELEN 1116  = -----

    Clock      Using         Bad
    HS CLK A     1            0
    HS CLK B     0            0
    HS CLK I     0            --

    Command Completed.
;
```

The following example shows output when two GPSM-II cards are configured and HS clock capable cards are not configured. The TSCSYNC feature is turned on.

```
rept-stat-clk
```

```
    tekelecstp 08-05-07 14:40:13 EST  EAGLE 39.0.0
    COMPOSITE                             PST           SST       AST
        SYSTEM CLOCK                      IS-NR         Active    -----
    ALARM STATUS = No Alarms.
        Primary Comp Clk 1114   (CLK A)   IS-NR         Active    -----
        Primary Comp Clk 1116   (CLK B)   IS-NR         Active    -----
        Secondary Comp Clk 1114 (CLK A)   IS-NR         Idle      -----
        Secondary Comp Clk 1116 (CLK B)   IS-NR         Idle      -----

    Clock      Using         Bad
    CLK A        2            0
    CLK B        0            0
    CLK I        0            --

    Prefer Clock A   for TSC CLOCK
```

```
    HIGH SPEED                              PST          SST       AST
        SYSTEM CLOCK                        IS-NR        Active    -----
    ALARM STATUS = No Alarms.
        Primary HS Clk 1114    (HS CLK A)   IS-NR        Active    -----
        Primary HS Clk 1116    (HS CLK B)   IS-NR        Active    -----
        Secondary HS Clk 1114  (HS CLK A)   IS-NR        Idle      -----
        Secondary HS Clk 1116  (HS CLK B)   IS-NR        Idle      -----

    HS CLK TYPE 1114     = RS422
    HS CLK LINELEN 1114  = -----
    HS CLK TYPE 1116     = RS422
    HS CLK LINELEN 1116  = -----

    Clock      Using         Bad
    HS CLK A     0            0
    HS CLK B     0            0
    HS CLK I     0            --

    Command Completed.
;
```

The following example shows output when two GPSM-II cards are configured and an HS clock capable card is configured. The TSCSYNC feature is turned on.

`rept-stat-clk`

```
    tekelecstp 08-06-07 14:40:13 EST  EAGLE 39.0.0
    COMPOSITE                               PST          SST       AST
        SYSTEM CLOCK                        IS-NR        Active    -----
    ALARM STATUS = No Alarms.
        Primary Comp Clk 1114   (CLK A)     IS-NR        Active    -----
        Primary Comp Clk 1116   (CLK B)     IS-NR        Active    -----
        Secondary Comp Clk 1114 (CLK A)     IS-NR        Idle      -----
        Secondary Comp Clk 1116 (CLK B)     IS-NR        Idle      -----

    Clock      Using         Bad
    CLK A        3            0
    CLK B        0            0
    CLK I        0            --

    Prefer Clock A   for TSC CLOCK

    HIGH SPEED                              PST          SST       AST
        SYSTEM CLOCK                        IS-NR        Active    -----
    ALARM STATUS = No Alarms.
        Primary HS Clk 1114    (HS CLK A)   IS-NR        Active    -----
        Primary HS Clk 1116    (HS CLK B)   IS-NR        Active    -----
        Secondary HS Clk 1114  (HS CLK A)   IS-NR        Idle      -----
        Secondary HS Clk 1116  (HS CLK B)   IS-NR        Idle      -----

    HS CLK TYPE 1114     = RS422
    HS CLK LINELEN 1114  = -----
    HS CLK TYPE 1116     = RS422
    HS CLK LINELEN 1116  = -----

    Clock      Using         Bad
    HS CLK A     1            0
    HS CLK B     0            0
    HS CLK I     0            --

    Command Completed.
;
```

The following example shows output when the mode=full parameter is specified and HS clock capable cards are configured. The TSCSYNC feature is turned on.

```
rept-stat-clk:mode=full
```

```
    tekelecstp 08-06-07 14:40:13 EST  EAGLE 39.0.0
    COMPOSITE                              PST           SST       AST
        SYSTEM CLOCK                       IS-ANR        Fault     -----
    ALARM STATUS = No Alarms.
        Primary Comp Clk 1114   (CLK A)    IS-NR         Active    -----
        Primary Comp Clk 1116   (CLK B)    -----         -----     -----
        Secondary Comp Clk 1114 (CLK A)    IS-NR         Idle      -----
        Secondary Comp Clk 1116 (CLK B)    -----         -----     -----

    Clock      Using         Bad
    CLK A        4            1
    CLK B        0            5
    CLK I        0            --

    Prefer Clock A   for TSC CLOCK

    HIGH SPEED                             PST           SST       AST
        SYSTEM CLOCK                       OOS-MT        Fault     -----
    ALARM STATUS = No Alarms.
        Primary HS Clk 1114    (HS CLK A)  IS-NR         Active    -----
        Primary HS Clk 1116    (HS CLK B)  -----         -----     -----
        Secondary HS Clk 1114  (HS CLK A)  IS-NR         Idle      -----
        Secondary HS Clk 1116  (HS CLK B)  -----         -----     -----

    HS CLK TYPE 1114     = E1 UNFRAMED
    HS CLK LINELEN 1114  = SHORTHAUL
    HS CLK TYPE 1116     = -----
    HS CLK LINELEN 1116  = -----

    Clock      Using         Bad
    HS CLK A     0            1
    HS CLK B     0            1
    HS CLK I     0            --

    Cards with bad clock source:
    CARD              CLK A       CLK B       HS CLK A    HS CLK B
    1103             *Active     *Fault       ------      ------
    1104              Active      Fault      *Fault      *Fault
    1106             *Active     *Fault       ------      ------
    1113              Active      Fault       ------      ------
    1205              Fault       Fault       ------      ------

    Command Completed.
;
```

The following example shows output when HS clock capable cards are not configured. The TSCSYNC feature is not turned on.

```
rept-stat-clk
```

```
    tekelecstp 08-06-07 14:40:13 EST  EAGLE 39.0.0
    COMPOSITE                              PST           SST       AST
        SYSTEM CLOCK                       IS-NR         Active    -----
    ALARM STATUS = No Alarms.
        Primary Comp Clk 1114   (CLK A)    IS-NR         Active    -----
        Primary Comp Clk 1116   (CLK B)    IS-NR         Active    -----
```

```
        Secondary Comp Clk 1114 (CLK A)    IS-NR         Idle      -----
        Secondary Comp Clk 1116 (CLK B)    IS-NR         Idle      -----

    Clock      Using         Bad
    CLK A        3            0
    CLK B        0            0
    CLK I        0            --

    HIGH SPEED                              PST           SST       AST
        SYSTEM CLOCK                        IS-NR         Idle      -----
    ALARM STATUS = No Alarms.
        Primary HS Clk 1114    (HS CLK A)  IS-NR         Active    -----
        Primary HS Clk 1116    (HS CLK B)  IS-NR         Active    -----
        Secondary HS Clk 1114  (HS CLK A)  IS-NR         Idle      -----
        Secondary HS Clk 1116  (HS CLK B)  IS-NR         Idle      -----

    HS CLK TYPE 1114     = RS422
    HS CLK LINELEN 1114  = -----
    HS CLK TYPE 1116     = RS422
    HS CLK LINELEN 1116  = -----

    Clock      Using         Bad
    HS CLK A     0            0
    HS CLK B     0            0
    HS CLK I     0            --

    Command Completed.
;
```

Legend

- **COMPOSITE SYSTEM CLOCK**—Composite System clock status
- **ALARM STATUS**—System clock alarms; "No alarms" is shown when there are no alarms.
- **PRIMARY COMP CLK**—The status of the primary Composite clock input for a particular TDM
- **SECONDARY COMP CLK**—The status of the secondary Composite clock input for a particular TDM
- **CLK A** – Internal Eagle Clock sourced by the 1114 TDM from the selected clock source.
- **CLK B** – Internal Eagle Clock sourced by the 1116 TDM from the selected clock source.
- **CLK I** – Local clock generated independently on each LIM card.
- **Prefer CLOCK x for TSC CLOCK**—The preferred clock source of the Time Slot Counter Synchronization (TSC) clock; appears only when the TSCSYNC feature is turned on.
- **HIGH SPEED SYSTEM CLOCK**—HS system clock status
- **ALARM STATUS**—HS System clock alarms; "No alarms" is shown when there are no alarms.
- **PRIMARY HS CLK**—The status of the high-speed primary clock input for a particular TDM
- **SECONDARY HS CLK**—The status of the high-speed secondary clock input for a particular TDM
- **HS CLK TYPE**—HS clock source (see the chg-stpopts command) for a particular TDM
- **HS CLK LINELEN**—HS clock line length (see the chg-stpopts command) for a particular TDM
- **HS CLK A** – Internal Eagle High Speed Clock sourced by the 1114 TDM from the selected clock source.
- **HS CLK B** – Internal Eagle High Speed Clock sourced by the 1116 TDM from the selected clock source.
- **HS CLK I** – Local clock generated independently on each LIM card. The value for the internal high-speed clock (Cards using HSCLK I) is generated differently from the internal system clock

(Cards using CLK I). The internal high speed clock is generated by the XILINX on the ATM applique's card. The internal system clock is generated by the Xilinx on the LIM main board when the LIM card does not have a valid system clock source (e.g., both A system clock and B system clock are bad at the LIM card).

Related Commands

rept-stat-card, *rept-stat-dstn*, *rept-stat-imt*, *rept-stat-ls*, *rept-stat-sccp*, *rept-stat-slk*, *rept-stat-trbl*

rept-stat-cluster

Report Status Cluster-Related DPC

Use this command to report summary status and statistical information for all provisioned clusters. Use this command also to report detailed routeset information for a specific cluster, provisioned cluster member, or dynamically-created x-list entry.

Note: This command does not support 24-bit ITU national point codes.

Parameters

dpc (optional)

ANSI destination point code of the cluster whose status is to be reported,with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (prefix-ni-nc-ncm).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Default:

Display summary for all provisioned clusters

mode (optional)

The type of display. Specify mode=full to display additional information for the specified DPC.

Range:

full

Default:

Display summary report

stat (optional)

This parameter reports on destinations whose status is the same as the state indicated by the parameter.

Range:

all

All of the primary states

alminh

Alarms inhibited

anr

In service abnormal (IS-ANR)

dsbld

Out of service maintenance disabled (OOS-MT-DSBLD)

mt

Out of service maintenance (OOS-MT)

nr

In service normal (IS-NR)

Default:

all

Example

```
rept-stat-cluster
rept-stat-cluster:stat=alminh
rept-stat-cluster:stat=MT
rept-stat-cluster:dpc=20-2-*
rept-stat-cluster:dpc=20-2-*:mode=full
rept-stat-cluster:dpc=20-2-5
```

Dependencies

If the mode=full parameter is specified, the dpc/dpca parameter must be specified.

The stat parameter cannot be specified with the dpc/dpca parameter in the command.

The Cluster Routing and Management Diversity (CRMD) feature must be turned on before this command can be entered.

The specified DPC must exist.

If a DPC is specified, it must be an x-list entry, a cluster DPC, or a member of a provisioned cluster.

The destination address must be a full point code or a cluster point code specified as *ni-nc-**. A DPC with *ni-nc-*** or *ni-nc-**** cannot be specified.

No other `rept-stat-xxx` command can be in progress when this command is entered.

Notes

If no parameters are specified, a summary report is produced, showing all provisioned clusters and their status.

If an FPC corresponding to a provisioned cluster member or an x-list entry is specified, then the status of only the specified FPC, along with routeset status, is displayed.

If a cluster destination is specified on the dpc/dpca parameter, then the status of the cluster and the routesets that have been defined for that cluster is displayed.

If the mode=full parameter and a DPC are specified, the Route/Destination table is searched, and all entries (cluster DPCs, provisioned cluster member DPCs, and x-list DPCs) belonging to the parent cluster are displayed along with their status. Also, if circular routing is in effect for the DPC, information useful in diagnosing and correcting the situation is displayed.

In the summary report, and in the detailed output when a cluster DPC is being reported, the number of provisioned members of the cluster, and the number of x-list entries that have been created for the cluster, are reported in the PROV and X-LIST columns, respectively.

When detailed information for an x-list entry is being reported, the reasons that the x-list entry was created, and the amount of time remaining on the x-list expiration timer, if applicable, in the format hh:mm is shown in the X-REASON and X-TIME columns, respectively. In x-list entries for which the expiration timer is not applicable, dashes "-----" are displayed.

Output

This example shows the output when no parameters are specified. Summary information for all of the defined cluster DPCs is shown. The report shows the number of provisioned and x-list members of each cluster.

```
rept-stat-cluster
```

```
    rlghncxa03w 04-01-07 08:51:31 EST  EAGLE 34.0.0
       DPCA         ORIG   PST     SST       AST      PROV  XLIST
       020-002-*    CLUST  IS-NR   Allowed   ACCESS      2      3
       020-020-*    CLUST  IS-NR   Allowed   ACCESS      3      5
       020-021-*    CLUST  OOS-MT  Prohibit  INACCESS    5      2
       020-022-*    CLUST  IS-NR   Allowed   ALMINH      2      3

    Command Completed.
;
```

This example shows the output when a provisioned cluster member DPC is specified. The report shows status information for the specified DPC plus route information.

```
rept-stat-cluster:dpc=20-2-1
```

```
    rlghncxa03w 04-01-07 08:51:31 EST  EAGLE 34.0.0
       DPCA         ORIG   PST     SST       AST
       020-002-001  PROV   IS-ANR  Restrict  ACCESS
      ALARM STATUS       = No Alarms.
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1   10   lsnppp   003-003-003  Allowed   Allowed    Allowed
       2   --   -------  ***-***-***  -------   -------    -------
       3   --   -------  ***-***-***  -------   -------    -------
       4   --   -------  ***-***-***  -------   -------    -------
       5   --   -------  ***-***-***  -------   -------    -------
       6   --   -------  ***-***-***  -------   -------    -------

    Command Completed.
;
```

This example shows the output when a specific cluster DPC is specified. The report shows count information about the cluster's provisioned and x-list members, plus the route information.

```
rept-stat-cluster:dpc=20-2-*
```

```
    rlghncxa03w 04-01-07 08:51:31 EST  EAGLE 34.0.0
       DPCA         ORIG    PST     SST       AST      PROV  X-LIST
       020-002-*    CLUST   IS-NR   Allowed   ACCESS      2       3
      ALARM STATUS       = No Alarms.
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1   10   lsnppp   003-003-003  Allowed   Allowed    Allowed
       2   --   -------  ***-***-***  -------   -------    -------
       3   --   -------  ***-***-***  -------   -------    -------
       4   --   -------  ***-***-***  -------   -------    -------
       5   --   -------  ***-***-***  -------   -------    -------
       6   --   -------  ***-***-***  -------   -------    -------

    Command Completed.
;
```

This example shows the output when an x-list cluster member DPC is specified. The report shows x-list related information (X-REASON, X-TIME) plus the route information. The report identifies the specified DPC as an x-list DPC.

```
rept-stat-cluster:dpc=20-2-5
```

```
    rlghncxa03w 04-01-07 08:51:31 EST  EAGLE 34.0.0
       DPCA         ORIG   PST     SST       AST      X-REASON X-TIME
       020-002-005  X-LIST IS-ANR  Restrict  ACCESS   RT       08:20
      ALARM STATUS       = No Alarms.
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1   10   lsnppp   003-003-003  Allowed   Allowed    Allowed
       2   --   -------  ***-***-***  -------   -------    -------
       3   --   -------  ***-***-***  -------   -------    -------
       4   --   -------  ***-***-***  -------   -------    -------
       5   --   -------  ***-***-***  -------   -------    -------
       6   --   -------  ***-***-***  -------   -------    -------

    Command Completed.
;
```

This example shows the output when a cluster DPC and mode=full is specified. The report shows summary status information for the provisioned and x-list DPCs that are members of the specified cluster.

```
rept-stat-cluster:dpc=20-2-*:mode=full
```

```
    rlghncxa03w 04-01-07 08:51:31 EST  EAGLE 34.0.0
       DPCA         ORIG    PST     SST       AST      PROV  X-LIST
       020-002-*    CLUST   IS-NR   Allowed   ACCESS      2       3
     ALARM STATUS       = No Alarms.
     RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1   10   lsnppp   003-003-003  Allowed   Allowed    Allowed
       2   --   -------  ***-***-***  -------   -------    -------
       3   --   -------  ***-***-***  -------   -------    -------
       4   --   -------  ***-***-***  -------   -------    -------
       5   --   -------  ***-***-***  -------   -------    -------
       6   --   -------  ***-***-***  -------   -------    -------
       DPCA         ORIG    PST     SST       AST      X-REASON X-TIME
       020-002-*    CLUST   IS-NR   Allowed   ACCESS   -------- -----
       020-002-001  PROV    OOS-MT  Prohibit  INACCESS -------- -----
       020-002-002  PROV    IS-ANR  Restrict  ACCESS   -------- -----
       020-002-126  X-LIST  IS-ANR  Restrict  ACCESS   RT       08:20
       020-002-127  X-LIST  OOS-MT  Prohibit  INACCESS CR       -----
       020-002-128  X-LIST  IS-ANR  Restrict  ACCESS   CG RT    05:40
    CIRCULAR ROUTING
      XMIT LSN= --------   RC=--
      RCV  LSN= --------
      MEMBER  = ***-***-***

    Command Completed.
;
```

This example shows the output when the stat parameter is specified. Only those clusters having a primary state (PST) matching the specified value are reported.

```
rept-stat-cluster:stat=alminh
```

```
    rlghncxa03w 04-01-07 08:51:31 EST  EAGLE 34.0.0
       DPCA         ORIG   PST     SST       AST      PROV  XLIST
       020-022-*    CLUST  IS-NR   Allowed   ALMINH      2      3

    Command Completed.
;
```

This example shows the output when specifying the dpc and mode=full parameters re specified. If a circular routing alarm is raised for a cluster member DPC, specifying these parameters displays information pertinent to the cluster member that is experiencing the circular routing condition.

```
rept-stat-cluster:dpc=20-2-127:mode=full
```

```
    rlghncxa03w 04-01-07 08:51:31 EST  EAGLE 34.0.0
       DPCA         ORIG    PST     SST       AST
       020-002-127  PROV    OOS-MT  Prohibit  INACCESS
      ALARM STATUS       = *C  0319 Circular routing detected
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1   10   lsnppp   003-003-003  Allowed   Allowed    Allowed
       2   --   -------  ***-***-***  -------   -------    -------
       3   --   -------  ***-***-***  -------   -------    -------
       4   --   -------  ***-***-***  -------   -------    -------
```

```
       5   --   -------  ***-***-***  -------   -------    -------
       6   --   -------  ***-***-***  -------   -------    -------
       DPCA         ORIG    PST     SST       AST      X-REASON X-TIME
       020-002-*    CLUST   IS-NR   Allowed   ACCESS   -------- -----
       020-002-001  PROV    OOS-MT  Prohibit  ACCESS   -------- -----
       020-002-002  PROV    IS-ANR  Restrict  ACCESS   -------- -----
       020-002-126  X-LIST  IS-ANR  Restrict  ACCESS   RT       08:20
       020-002-127  X-LIST  OOS-MT  Prohibit  INACCESS CG CR    -----
       020-002-128  X-LIST  IS-ANR  Restrict  ACCESS   CR CG RT 05:40
    CIRCULAR ROUTING
      XMIT LSN= lsnppp  RC=--
      RCV  LSN= lsn01a
      MEMBER  = ***-***-***

    Command Completed.
;
```

If a circular routing alarm is raised for a cluster DPC, then specifying the dpc and mode=full parameters displays information pertinent to the cluster member experiencing the circular routing condition. The value for the MEMBER field in this example represents the cluster member that had the circular routing condition. This is the same member for which an x-list entry could not be created.

Note: The circular routing member information shown in this output report displays as ***-***-*** if the specified DPC is not a cluster DPC or the information is not known by maintenance at the time the report is generated.

```
rept-stat-cluster:dpc=20-2-*:mode=full
```

```
    rlghncxa03w 04-01-07 08:51:31 EST  EAGLE 34.0.0
       DPCA         ORIG    PST     SST       AST      PROV  X-LIST
       020-002-*    CLUST   IS-NR   Allowed   ACCESS      2       3
      ALARM STATUS       = *C  0319 Circular routing detected
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1   10   lsnppp   003-003-003  Allowed   Allowed    Allowed
       2   --   -------  ***-***-***  -------   -------    -------
       3   --   -------  ***-***-***  -------   -------    -------
       4   --   -------  ***-***-***  -------   -------    -------
       5   --   -------  ***-***-***  -------   -------    -------
       6   --   -------  ***-***-***  -------   -------    -------
       DPCA         ORIG    PST     SST       AST      X-REASON X-TIME
       020-002-*    CLUST   IS-NR   Allowed   ACCESS   -------- -----
       020-002-001  PROV    OOS-MT  Prohibit  INACCESS -------- -----
       020-002-002  PROV    IS-ANR  Restrict  ACCESS   -------- -----
       020-002-126  X-LIST  IS-ANR  Restrict  ACCESS   RT       08:20
       020-002-127  X-LIST  OOS-MT  Prohibit  INACCESS CR       -----
       020-002-128  X-LIST  IS-ANR  Restrict  ACCESS   CG RT    05:40
    CIRCULAR ROUTING
      XMIT LSN= lsnppp  RC=--
      RCV  LSN= lsn01a
      MEMBER  = 020-002-129

    Command Completed.
;
```

This example includes private point codes:

```
rept-stat-cluster:dpc=20-2-*:mode=full
```

```
    rlghncxa03w 05-01-06 10:09:59 EST  EAGLE 34.0.0
```

```
      DPCA         ORIG   PST     SST       AST      PROV  XLIST
      020-002-*    CLUST  OOS-MT  Idle      INACCESS    0      0
     ALARM STATUS       = No Alarms.
     RTE COST  LSN           APCA         LS STAT   NON-ADJ    ROUTE STAT
      1   10   ls11345678  p-001-001-003  Allowed   Allowed    Allowed
      2   --   ---------- ---***-***-***  --------  --------   --------
      3   --   ---------- ---***-***-***  --------  --------   --------
      4   --   ---------- ---***-***-***  --------  --------   --------
      5   --   ---------- ---***-***-***  --------  --------   --------
      6   --   ---------- ---***-***-***  --------  --------   --------
      DPCA         ORIG    PST     SST       AST      X-REASON X-TIME
      020-002-*    CLUST   IS-NR   Allowed   ACCESS   -------- -----
    p-020-002-001  PROV    OOS-MT  Prohibit  INACCESS -------- -----
    p-020-002-002  PROV    IS-ANR  Restrict  ACCESS   -------- -----
      020-002-126  X-LIST  IS-ANR  Restrict  ACCESS   RT       08:20
      020-002-127  X-LIST  OOS-MT  Prohibit  INACCESS CR       -----
      020-002-128  X-LIST  IS-ANR  Restrict  ACCESS   CG RT    05:40
   CIRCULAR ROUTING INFO:
     XMIT LSN=----------   RC=--
     RCV  LSN=----------
     MEMBER  =-----------

   Command Completed.
;
```

Legend

- **ORIG**—Origination of the destination point code being reported. Possible values that can appear in the column are:
- **CLUST—**Entry is a provisioned cluster (*ni-nc-**) DPC
- **PROV—**Entry is a provisioned cluster member (ni-nc-ncm)
- **X-LIST—**Entry is a non-provisioned (i.e. dynamically-created) x-list cluster member
- **PST**—Primary state of the cluster. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the cluster. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the cluster. See *Possible Values for PST/SST/AST*.
- **X-REASON**—Reasons that the X-LIST entries currently exist. The two-letter indicator values that can appear in this column are:
- **RT**—X-LIST entry created due to routing
- **CG**—X-LIST entry created due to congestion
- **CR**—X-LIST entry created due to circular routing

The circular routing transmit/receive linkset information shown in the mode=full detailed output report displays as "--------" if no circular routing alarm exists for the DPC or the information is not known by maintenance at the time the report is generated.

Related Commands

chg-feat, *chg-stpopts*, *rept-stat-cluster*, *rtrv-stpopts*

rept-stat-db Report Status Database

Use this command to display a report showing various status indicators for the active and standby OAM database and the status of the database on each of the network cards.

If the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, Prepaid SMS Intercept Ph1 (PPSMS), SIP NP, or V-Flex feature is turned on, or the ATINP feature is enabled, then the status of the MPS databases and Service Module cards is displayed.

Parameters

db (optional)

Report section or sections to display in the output. The content of each section depends on the specified or default value of the display parameter. MPS output appears only if a feature that uses the MPS is turned on in the system (A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, PPSMS, SIP NP, V-Flex, or the LNP ELAP Configuration controlled feature) or the ATINP feature is enabled.

Range:

all

displays database and card output for the STP and MPS report sections

mps

displays database and card output for the MPS report section

stp

displays database and card output for the STP report section

Default:

all

display (optional)

Output type.

Range:

all

Displays operational status of all databases (MASP A, MASP B, and MDAL) and all cards equipped in the database on the system.

brief

Displays operational status of databases in the active and standby MASP and of MPS databases if a feature that uses the MPS is turned on

except

Displays operational status information contained in the display=brief output along with the cards whose database level does not match the active fixed disk current partition or active MPS database

version

Displays the same information that is displayed with the display=all parameter except that the individual database status column is replaced with the database format version and status. Details of the status of the backup databases are displayed for MASP cards. No version information is shown for MPS databases; use the `rept-stat-mps` command.

Default:

brief

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

Example

```
rept-stat-db
rept-stat-db:display=all
rept-stat-db:loc=1207
rept-stat-db:db=stp
```

Dependencies

The db and loc parameters cannot be specified at the same time.

For E5-OAM cards, values of 1117 and 1118 cannot be specified for the loc parameter.

One of the following features must be turned on, the ATINP feature must be enabled, or at least one ENUM card must be provisioned before the db=mps parameter can be specified:

- A-Port
- AINPQ
- EIR
- G-Flex
- G-Port
- INP
- LNP ELAP Configuration
- Prepaid SMS Intercept Ph1
- SIP NP
- V-Flex

The shelf and card must be equipped.

The card location slot must be between 1 and 18, but not 9 or 10.

The shelf location must be 11xx, 12xx, 13xx, 21xx, 22xx, 23xx, 31xx, 32xx, 33xx, 41xx, 42xx, 43xx, 51xx, 52xx, 53xx, or 61xx.

The frame value of the shelf location parameter (loc) must be within the valid range.

A valid value must be specified for the display parameter.

Notes

If the display, db, or loc parameter is specified and the database for a particular card location is not accessible, hyphens are displayed in place of the data.

The output of the `rept-stat-db` command with no parameters specified or with the display=brief parameter shows the following information:

- Activity status of both the active and standby MASP, the date and time the last backup was performed on the removable drive (if inserted) and the fixed disk backup partition, coherency, the number of updates (level) to the backup partition of the fixed disk, and the current partition of the fixed disk
- If the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, PPSMS, SIPNP (if used with EPAP), or V-Flex feature is turned on, or the ATINP feature is enabled, EPAP A and EPAP B database status followed by Service Module card database status
- If the SIP NP (if used with ELAP) or LNP ELAP Configuration controlled feature is turned on, ELAP A and ELAP B database status followed by Service Module card database status

The output when the display=except parameter is specified shows the coherency and the number of updates for all the cards whose database level does not match the active fixed disk current partition, reference database level, or is incoherent. All databases that are not accessible are also displayed. In addition, the time stamp for the last database update is displayed for every card.

The output when the display=all parameter is specified shows the coherency and the number of updates for all of the distributed databases. In addition, the time stamp for the last database update is displayed for every card.

The output when the display=version parameter is specified shows the coherency and the number of updates for the active and standby databases, along with the database version and the operational status of each of these databases. If the LNP feature is turned on, the version of the LNP database is shown. No version is shown for EPAP or ELAP databases; use the `rept-stat-mps` command to display version information for these databases.

The output when the loc parameter specifies an equipped card shows the coherency and the number of updates to its database. In addition, the time stamp for the last database update is displayed for the specific card location.

The db parameter is used to limit the output of the command to the EAGLE STP information or the MPS information. The information is displayed as indicated by the display parameter value (display=version is not valid for db=mps; the command does not display the MPS database versions). The default db parameter value is *all*, which displays the information for the STP and MPS databases and cards as indicated by the display parameter value.

Output

Note: Removable drive database information is shown only for the Active OAM slot, whether or not a removable drive is inserted into the standby OAM.

Note: A status of 'OK' indicates that the database has no errors.

This example shows the output for a specified card. The disk is OFF-LINE indicating the disk has been dismounted. This is not necessarily a problem.

```
rept-stat-db:loc=1114
```

```
    tekelecstp 08-08-29 08:38:25 NZST  EAGLE 39.2.0
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    TDM-CRNT   1114  -  -      -           -        -     OFF-LINE
    TDM-BKUP   1114  -  -      -           -        -          -
;
```

This example shows the output for a specified Service Module card used for EPAP or ELAP. The A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, SIP NP, or V-Flex feature is turned on, or the ATINP feature is enabled.

```
rept-stat-db:loc=1201
```

```
    tekelecstp 08-08-29 08:38:25 NZST  EAGLE 39.2.0
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    VSCCP      1201  Y  N  12          08-05-29 08:53:48       -

                    EAGLE RTDB REPORT
    CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION
    ---------  ----  -  -----------------  ----------  --------------
    VSCCP      1201  Y  08-05-29 16:12:50       12345        -
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, SIP NP, and V-Flex features are not turned on, and the ATINP feature is not enabled:

```
rept-stat-db
```

```
    tekelecstp 08-08-29 08:38:25 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
    RD BKUP Y        1 08-05-29 15:44:20 NZST
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, SIP NP, and V-Flex features are not turned on, and the ATINP feature is not enabled:

```
rept-stat-db:display=all
```

```
    tekelecstp 08-08-29 08:39:24 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------
```

```
    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
    RD BKUP Y        1 08-05-29 15:44:20 NZST
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    SS7ANSI    1102  Y  N  11          08-05-29 08:04:00       -
    SS7ANSI    1103  Y  N  11          08-05-29 08:04:00       -
    VSCCP      1105  Y  N  11          08-05-29 08:04:00       -
    STPLAN     1107  Y  N  11          08-05-29 08:04:00       -
    TDM-CRNT   1114  Y  N  11          08-05-29 08:04:00       -
    TDM-BKUP   1114  Y  -  11          08-05-29 08:04:00       -
    TDM-CRNT   1116  Y  N  11          08-05-29 08:04:00       -
    TDM-BKUP   1116  Y  -  11          08-05-29 08:04:00       -
    MDAL       1117  Y  -  1           08-05-29 15:06:29  DIFF LEVEL
    VSCCP      1201  Y  N  11          08-05-29 08:04:00       -
    VSCCP      1203  Y  N  11          08-05-29 08:04:00       -
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, SIP NP, and V-Flex features are not turned on, and the ATINP feature is not enabled:

Note: This command does not display version information for MPS databases. Use the `rept-stat-mps` command to display MPS database version information.

```
rept-stat-db:display=version
```

```
    tekelecstp 08-08-29 08:51:21 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- -------------------- - -------- --------------------

    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
    RD BKUP Y        1 08-05-24 15:44:20 NZST
;
```

This example shows the output when the LNP feature is turned on:

```
rept-stat-db:display=version
```

```
    tekelecstp 02-10-29 08:51:21 NZST EAGLE 30.0.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- -------------------- - -------- --------------------

    FD BKUP Y       11 02-10-29 08:20:13 NZST Y       11 02-10-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
```

```
    RD BKUP Y        1 02-10-24 15:44:20 NZST
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION STATUS
    ---------  ----  -  -  ----------  -----------------  ----------------
    TDM-CRNT   1114  Y  N  11          02-10-29 08:04:00  111-000-000  NORMAL
        LNP                                               000-014-000
    TDM-BKUP   1114  Y  -  11          02-10-29 08:04:00  111-000-000  NORMAL
        LNP                                               000-014-000
    TDM-CRNT   1116  Y  N  11          02-10-29 08:04:00  111-000-000  NORMAL
        LNP                                               000-014-000
    TDM-BKUP   1116  Y  -  11          02-10-29 08:04:00  111-000-000  NORMAL
        LNP                                               000-014-000
    MDAL       1117  Y  -  1           02-10-24 15:06:29  114-000-000  NORMAL
        LNP                                               000-014-000
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, G-Flex, G-Port, EIR, INP, LNP ELAP Configuration, PPSMS, SIP NP, and V-Flex features are not turned on, and the ATINP feature is not enabled:

`rept-stat-db:display=except`

```
    tekelecstp 08-08-29 08:55:54 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       12                        Y       12
            MDAL 1117
            - --------
    RD BKUP Y        1 07-10-24 15:44:20 NZST
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    SS7ANSI    1103  Y  N  10          08-05-29 08:03:48  DIFF LEVEL
    TDM-BKUP   1114  Y  -  11          08-05-29 08:04:00  DIFF LEVEL
    TDM-BKUP   1116  Y  -  11          08-05-29 08:04:00  DIFF LEVEL
    MDAL       1117  Y  -  1           08-05-24 15:06:29  DIFF LEVEL
;
```

This example shows the output when the LNP ELAP Configuration controlled feature is turned on, and ELAP is used:

`rept-stat-db`

```
    tekelecstp 02-10-29 08:39:24 NZST EAGLE 30.0.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       11 02-10-29 08:20:13 NZST Y       11 02-10-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
    RD BKUP Y        1 02-10-24 15:44:20 NZST
                    ELAP A  ( ACTV )
                     C  BIRTHDATE          LEVEL       EXCEPTION
```

```
                    -  -----------------  ----------  --------------
    RTDB             Y  02-10-29 08:20:04       12345        -
    RTDB-EAGLE          02-10-29 08:20:04       12345        -
                   ELAP B ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB             Y  02-10-29 08:20:04       12345        -
    RTDB-EAGLE          02-10-29 08:20:04       12345        -
;
```

This example shows the output when the LNP ELAP Configuration controlled feature is turned on, and ELAP is used:

`rept-stat-db:display=all`

```
   tekelecstp 02-10-29 08:39:24 NZST EAGLE 30.0.0
   DATABASE STATUS: >> OK <<
           TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
           C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
           - -------- ---------------------- - -------- ----------------------
   FD BKUP Y       11 02-10-29 08:20:13 NZST Y       11 02-10-29 08:20:13 NZST
   FD CRNT Y       11                        Y       11
           MDAL 1117
           - --------
   RD BKUP Y        1 02-10-24 15:44:20 NZST
   CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
   ---------  ----  -  -  ----------  -----------------  --------------
   SS7ANSI    1102  Y  N  11          02-10-29 08:04:00       -
   SS7ANSI    1103  Y  N  11          02-10-29 08:04:00       -
   VSCCP      1105  Y  N  11          02-10-29 08:04:00       -
   STPLAN     1107  Y  N  11          02-10-29 08:04:00       -
   TDM-CRNT   1114  Y  N  11          02-10-29 08:04:00       -
   TDM-BKUP   1114  Y  -  11          02-10-29 08:04:00       -
   TDM-CRNT   1116  Y  N  11          02-10-29 08:04:00       -
   TDM-BKUP   1116  Y  -  11          02-10-29 08:04:00       -
   MDAL       1117  Y  -  1           02-10-24 15:06:29  DIFF LEVEL
   VSCCP      1201  Y  N  11          02-10-29 08:04:00       -
   VSCCP      1203  Y  N  11          02-10-29 08:04:00       -
                  ELAP A  ( ACTV )
                   C  BIRTHDATE          LEVEL       EXCEPTION
                   -  -----------------  ----------  --------------
   RTDB             Y  02-10-29 08:20:04       12345        -
   RTDB-EAGLE          02-10-29 08:20:04       12345        -
                  ELAP B ( STDBY )
                   C  BIRTHDATE          LEVEL       EXCEPTION
                   -  -----------------  ----------  --------------
   RTDB             Y  02-10-29 08:20:04       12345        -
   RTDB-EAGLE          02-10-29 08:20:04       12345        -

                  EAGLE RTDB REPORT
   CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION
   ---------  ----  -  -----------------  ----------  --------------
   VSCCP      1201  Y  02-10-29 08:20:04       12345        -
   VSCCP      1203  Y  02-10-29 08:20:04       12345        -
   VSCCP      1105  Y  02-10-29 08:20:04       12345        -
;
```

This example shows the output when the LNP ELAP Configuration controlled feature is turned on, and ELAP is used.

```
rept-stat-db:display=except
```

```
    tekelecstp 02-10-29 08:55:54 NZST EAGLE 30.0.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       11 02-10-29 08:20:13 NZST Y       11 02-10-29 08:20:13 NZST

    FD CRNT Y       12                        Y       12
            MDAL 1117
            - --------
    RD BKUP Y        1 02-10-24 15:44:20 NZST
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    SS7ANSI    1103  Y  N  10          02-10-29 08:03:48  DIFF LEVEL
    TDM-BKUP   1114  Y  -  11          02-10-29 08:04:00  DIFF LEVEL
    TDM-BKUP   1116  Y  -  11          02-10-29 08:04:00  DIFF LEVEL
    MDAL       1117  Y  -  1           02-10-24 15:06:29  DIFF LEVEL

                  ELAP A  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
   RTDB             Y  02-10-29 08:20:04       12345        -
   RTDB-EAGLE       Y  02-10-29 08:20:04       12345        -

                  ELAP B ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
   RTDB             Y  02-10-29 08:20:04       12345        -
   RTDB-EAGLE       Y  02-10-29 08:20:04       12345        -

                   EAGLE RTDB REPORT
   CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION
   ---------  ----  -  -----------------  ----------  --------------
   VSCCP      1203  Y  02-10-29 08:20:04       12340  DIFF LEVEL
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, G-Flex, G-Port, EIR, INP, PPSMS, SIP NP, or V-Flex feature is turned on, or the ATINP feature is enabled, and EPAP is used:

```
rept-stat-db
```

```
    tekelecstp 08-08-29 08:39:24 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
    RD BKUP Y        1 08-05-24 15:44:20 NZST
                   EPAP A  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB             Y  08-05-29 08:20:04       12345        -
```

```
    RTDB             Y  08-05-29 08:20:04       12345        -
    RTDB-EAGLE       Y  08-05-29 08:20:04       12345        -
                   EPAP B ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB              Y  08-05-29 08:20:04       12345        -
    RTDB             Y  08-05-29 08:20:04       12345        -
    RTDB-EAGLE       Y  08-05-29 08:20:04       12345        -
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, PPSMS, SIP NP, or V-Flex feature is turned on, or the ATINP feature is enabled, and EPAP is used:

`rept-stat-db:display=all`

```
    tekelecstp 08-08-29 08:39:24 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
    RD BKUP Y        1 08-05-24 15:44:20 NZST
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    SS7ANSI    1102  Y  N  11          08-05-29 08:04:00       -
    SS7ANSI    1103  Y  N  11          08-05-29 08:04:00       -
    STPLAN     1107  Y  N  11          08-05-29 08:04:00       -
    TDM-CRNT   1114  Y  N  11          08-05-29 08:04:00       -
    TDM-BKUP   1114  Y  -  11          08-05-29 08:04:00       -
    TDM-CRNT   1116  Y  N  11          08-05-29 08:04:00       -
    TDM-BKUP   1116  Y  -  11          08-05-29 08:04:00       -
    MDAL       1117  Y  -  1           08-05-29 15:06:29  DIFF LEVEL
    VSCCP      1201  Y  N  11          08-05-29 08:04:00       -
    VSCCP      1203  Y  N  11          08-05-29 08:04:00       -
                   EPAP A  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB              Y  08-05-29 08:20:04       12345        -
    RTDB             Y  08-05-29 08:20:04       12345        -
    RTDB-EAGLE       Y  08-05-29 08:20:04       12345        -
                   EPAP B ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB              Y  08-05-29 08:20:04       12345        -
    RTDB             Y  08-05-29 08:20:04       12345        -
    RTDB-EAGLE       Y  08-05-29 08:20:04       12345        -
                   EAGLE RTDB REPORT
    CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION
    ---------  ----  -  -----------------  ----------  --------------
    VSCCP      1201  Y  08-05-29 08:20:04       12345        -
    VSCCP      1203  Y  08-05-29 08:20:04       12345        -
    VSCCP      1105  Y  08-05-29 08:20:04       12345        -
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, PPSMS, SIP NP, or V-Flex feature is turned on, or the ATINP feature is enabled, and EPAP is used:

```
rept-stat-db:display=except
```

```
    tekelecstp 08-08-29 08:55:54 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- -------------------- - -------- --------------------

    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       12                        Y       12
            MDAL 1117
            - --------
    RD BKUP Y        1 02-10-24 15:44:20 NZST
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    SS7ANSI    1103  Y  N  10          08-05-29 08:03:48  DIFF LEVEL
    TDM-BKUP   1114  Y  -  11          08-05-29 08:04:00  DIFF LEVEL
    TDM-BKUP   1116  Y  -  11          08-05-29 08:04:00  DIFF LEVEL
    MDAL       1117  Y  -  1           08-05-29 15:06:29  DIFF LEVEL
                   EPAP A  ( ACTV )
                     C  BIRTHDATE          LEVEL       EXCEPTION
                     -  -----------------  ----------  --------------
    PDB              Y  08-05-29 08:20:04       12345        -
    RTDB             Y  08-05-29 08:20:04       12345        -
    RTDB-EAGLE       Y  08-05-29 08:20:04       12345        -
                    EPAP B ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
   PDB              Y  08-05-29 08:20:04       12345        -
   RTDB             Y  08-05-29 08:20:04       12345        -
   RTDB-EAGLE       Y  08-05-29 08:20:04       12345        -
                   EAGLE RTDB REPORT
   CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION
   ---------  ----  -  -----------------  ----------  --------------
   VSCCP      1203  Y  08-05-29 08:20:04       12340  DIFF LEVEL
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, G-Flex, G-Port, EIR, INP, LNP ELAP Configuration, PPSMS, SIPNP, and V-Flex features are not turned on, and the ATINP feature is not enabled:

```
rept-stat-db:db=stp
```

```
    tekelecstp 08-08-29 08:39:24 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                 TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- -------------------- - -------- --------------------

    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
```

```
    RD BKUP Y        1 08-05-29 15:44:20 NZST
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, SIP NP, and V-Flex features are not turned on, and the ATINP feature is not enabled:

`rept-stat-db:display=all:db=stp`

```
    tekelecstp 08-08-29 08:39:24 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       11 07-08-29 08:20:13 NZST Y       11 07-08-29 08:20:13 NZST

    FD CRNT Y       11                        Y       11
            MDAL 1117
            - --------
    RD BKUP Y        1 02-10-24 15:44:20 NZST
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    SS7ANSI    1102  Y  N  11          07-08-29 08:04:00       -
    SS7ANSI    1103  Y  N  11          07-08-29 08:04:00       -
    VSCCP      1105  Y  N  11          07-08-29 08:04:00       -
    STPLAN     1107  Y  N  11          07-08-29 08:04:00       -
    TDM-CRNT   1114  Y  N  11          07-08-29 08:04:00       -
    TDM-BKUP   1114  Y  -  11          07-08-29 08:04:00       -
    TDM-CRNT   1116  Y  N  11          07-08-29 08:04:00       -
    TDM-BKUP   1116  Y  -  11          07-08-29 08:04:00       -
    MDAL       1117  Y  -  1           07-08-24 15:06:29  DIFF LEVEL
    VSCCP      1201  Y  N  11          07-08-29 08:04:00       -
    VSCCP      1203  Y  N  11          07-08-29 08:04:00       -
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, G-Flex, G-Port, EIR, INP, LNP ELAP Configuration, PPSMS, SIP NP, and V-Flex features are not turned on and the ATINP feature is not enabled:

`rept-stat-db:display=except:db=stp`

```
    tekelecstp 08-08-29 08:55:54 NZST  EAGLE 39.2.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       11 08-05-29 08:20:13 NZST Y       11 08-05-29 08:20:13 NZST

    FD CRNT Y       12                        Y       12
            MDAL 1117
            - --------
    RD BKUP Y        1 08-05-24 15:44:20 NZST
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    SS7ANSI    1103  Y  N  10          08-05-29 08:03:48  DIFF LEVEL
    TDM-BKUP   1114  Y  -  11          08-05-29 08:04:00  DIFF LEVEL
    TDM-BKUP   1116  Y  -  11          08-05-29 08:04:00  DIFF LEVEL
```

```
    MDAL       1117  Y  -  1           08-05-29 15:06:29  DIFF LEVEL
;
```

This example shows the output when the LNP ELAP Configuration controlled feature is turned on, and ELAP is used:

`rept-stat-db:db=mps`

```
    tekelecstp 02-10-29 08:55:54 NZST EAGLE 30.0.0
                   ELAP A  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB             Y  02-10-29 08:20:04       12345        -
    RTDB-EAGLE          02-10-29 08:20:04       12345        -
                   ELAP B ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB             Y  02-10-29 08:20:04       12345        -
    RTDB-EAGLE          02-10-29 08:20:04       12345        -
;
```

This example shows the output when the LNP ELAP Configuration feature is turned on, and ELAP is used. Card 1203 indicates a value 12 in the exception column. The value indicates the number of times that the Corruption Cross Correction function has corrected the card during the time that the card has been in service. More specifically, the card has encountered 12 corrupted records and has subsequently repaired them. This value persists until the card is reset.

`rept-stat-db:display=all:db=mps`

```
    tekelecstp 02-10-29 08:55:54 NZST EAGLE 31.6.0
                  ELAP A  ( ACTV )
                   C  BIRTHDATE          LEVEL       EXCEPTION
                   -  -----------------  ----------  --------------
    RTDB            Y  02-10-29 08:20:04       12345        -
    RTDB-EAGLE         02-10-29 08:20:04       12345        -

                  ELAP B ( STDBY )
                   C  BIRTHDATE          LEVEL       EXCEPTION
                   -  -----------------  ----------  --------------
    RTDB            Y  02-10-29 08:20:04       12345        -
    RTDB-EAGLE         02-10-29 08:20:04       12345        -
                   EAGLE RTDB REPORT
    CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION    IN-SRVC
    ---------  ----  -  -----------------  ----------  ------------ -----------

    VSCCP      1201  Y  02-10-29 08:20:04       12345        -      10d 23h 21m

    VSCCP      1203  Y  02-10-29 08:20:04       12345        12     10d 23h 21m

    VSCCP      1105  Y  02-10-29 08:20:04       12345        -       5d  3h  1m

    VSCCP      1201  Y  02-10-29 08:20:04       12345        -
    VSCCP      1203  Y  02-10-29 08:20:04       12345        -
    VSCCP      1105  Y  02-10-29 08:20:04       12345        -
;
;
```

This example shows the output when the LNP ELAP Configuration feature is turned on, and ELAP is used:

```
rept-stat-db:display=except:db=mps
```

```
    tekelecstp 02-10-29 08:55:54 NZST EAGLE 31.6.0
                  ELAP A  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
   RTDB              Y  02-10-29 08:20:04       12345        -
   RTDB-EAGLE        Y  02-10-29 08:20:04       12345        -

                   ELAP B ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
   RTDB              Y  02-10-29 08:20:04       12345        -
   RTDB-EAGLE        Y  02-10-29 08:20:04       12345        -

                    EAGLE RTDB REPORT
    CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION    IN-SRVC
    ---------  ----  -  -----------------  ----------  ------------ -----------

    VSCCP      1203  Y  02-10-29 08:20:04       12340  DIFF LEVEL   10d 23h 21m

;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, G-Flex, G-Port, EIR, INP, PPSMS, SIP NP, or V-Flex feature is turned on, or the ATINP feature is enabled, and EPAP is used:

```
rept-stat-db:db=mps
```

```
    tekelecstp 08-08-29 08:55:54 NZST  EAGLE 39.2.0
                    EPAP A  ( ACTV )
                     C  BIRTHDATE          LEVEL       EXCEPTION
                     -  -----------------  ----------  --------------
    PDB              Y  08-05-29 08:20:04       12345        -
    RTDB             Y  08-05-29 08:20:04       12345        -
    RTDB-EAGLE       Y  08-05-29 08:20:04       12345        -
                    EPAP B ( STDBY )
                     C  BIRTHDATE          LEVEL       EXCEPTION
                     -  -----------------  ----------  --------------
    PDB              Y  08-05-29 08:20:04       12345        -
    RTDB             Y  08-05-29 08:20:04       12345        -
    RTDB-EAGLE       Y  08-05-29 08:20:04       12345        -
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, EIR, INP, PPSMS, SIP NP, or V-Flex feature is turned on, or the ATINP feature is enabled, and EPAP is used:

```
rept-stat-db:display=all:db=mps
```

```
    tekelecstp 08-05-29 08:55:54 NZST  EAGLE 39.2.0
                    EPAP A  ( ACTV )
                     C  BIRTHDATE          LEVEL       EXCEPTION
                     -  -----------------  ----------  --------------
    PDB              Y  07-08-29 08:20:04       12345        -
    RTDB             Y  07-08-29 08:20:04       12345        -
    RTDB-EAGLE       Y  07-08-29 08:20:04       12345        -

                    EPAP B ( STDBY )
```

```
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB             Y  07-08-29 08:20:04       12345        -
    RTDB            Y  07-08-29 08:20:04       12345        -
    RTDB-EAGLE      Y  07-08-29 08:20:04       12345        -

                   EAGLE RTDB REPORT
    CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION    IN-SRVC
    ---------  ----  -  -----------------  ----------  ------------ -----------

    VSCCP      1201  Y  07-08-29 08:20:04       12345        -      10d 23h 21m

    VSCCP      1203  Y  07-08-29 08:20:04       12345        -      10d 23h 21m

    VSCCP      1105  Y  07-08-29 08:20:04        12345        -       5d  3h
1m
;
```

This example shows the output when the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, EIR, G-Flex, G-Port, INP, PPSMS, SIP NP, or V-Flex feature is turned on, or the ATINP feature is enabled, and EPAP is used:

```
rept-stat-db:display=except:db=mps
```

```
    tekelecstp 08-08-29 08:55:54 NZST  EAGLE 39.2.0
                  EPAP A  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB             Y  07-08-29 08:20:04       12345        -
    RTDB            Y  07-08-29 08:20:04       12345        -
    RTDB-EAGLE      Y  07-08-29 08:20:04       12345        -

                   EPAP B ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB             Y  07-08-29 08:20:04       12345        -
    RTDB            Y  07-08-29 08:20:04       12345        -
    RTDB-EAGLE      Y  07-08-29 08:20:04       12345        -

                   EAGLE RTDB REPORT
    CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION    IN-SRVC
    ---------  ----  -  -----------------  ----------  ------------ -----------

    VSCCP      1203  Y  07-08-29 08:20:04       12340  DIFF LEVEL   10d 23h 21m

;
```

This example shows the output when E5-MCAP and E5-TDM cards are used:

```
rept-stat-db
```

```
    e5oam 08-12-01 15:25:40 EST  EAGLE 40.1.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( STDBY)                 TDM 1116 ( ACTV )
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       36 08-11-19 09:38:25 EST  Y       36 08-11-19 09:38:25 EST
    FD CRNT Y       39                        Y       39
            MCAP 1113                         MCAP 1115
```

```
           - --------                              - --------
    RD BKUP Y       36 08-11-19 09:27:17 EST  Y       36 08-11-19 09:27:17 EST
    USB BKP -    -          -         -         Y        3 08-11-07 01:11:22 EST
;
```

`rept-stat-db:display=all`

```
    e5oam 08-12-01 15:26:27 EST  EAGLE 40.1.0
    DATABASE STATUS: >> OK <<
           TDM 1114 ( STDBY)                 TDM 1116 ( ACTV )
           C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
           - -------- ---------------------- - -------- ----------------------

    FD BKUP Y       36 08-11-19 09:38:25 EST  Y       36 08-11-19 09:38:25 EST
    FD CRNT Y       39                        Y       39
           MCAP 1113                         MCAP 1115
           - --------                        - --------
    RD BKUP Y       36 08-11-19 09:27:17 EST  Y       36 08-11-19 09:27:17 EST
    USB BKP -    -          -         -         -    -          -         -

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    MCP        1108  -  -      -          -          -          -
    IPS        1111  Y  N  39          08-11-22 10:21:54       -
    OAM-RMV    1113  Y  -  36          08-11-18 23:36:19  DIFF LEVEL
    TDM-CRNT   1114  Y  N  39          08-11-22 10:21:54       -
    TDM-BKUP   1114  Y  -  36          08-11-18 23:36:38  DIFF LEVEL
    OAM-RMV    1115  Y  -  36          08-11-18 23:36:19  DIFF LEVEL
    OAM-USB    1115  Y  -   3          08-11-07 01:11:22  DIFF LEVEL
    TDM-CRNT   1116  Y  N  39          08-11-22 10:21:54       -
    TDM-BKUP   1116  Y  -  36          08-11-18 23:36:38  DIFF LEVEL
```

The examples show output when the Dual ExAP Config feature is enabled and both LNP and EPAP base features are turned ON:

`rept-stat-db`

```
    exap 12-07-03 09:31:29 MST  EAGLE 45.0.0-64.34.0
    DATABASE STATUS: >> OK <<
           TDM 1114 ( STDBY)                 TDM 1116 ( ACTV )
           C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
           - -------- ---------------------- - -------- ----------------------

    FD BKUP Y        1     -         -         Y        1     -         -
    FD CRNT Y       79                        Y       79
           MCAP 1113                         MCAP 1115
           - --------                        - --------
    RD BKUP Y        1     -         -         Y        1     -         -
    USB BKP -    -          -         -         -    -          -         -

                   ELAP A ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB            Y  11-08-01 13:50:00           6        -
    RTDB-EAGLE         11-08-01 13:50:00           6        -

                   ELAP B  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB            Y  11-08-01 13:50:00           6        -
```

```
    RTDB-EAGLE          11-08-01 13:50:00           6        -

                   EPAP A ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB                09-06-12 12:09:46   104552913        -
    RTDB               Y  09-06-12 12:09:46   104552913        -
    RTDB-EAGLE            09-06-12 12:15:06   104552913        -

                   EPAP B  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB                09-06-12 12:09:46   104552913        -
    RTDB               Y  09-06-12 12:09:46   104552913        -
    RTDB-EAGLE            09-06-12 12:15:06   104552913        -

;
```

rept-stat-db:display=all

```
    exap 12-07-03 09:35:32 MST  EAGLE 45.0.0-64.34.0
    DATABASE STATUS: >> OK <<
            TDM 1114 ( STDBY)                  TDM 1116 ( ACTV )
            C   LEVEL    TIME LAST BACKUP      C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------

    FD BKUP Y        1     -        -         Y        1     -        -
    FD CRNT Y       79                       Y       79
            MCAP 1113                        MCAP 1115
            - --------                       - --------
    RD BKUP Y        1     -        -         Y        1     -        -
    USB BKP -    -         -        -         -    -         -        -

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------  --------------
    VSCCP      1101  Y  N  79          12-07-02 11:10:56       -
    VSCCP      1103  Y  N  79          12-07-02 11:10:56       -
    IPS        1105  Y  N  79          12-07-02 11:10:56       -
    SS7ANSI    1107  Y  N  79          12-07-02 11:10:56       -
    IPSG       1108  -  -      -           -         -          -
    VSCCP      1111  Y  N  79          12-07-02 11:10:56       -
    OAM-RMV    1113  Y  -  1               -         -      DIFF LEVEL
    TDM-CRNT   1114  Y  N  79          12-07-02 11:10:56       -
    TDM-BKUP   1114  Y  -  1           00-00-00 00:00:00  DIFF LEVEL
    OAM-RMV    1115  Y  -  1               -         -      DIFF LEVEL
    OAM-USB    1115  -  -      -           -         -          -
    TDM-CRNT   1116  Y  N  79          12-07-02 11:10:56       -
    TDM-BKUP   1116  Y  -  1           00-00-00 00:00:00  DIFF LEVEL
    VSCCP      1201  -  -      -           -         -          -
    CCS7ITU    1203  -  -      -           -         -          -
    VSCCP      1205  -  -      -           -         -          -

                   ELAP A ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB               Y  11-08-01 13:50:00           6        -
    RTDB-EAGLE            11-08-01 13:50:00           6        -

                   ELAP B  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB               Y  11-08-01 13:50:00           6        -
```

```
    RTDB-EAGLE          11-08-01 13:50:00           6        -

                   EPAP A ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB                09-06-12 12:09:46   104552913        -
    RTDB               Y  09-06-12 12:09:46   104552913        -
    RTDB-EAGLE         09-06-12 12:15:06   104552913        -

                   EPAP B  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB                09-06-12 12:09:46   104552913        -
    RTDB               Y  09-06-12 12:09:46   104552913        -
    RTDB-EAGLE         09-06-12 12:15:06   104552913        -

                   EAGLE RTDB REPORT
    CARD/APPL  LOC   C  BIRTHDATE          LEVEL       EXCEPTION    IN-SRVC
    ---------  ----  -  -----------------  ----------  ------------ -----------

    VSCCP      1101  Y  11-08-01 17:50:00           6        -       7d 16h 33m

    VSCCP      1111  Y  09-06-12 12:15:06   104552913        -       4d 18h 27m

;
```

```
rept-stat-db:db=mps
```

```
    exap 12-07-03 09:36:17 MST  EAGLE 45.0.0-64.34.0
                   ELAP A ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB               Y  11-08-01 13:50:00           6        -
    RTDB-EAGLE         11-08-01 13:50:00           6        -

                   ELAP B  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    RTDB               Y  11-08-01 13:50:00           6        -
    RTDB-EAGLE         11-08-01 13:50:00           6        -

                   EPAP A ( STDBY )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB                09-06-12 12:09:46   104552913        -
    RTDB               Y  09-06-12 12:09:46   104552913        -
    RTDB-EAGLE         09-06-12 12:15:06   104552913        -

                   EPAP B  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  -----------------  ----------  --------------
    PDB                09-06-12 12:09:46   104552913        -
    RTDB               Y  09-06-12 12:09:46   104552913        -
    RTDB-EAGLE         09-06-12 12:15:06   104552913        -

;
```

Legend

- **DATABASE STATUS—**Indicates any database alarms on the MASPs. Not used with *loc* parameter output.

  - **>> OK<<**—No database alarms
  - **>>NOT OK (DMS)<<**—Database DMS alarms are present
  - **>>NOT OK (DRMS)<<**—Database DRMS alarms are present
  - **>>NOT OK (DMS,DRMS)<<**—Database DMS and DRMS alarms are present
- **(ACTV MASP)**—The specified MASP is the active processor. Not used with loc parameter.
- **(STDBY MASP)**—The specified MASP is the standby processor. Not used with loc parameter.
- **(NOACCS)**—The specified processor is not accessible. Not used with loc parameter.
- **C**—Indicates whether the database is coherent
- **Y** —the database is coherent
- **N** —the database is not coherent
- Dash (**-**)—the database is not accessible
- **LEVEL**—Number of updates made to the database partitions
- **TIME LAST BACKUP**—Date and time the last change was performed on the removable drives (if inserted) and the backup partition of the fixed disk. Not used with loc parameter.
- **TIME LAST UPDATE**—Date and time of the last update on the card database from OAM. Not used with loc parameter.
- **RD BKUP**—Removable drive backup partition
- **FD BKUP**—Fixed disk backup partition
- **FD CRNT**—Fixed disk current partition. Not used with the loc parameter output.
- **DIFF CONTENTS—**The specified database's contents are different compared to the other database in that partition.
- **DIFF LEVEL**—The specified database's level does not match the level of the current partition of the active fixed disk (**FD CRNT**).
- **DIFF TIME**—The specified database's level matches the level of the current partition of the active fixed disk (FD CRNT), but the time that the database was updated, compared to the current partition of the active fixed disk (FD CRNT), is different. This exception indicator appears only if the time and date stamp in an update packet or in memory becomes corrupted.
- **CORRUPTED**—The specified database is corrupted.
- **INCOHERENT**—The specified database is incoherent.
- **EXCEPTION**—The following values can appear:
  - The condition of the specified database with which the system has detected a problem. These conditions are: **DIFF CONTENTS**, **DIFF LEVEL**, **DIFF TIME**, **CORRUPTED**, and **INCOHERENT**. A "-" indicates that the database was not accessible. A blank entry indicates that the database has no problems. This field is used with the display=except, display=all, and loc parameter outputs.
  - A value that indicates the number of times that the Corruption Cross Correction function has corrected the card during the time that the card has been in service. This value persists until the card is reset.
- **IN-SRVC**—Length of time the card has been in service
- **CARD/APPL**—Card type or application assigned to the card specified in the **LOC** field. Not used with the display=brief (default) output.
  - **TDM-BKUP**—Backup partition on the fixed disk on the TDM
  - **TDM-CRNT**—Current partition on the fixed disk on the TDM
- **LOC**—Card location of the database. Not used with display=brief (default) output.

- **T**—Indicates whether the specified database is in transition. A database is in transition when the database for the link interface module (LIM) or E5-TSM being loaded with the new screen set information after an update to the database, and the database has not reached the current reported database level. Not used with display=brief (default) output.
- **Y**—the database is in transition
- **N**—the database is not in transition.
- **TIME LAST BACKUP**—The date and time the last change was performed on the specified card and its associated database. A dash (–) in this field for the fixed drive (FD) or removable drive (RD) indicates that no backup has been created on that drive. Not used with display=brief (default) output.
- **VERSION**—Version number of each database (including the LNP database if the LNP feature is on)
  - **xxx-xxx-xxx**—Version number of the database
  - **UNKNOWN**—The `rept-stat-db` command can show the version number only for a database that is version 20.0.0 or later. Any database version that is earlier than version 20.0.0 cannot be determined and UNKNOWN is displayed for the database version number.
  - A dash "-"—The database is not available. Used only with

  display=version output.
- **STATUS**—Operational status of the database version. Used only with *display=version* output.
  - **NORMAL**—The database version is fully operational.
  - Blank entry—Indicates the database is not available or is unknown. A numeric value indicates the database is invalid. The value displayed is the status value found in the field and is for diagnostic purposes.
- **BIRTHDATE**—Date and time of creation for the database
- **EPAP A (ACTV)**—The active EAGLE Application Processor. This section appears only if the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, G-Port, G-Flex, EIR, INP, PPSMS, SIP NP (if used with EPAP), or V-Flex features are turned on or the ATINP feature is enabled.
  - **PDB**—Provisioning database status information
  - **RTDB**—Provisioning database status information used to create the resident Realtime Database. The RTDB information may be different than the PDB information if the PDB has been reloaded, or if the RTDB has not been loaded from the PDB. If the RTDB birthdate is different than the PDB or if the level is too old to be able to resynchronize the databases, then a "Reload Required" alarm is generated.
  - **RTDB-EAGLE**—EPAP resident Realtime Database status information. This database is downloaded to Service Module cards. If the birthdate or level do not match the Service Module card, then the Service Module card generates an alarm. The RTDB is reloaded from the PDB, and the birthdate and level are reset and do not match the database status information. This database status mismatch condition indicates an abnormal condition that requires Service Module cards to be reloaded.
- **EPAP B (STDBY)**—The standby EAGLE Application Processor. This section appears only if the A-Port, AINPQ, Diameter S13/S13' Interface for EIR, G-Port, G-Flex, EIR, INP, PPSMS, SIP NP (if used with EPAP), or V-Flex features are turned on, or the ATINP feature is enabled.
  - **PDB**—Provisioning database status information
  - **RTDB**—The provisioning database status information used to create the resident Realtime Database. The RTDB information may be different than the PDB information if the PDB has been reloaded, or if the RTDB has not been loaded from the PDB. If the RTDB birthdate is

different than the PDB or if the level is too old to be able to resynchronize the databases, then a "Reload Required" alarm is generated.

- **RTDB-EAGLE**—EPAP resident Realtime Database status information. This database is downloaded to Service Module cards. If the birthdate or level do not match the Service Module card, then the Service Module card generates an alarm. The RTDB is reloaded from the PDB, and the birthdate and level are reset and do not match the database status information. This database status mismatch condition indicates an abnormal condition that requires Service Module cards to be reloaded.

- **ELAP A (ACTV)**—The active EAGLE LNP Application Processor. This section appears only if the LNP ELAP Configuration or SIP NP (if used with ELAP) feature is turned on.
  - **RTDB-EAGLE**—ELAP resident Database status information. This database is downloaded to Service Module cards. If the birthdate or level do not match the Service Module card, then the Service Module card generates an alarm.
  - **TIME LAST UPDATE—**Date and time of the last update of the RTDB from the LSMS
- **ELAP B (STDBY)**—The standby EAGLE LNP Application Processor. This section appears only if the LNP ELAP Configuration or SIP NP (if used with ELAP) feature is turned on.
  - **RTDB-EAGLE**—The ELAP resident Realtime Database status information. This database is downloaded to Service Module cards. If the birthdate or level do not match the Service Module card, then the Service Module card generates an alarm.
  - **TIME LAST UPDATE**—Date and time of the last update of the RTDB from the LSMS

Related Commands

chg-db, *copy-meas*, *disp-disk-dir*

rept-stat-ddb

Report Dynamic Database Status

Use this command to obtain the most recent dynamic database (DDB) audit report. The DDB audit report displays the checksums of the Route, Linkset, Link, CM Card, CM Cluster, Mated Application, and MTP globals. The report displays the exact status of active MTP card after audit and cause of that status.

Parameters

display (optional)

This parameter specifies the type of report to display.

Range:

brief

all

Default:

brief

filter (optional)

This parameter provides a full DDB audit report for cards that meet the specified criteria.

Range:

resp

Responding cards

nrsp

Non-responding cards

incn

Inconsistent cards

cons

Consistent cards

ncons

Not-consistent cards: includes cards marked as inconsistent, DDB update in progress, having idle period less than quiet period, and sending replies marked as NO_DATA

ndat

Cards marked as "No Data" because the checksum of dynamic tables is not available

nddl

Cards marked as "No Data " because the checksum of dynamic tables is not available due to the DDL crossload being in incomplete state

nddb

Cards marked as "No Data" because the checksum of dynamic tables is not available due to non-initialization of DDB

duip

Cards returning replies marked as "DDB update in progress"

duipt

Cards returning replies marked as "DDB update in progress" due to incomplete evaluation of TSRC task

duipc

Cards returning replies marked as "DDB update in progress" due to incomplete checksum calculation

nquiet

Cards returning replies having idle period less than the quiet period

list (optional)

This parameter displays a list of cards that meet the specified criteria.

Range:

resp

Responding cards

nrsp

Non-responding cards

incn

Inconsistent cards

cons

Consistent cards

ncons

Not-consistent cards, including cards marked as inconsistent, DDB update in progress, having idle period less than quiet period, and sending replies marked as NO_DATA

ndat

Cards marked as "No Data " because the checksum of dynamic tables is not available

nddl

Cards marked as "No Data " because the checksum of dynamic tables is not available due to the DDL crossload being in incomplete state

nddb

Cards marked as "No Data " because the checksum of dynamic tables is not available due to non-initialization of the DDB

duip

Cards returning replies marked as "DDB update in progress"

duipt

Cards returning replies marked as "DDB update in progress" due to incomplete evaluation of TSRC task

duipc

Cards returning replies marked as "DDB update in progress" due to incomplete checksum calculation

nquiet

Cards returning replies marked as having the idle period less than the quiet period

Example

```
rept-stat-ddb
rept-stat-ddb:display=all
rept-stat-ddb:list=resp
rept-stat-ddb:filter=nddb
```

Dependencies

Audit data is available only if the execution of a periodic or manual DDB audit is complete (see the `aud-data` command).

If the system is in upgrade mode, then this command cannot be entered.

The display, list, and filter parameters cannot be specified together in the command.

Notes

A question mark (?) indicates that the corresponding card's status is not evaluated (Inconsistent/Consistent) when system status is marked as ABORTED.

Cards having an additional status of IGNORED responded with "DDB update in progress". These cards are not considered for calculating system status.

Output

The MATED APPL field is displayed only for Service Module cards.

`rept-stat-ddb:display=all`

```
tekelecstp 09-07-21 21:10:17 GMT  EAGLE 41.1.0
DDB AUDIT REPORT
    SYSTEM STATUS             : INCONSISTENT
    ACTIVE MTP CARDS          : 21
    NON RESPONDING CARDS      : 7: 1207 1208 1211 1212 2108 2111 2112
    RESPONDING CARDS          : 14
    CARDS WITH NO DATA        : 2
    CARDS WITH DATA           : 12
    CARDS FAILING QUIET PRD   : 0
    CARDS WITH DDB UPD IN PRG : 3
    CARDS CONSIDERED FOR CKSM : 9
    INCONSISTENT CARDS        : 2: 1203 2103
    CONSISTENT CARDS          : 7
    AUDIT START TIME          : 21/07/2009  21:07:54
    QUIET PERIOD              : 600 ms

RTE        LINK SET   LINK       CM CARD    CM CLSTR   MATED APPL MTP GLOBLS

  LOC   STATUS        CAUSE            IDLE       DDB UPD    ADDN'L STATUS
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

  1201  CONSISTENT                     700        1000
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

  1202  CONSISTENT                     700        1000
H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0

  1203  INCONSISTENT                   700        1000
---------- ---------- ---------- ---------- ---------- ---------- ----------

  1204  NODATA        (DDB INIT)       ---------- ----------
H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8

  1205  IN UPDATE 1   (TSRC,DDB)       700        1000       (IGNORED)
H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

  1206  CONSISTENT                     700        1000
---------- ---------- ---------- ---------- ---------- ---------- ----------
```

```
      1207  NORESP                          ---------- ----------
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      1208  NORESP                          ---------- ----------
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      1211  NORESP                          ---------- ----------
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      1212  NORESP                          ---------- ----------
    H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8

      1213  CONSISTENT                      700        1000
    H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 ---------- H'000003e8

      2101  CONSISTENT                      700        1000
    H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 ---------- H'000003e8

      2102  CONSISTENT                      700        1000
    H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 ---------- H'000007d0

      2103  INCONSISTENT                    700        1000       (WWA UPD=2)
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      2104  NODATA        (DDL XLOAD)       ---------- ----------
    H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 ---------- H'00000bb8

      2105  IN UPDATE 2   (DDB)             700        1000       (IGNORED)
    H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 H'00000bb8 ---------- H'00000bb8

      2106  IN UPDATE 2   (TSRC,DDB)        700        1000       (IGNORED)
    H'000003e8 H'000003e8 H'000003e8 H'000003e8 H'000003e8 ---------- H'000003e8

      2107  CONSISTENT                      700        1000
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      2108  NORESP                          ---------- ----------
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      2111  NORESP                          ---------- ----------
    ---------- ---------- ---------- ---------- ---------- ---------- ----------

      2112  NORESP                          ---------- ----------
    Command Completed.
;
```

rept-stat-ddb

```
    tekelecstp 09-07-21 21:10:32 GMT  EAGLE 41.1.0
    DDB AUDIT REPORT
    SYSTEM STATUS             : OK
    ACTIVE MTP CARDS          : 10
    NON RESPONDING CARDS      : 0
    RESPONDING CARDS          : 10
    CARDS WITH NO DATA        : 0
    CARDS WITH DATA           : 10
    CARDS FAILING QUIET PRD   : 0
    CARDS WITH DDB UPD IN PRG : 0
    CARDS CONSIDERED FOR CKSM : 10
    INCONSISTENT CARDS        : 0
    CONSISTENT CARDS          : 0
```

```
   AUDIT START TIME          : 21/07/2009  21:07:54
    QUIET PERIOD              : 20 ms

    Command Completed.
;
```

`rept-stat-ddb:filter=incn`

```
    tekelecstp 09-07-21 21:09:32 GMT  EAGLE 41.1.0
    DDB AUDIT REPORT
        SYSTEM STATUS             : INCONSISTENT
        ACTIVE MTP CARDS          : 21
        NON RESPONDING CARDS      : 7: 1207 1208 1211 1212 2108 2111 2112
        RESPONDING CARDS          : 14
        CARDS WITH NO DATA        : 2
        CARDS WITH DATA           : 12
        CARDS FAILING QUIET PRD   : 0
        CARDS WITH DDB UPD IN PRG : 3
        CARDS CONSIDERED FOR CKSM : 9
        INCONSISTENT CARDS        : 2: 1203 2103
        CONSISTENT CARDS          : 7
        AUDIT START TIME          : 21/07/2009  21:07:54
        QUIET PERIOD              : 600 ms

    RTE        LINK SET   LINK       CM CARD    CM CLSTR   MATED APPL MTP GLOBLS

      LOC   STATUS        CAUSE            IDLE       DDB UPD    ADDN'L STATUS
    H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0

      1203  INCONSISTENT                   700        1000
    H'000007d0 H'000007d0 H'000007d0 H'000007d0 H'000007d0 ---------- H'000007d0

      2103  INCONSISTENT                   700        1000       (WWA UPD=2)

    Command Completed.
;
```

`rept-stat-ddb:list=nrsp`

```
    tekelecstp 09-07-21 21:07:54 GMT  EAGLE 41.1.0
    DDB AUDIT REPORT CARD LIST [ NON RESPONDING CARDS ] (6)
      1207, 1208, 1211, 1212, 2108, 2111

    Command Completed.
;
```

MTP Cards sending replies marked as "DDB update in progress" are distributed in two rows depending upon the number of times the MTP card consecutively reported "DDB updates in progess".

`rept-stat-ddb:list=duip`

```
    tekelecstp 09-07-21 21:07:54 GMT  EAGLE 41.1.0
    DDB AUDIT REPORT CARD LIST [ DDB UPDATE IN PROGRESS ] (2)
    DDB UPDATES IN PROGRESS (>= 6 TIMES)  (0)

    DDB UPDATES IN PROGRESS (< 6 TIMES)  (2)

      1205, 2105
```

```
    Command Completed.
;
```

```
rept-stat-ddb:list=nquiet
```

```
    tekelecstp 09-07-21 21:07:54 GMT  EAGLE 41.1.0
    DDB AUDIT REPORT CARD LIST [CARDS WITH NQUIET] (0)

    Command Completed.
;
```

Legend

- **SYSTEM STATUS**:
  - **OK**—DDB is consistent on all active MTP cards or no active MTP card is present in system
  - **INCONSISTENT**—DDB is inconsistent
  - **UNKNOWN**—"All active MTP cards in the system responded without the checksum of DDB table" or "No active MTP card in the system responded to audit request"
  - **ABORTED**—"Checksums collected failed to meet the quiet period requirement" or "Number of cards responded with "DDB update in progess" greater than 25% number of cards responded with data"
- **ACTIVE MTP CARDS**—Number of active MTP cards
- **NON RESPONDING CARDS**—Number of non-responding cards
- **RESPONDING CARDS**—Number of responding cards
- **CARDS WITH NO DATA**—Cards sending replies without the checksum of dynamic tables, due to incomplete DDL crossload or DDB initialization
- **CARDS WITH DATA**—Cards sending replies with checksums
- **CARDS FAILING QUIET PRD**—Cards failing quiet time requirement
- **CARDS WITH DDB UPD IN PRG**—Cards sending replies marked as "DDB update in progess" due to DDB checksum not evaluated completely or TSRC task is incomplete
- **CARDS CONSIDERED FOR CKSM**—Cards sending correct replies. Replies are not marked with "DDB update in progess" or "Reply with no data".
- **INCONSISTENT CARDS**—Cards that are inconsistent
- **CONSISTENT CARDS**—Cards that are consistent
- **AUDIT START TIME**—Time that the audit started (*DD/MM/YYYY hh:ms:ss*format)
- **QUIET PERIOD**—Minimum DDB idle time, in milliseconds, during which no DDB updates are applied
- **RTE**—Checksum of RTE Table
- **LINK SET**—Checksum of Link Set Table
- **LINK**—Checksum of Link Table
- **CM CARD**—Checksum of CM Card
- **CM CLSTR**—Checksum of CM Cluster
- **MATED APPL**—Checksum of Mated Application
- **MTP GLOBLS**—Checksum of MTP Globals Table
- **IDLE (PERIOD)**—Time elapsed, in milliseconds, since the last DDB update was received by this card

- **DDB UPD**—Total DDB updates received on the card
- **ADDN'L STATUS**—Display more information for the card, including WWA updates or whether card is considered for audit calculations
- **CAUSE**—Display the reason for sending replies of type "reply with no data " or "DDB update in progress". This value can be DDL (crossload not completed), DDB (dynamic database is not initialised), (TSRC, DDB) (TSRC task is not completed) or DDB (checksums still needs to apply on tables).
- **?**—Card status is not evaluated (inconsistent/consistent) if the system status is marked as "ABORTED"
- **IGNORED**—Card responded with "DDB update in progess" and is not considered for calculating system status
- **WWA UPD**—Number of entries that were updated by the WWA

Related Commands

aud-data, *dbg-ddb*

rept-stat-deir Report Diameter EIR Status

Use this command to display the overall status of the Diameter EIR service on the EAGLE.

Parameters

dcname (optional)

Diameter connection name. This parameter specifies the unique logical name assigned to each diameter connection. It shall display Status, TPS and Statistics of the Diameter connection specified.

Range:

ayyyyyyyyyyyyyy

A string of alphanumeric characters, beginning with a letter and up to 15 characters in length. Valid values are a..z, A..Z, 0..9.

System Default:

null

loc (optional)

Diameter card location for which Card status, overall card TPS and total statistics of the card is to be reported.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

mode (optional)

Display Diameter connection statistics.

Range:

perf

Displays per card TPS statistics, DEIR Service statistics, and per connection TPS statistics.

stat

Displays per card TPS statistics, DEIR Service statistics, and per connection service statistics.

peakreset (optional)

Reset peak values for a card or a specified diameter connection.

Range:

yes

Reset the peak value.

no

Do not reset the peak value.

Example

```
rept-stat-deir
rept-stat-deir:loc=1207
rept-stat-deir:dcname=dc1207a
rept-stat-deir:mode=perf
rept-stat-deir:peakreset=yes:loc=1207
rept-stat-deir:mode=perf:loc=1207
rept-stat-deir:mode=stat:loc=1207
rept-stat-deir:mode=stat
```

Dependencies

S13/S13' EIR Feature must be activated before retrieving the overall status of DEIR cards.

The (1) mode and loc parameters, (2) loc and peakreset parameters, or (3) dcname and peakreset parameters can be specified together. No other combination is allowed.

The location specified with this command should be of a DEIR card running DEIRHC gpl.

At least one Diameter EIR card running the DEIRHC gpl must be configured.

The Diameter connection name specified must be present in the DCONN table.

The card at the specified location must support this command.

Diameter card location or diameter connection name must be specified with peakrest parameter.

Notes

If optional parameters are specified, only the entries that match the entered parameters are displayed.

Output

This example displays output when no parameter is specified:

`rept-stat-deir`

```
    tekelecstp 14-03-21 01:16:07 MST  EAGLE 46.0.0 65.11.0
    rept-stat-deir
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 01:16:07 MST  EAGLE 46.0.0 65.11.0
    DEIR ALARM STATUS = **  0484 DEIR System normal, card(s) abnormal
    DEIR Cards Configured=16          Cards IS-NR= 1
    Average CPU Usage  =  1%

    CARD     VERSION    PST            SST        AST       TPS    PTPS
    ------------------------------------------------------------------------
    1201   ----------- OOS-MT          Isolated   -----     0      0
    1313   ----------- OOS-MT          Isolated   -----     0      0
    1101   013-011-001 IS-NR           Active     -----     86     86
    1103   013-011-001 IS-NR           Active     -----     0      0
    1105   013-011-001 IS-ANR          MPS Unavl  -----     0      0
    ------------------------------------------------------------------------

    TOTAL DEIR SERVICE STATISTICS:
    ========================================================================
    SERVICE   SUCCESS     ERROR       WARNINGS   OVERFLOW    TOTAL
    DEIR SRV: 1           0           2608       0           2609

    Command Completed.
;
```

This example displays output when LOC parameter is specified:

`rept-stat-deir:loc=1101`

```
    tekelecstp 14-03-21 01:19:26 MST  EAGLE 46.0.0 65.11.0
    rept-stat-deir:loc=1101
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
```

```
    tekelecstp 14-03-21 01:19:26 MST  EAGLE 46.0.0 65.11.0
    CARD   VERSION      TYPE    PST           SST          AST
    1101   013-011-001  DSM     IS-NR         Active       -----
    CARD ALARM STATUS       = No Alarms.
    CPU USAGE =  1 %

    TPS STATISTICS:
    ==============================================================================
                TPS    PEAK-TPS   PEAKTIMESTAMP
    ------------------------------------------------------------------------------
                101    101        02-01-02 01:16:32


    PER CONNECTION TPS STATISTICS:
    ==============================================================================
    DCNAME           STATUS  RSVD-TPS  MAX-TPS  TPS  Peak-TPS PEAKTIMESTAMP
    ------------------------------------------------------------------------------
    d1               UP      250       8000     1    1        02-01-02 01:19:03

    d2               UP      250       8000     100  100      02-01-02 01:19:03

    d31              DOWN    250       8000     0    0        02-01-02 01:19:03

    d41              DOWN    250       8000     0    0        02-01-02 01:19:03

    d3               DOWN    250       8000     0    0        02-01-02 01:19:03

    d4               DOWN    250       8000     0    0        02-01-02 01:19:03

    dd10             DOWN    250       8000     0    0        02-01-02 01:19:03

    ------------------------------------------------------------------------------

    Command Completed.
;
```

This example displays output when DCNAME parameter is specified:

`rept-stat-deir:dcname=d1`

```
    tekelecstp 14-03-21 01:20:22 MST  EAGLE 46.0.0 65.11.0
    rept-stat-deir:dcname=d1
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 01:20:27 MST  EAGLE 46.0.0 65.11.0
    DCONN ALARM STATUS     = No Alarms.

     DCNAME             STATUS
     d1                 UP

    TPS STATISTICS:
    ==============================================================================
      RSVD-TPS   MAX-TPS    TPS    PEAK-TPS   PEAKTIMESTAMP
      250        8000       1      1          02-01-02 01:20:03
```

```
    DCONN STATISTICS
    ================================================================================
    SUCCESS     ERROR      WARNING     OVERFLOW    TOTAL
    0           0          30          0           30

    Command Completed.
;
```

This example displays output when MODE=PERF parameter is specified:

`rept-stat-deir:mode=perf`

```
    tekelecstp 14-03-21 01:24:15 MST  EAGLE 46.0.0 65.11.0
    rept-stat-deir:mode=perf
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 01:24:15 MST  EAGLE 46.0.0 65.11.0
    DEIR ALARM STATUS = **  0484 DEIR System normal, card(s) abnormal
    DEIR Cards Configured=16          Cards IS-NR= 1
    Average CPU Usage  =  1%

    CARD     VERSION    PST            SST       TPS    PTPS   PTIMESTAMP
    ------------------------------------------------------------------------
    1201   ----------- OOS-MT          Isolated  0      0      00-00-00 00:00:00

    1303   ----------- OOS-MT          Isolated  0      0      00-00-00 00:00:00

    1101   013-011-001 IS-NR           Active    101    101    02-01-02 01:23:09

    1103   013-011-001 IS-NR           Active    0      0      00-00-00 00:00:00

    1105   013-011-001 IS-ANR          MPS Unavl 0      0      00-00-00 00:00:00

    ------------------------------------------------------------------------

    TOTAL DEIR SERVICE STATISTICS:
    ========================================================================
    SERVICE   SUCCESS     ERROR       WARNINGS   OVERFLOW    TOTAL
    DEIR SRV: 0           0           3035       0           3035
    ------------------------------------------------------------------------

    PER CONNECTION TPS STATISTICS:
    ========================================================================
    DCNAME           STATUS  RSVD-TPS  MAX-TPS  TPS  Peak-TPS PEAKTIMESTAMP
    ------------------------------------------------------------------------
    d1               UP      250       8000     1    1        02-01-02 01:24:03

    d2               UP      250       8000     100  100      02-01-02 01:24:03

    d31              DOWN    250       8000     0    0        02-01-02 01:24:03

    d41              DOWN    250       8000     0    0        02-01-02 01:24:03

    d3               DOWN    250       8000     0    0        02-01-02 01:24:03

    d4               DOWN    250       8000     0    0        02-01-02 01:24:03
```

```
    dd10              DOWN    250       8000     0    0        02-01-02 01:24:03

    b1                DOWN    250       8000     0    0        00-00-00 00:00:00

    b2                DOWN    250       8000     0    0        00-00-00 00:00:00

    b31               DOWN    250       8000     0    0        00-00-00 00:00:00

    b41               DOWN    250       8000     0    0        00-00-00 00:00:00

    b3                DOWN    250       8000     0    0        00-00-00 00:00:00

    b4                DOWN    1500      8000     0    0        00-00-00 00:00:00

    b10               DOWN    250       8000     0    0        00-00-00 00:00:00

    aasw234edf56tgr   DOWN    250       8000     0    0        02-01-02 01:24:10

    ------------------------------------------------------------------------------

    Command Completed.
;
```

This example displays output when MODE=PERF parameter is specified along with location:

`rept-stat-deir:mode=perf:loc=1101`

```
    tekelecstp 14-03-21 01:27:25 MST  EAGLE 46.0.0 65.11.0
    rept-stat-deir:mode=perf:loc=1101
    Command entered at terminal #19.
;
```

```
   Command Accepted - Processing
    tekelecstp 14-03-21 01:27:26 MST  EAGLE 46.0.0 65.11.0
    CARD   VERSION      TYPE    PST            SST          AST
    1101   013-011-001  DSM     IS-NR          Active       DB_DIFF
    CARD ALARM STATUS       =  *  0034 Card database is inconsistent
    CPU USAGE =  1 %

    TPS STATISTICS:
    ==============================================================================
                TPS    PEAK-TPS   PEAKTIMESTAMP
    ------------------------------------------------------------------------------
                101    101        02-01-02 01:23:09


    PER CONNECTION TPS STATISTICS:
    ==============================================================================
    DCNAME            STATUS  RSVD-TPS  MAX-TPS  TPS  Peak-TPS PEAKTIMESTAMP
    ------------------------------------------------------------------------------
    d1                UP      250       8000     1    1        02-01-02 01:27:04

    d2                UP      250       8000     100  100      02-01-02 01:27:04

    d31               DOWN    250       8000     0    0        02-01-02 01:27:04

    d41               DOWN    250       8000     0    0        02-01-02 01:27:04
```

```
    d3               DOWN    250       8000     0    0        02-01-02 01:27:04

    d4               DOWN    250       8000     0    0        02-01-02 01:27:04

    dd10             DOWN    250       8000     0    0        02-01-02 01:27:04

    ------------------------------------------------------------------------

    Command Completed.
;
```

This example displays output when peakreset is specified with location:

`rept-stat-deir:peakreset=yes:loc=1217`

```
Command Accepted - Processing
    tekelecstp 13-04-15 05:38:52 MST  EAGLE 45.1.0
    rept-stat-deir:peakreset=yes:loc=1101
    Command entered at terminal #2.
;
```

```
tekelecstp 13-04-1505:38:52 MST  EAGLE 45.1.0
    Command Completed.
;
```

This example displays output when peakreset is specified with dcname:

`rept-stat-deir:peakreset=yes:dcname=dc1217`

```
Command Accepted - Processing
    tekelecstp 13-05-10 09:38:52 MST  EAGLE 45.1.0
    rept-stat-deir:peakreset=yes:dcname=dc1217
    Command entered at terminal #2.
;
```

```
    tekelecstp 13-04-1505:38:52 MST  EAGLE 45.1.0
    Command Completed.
;
```

This example displays output when MODE = STAT parameter is specified:

`rept-stat-deir:mode=stat`

```
    tekelecstp 14-03-21 01:24:15 MST  EAGLE 46.0.0 65.11.0
    rept-stat-deir:mode=stat
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 01:24:15 MST  EAGLE 46.0.0 65.11.0
    DEIR ALARM STATUS = **  0484 DEIR System normal, card(s) abnormal
```

```
    DEIR Cards Configured=16          Cards IS-NR= 1
    Average CPU Usage  =  1%

    CARD     VERSION    PST            SST       TPS    PTPS   PTIMESTAMP
    ------------------------------------------------------------------------
    1201   ----------- OOS-MT          Isolated  0      0      00-00-00 00:00:00

    1303   ----------- OOS-MT          Isolated  0      0      00-00-00 00:00:00

    1101   013-011-001 IS-NR           Active    101    101    02-01-02 01:23:09

    1103   013-011-001 IS-NR           Active    0      0      00-00-00 00:00:00

    1105   013-011-001 IS-ANR          MPS Unavl 0      0      00-00-00 00:00:00

    ------------------------------------------------------------------------

    TOTAL DEIR SERVICE STATISTICS:
    ========================================================================
    SERVICE   SUCCESS     ERROR       WARNINGS   OVERFLOW    TOTAL
    DEIR SRV: 0           0           3035       0           3035
    ------------------------------------------------------------------------

    PER CONNECTION SERVICE STATISTICS:
    ========================================================================
    DCNAME           STATUS  SUCCESS   WARNING   ERRORS    OVERFLOW  TOTAL
    ------------------------------------------------------------------------
    d1               UP      0         30        0         0         30
    d2               UP      0         3004      0         0         3004
    d31              DOWN    0         0         0         0         0
    d41              DOWN    0         0         0         0         0
    d3               DOWN    0         0         0         0         0
    d4               DOWN    0         0         0         0         0
    dd10             DOWN    0         0         0         0         0
    b1               DOWN    0         0         0         0         0
    b2               DOWN    0         0         0         0         0
    b31              DOWN    0         0         0         0         0
    b41              DOWN    0         0         0         0         0
    b3               DOWN    0         0         0         0         0
    b4               DOWN    0         0         0         0         0
    b10              DOWN    0         0         0         0         0
    aasw234edf56tgr  DOWN    0         0         0         0         0
    x1               DOWN    0         0         0         0         0
    ------------------------------------------------------------------------

    Command Completed.
```

This example displays output when MODE = STAT parameter is specified along with location:

`rept-stat-deir:mode=stat:loc=1101`

```
    tekelecstp 14-03-21 01:33:22 MST  EAGLE 46.0.0 65.11.0
    rept-stat-deir:mode=stat:loc=1101
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 01:33:22 MST  EAGLE 46.0.0 65.11.0
    CARD   VERSION      TYPE    PST            SST          AST
```

```
    1101   013-011-001  DSM     IS-NR          Active       DB_DIFF
    CARD ALARM STATUS       = **  0484 DEIR System normal, card(s) abnormal
    CPU USAGE =  1 %

    TPS STATISTICS:
    ==============================================================================
                TPS    PEAK-TPS   PEAKTIMESTAMP
    ------------------------------------------------------------------------------
                101    101        02-01-02 01:23:09


    PER CONNECTION SERVICE STATISTICS:
    ==============================================================================
    DCNAME           STATUS  SUCCESS   WARNING   ERRORS    OVERFLOW  TOTAL
    ------------------------------------------------------------------------------
    d1               UP      0         30        0         0         30
    d2               UP      0         3005      0         0         3005
    d31              DOWN    0         0         0         0         0
    d41              DOWN    0         0         0         0         0
    d3               DOWN    0         0         0         0         0
    d4               DOWN    0         0         0         0         0
    dd10             DOWN    0         0         0         0         0
    ------------------------------------------------------------------------------

    Command Completed.
;
```

Legend

This section defines the fields of the following `rept-stat-deir` reports:

- rept-stat-deir
- rept-stat-deir:loc=1207
- rept-stat-deir:dcname=dc1207a
- rept-stat-deir:mode=perf
- rept-stat-deir:peakreset=yes:loc=1207
- rept-stat-deir:peakreset=yes:dcname=dc1217
- rept-stat-deir:mode=stat
- rept-stat-deir:mode=stat:loc=1101

A dash (-) in an output field indicates that the statistic does not apply.

- CARD IS-NR -Number of DEIR cards running the DEIRHC GPL that can be used by the system (status is In-Service Normal, IS-NR).
- **CARD**-Card location of the DEIR card running the DEIRHC GPL
- **P**- The primary Service Module card. This card provides the MPS status to the EAGLE. This indicator is displayed between the card location and the GPL version.
- **VERSION** -Version number of the DEIRHC GPL running on the DEIR card.
- **PST** -Primary state of the card. See *Possible Values for PST/SST/AST*
- **SST**-Secondary state of the card. See *Possible Values for PST/SST/AST*
- **AST** -Associated state of the card. See *Possible Values for PST/SST/AST*
- **TPS** - TPS (Transactions per second) indicates the number of Diameter messages which are received on the DEIR cards or specified diameter connection.
- **RSVD-TPS**- Reserved TPS is the guaranteed TPS for a diameter connection.

- **MAX-TPS** - This is the maximum TPS for a diameter connection
- **PTPS/PEAK-TPS** ---
  - PTPS indicates the maximum TPS occurred on the card when executed with loc parameter.
  - PTPS indicates the maximum TPS occurred on a diameter connection when executed with dcname parameter.
- **PTIMESTAMP/PEAKTIMESTAMP** - The time when the PTPS occurred on the card or specified diameter connection.
- **DCNAME** -Diameter connection name.
- **STATUS** - UP or DOWN status of the diameter connection.
- **DEIR ALARM STATUS** - Displays DEIR system related alarms. If there are no system alarms present, this field displays No Alarms.
- **CARD ALARM STATUS** - Displays DEIR card specific alarms. If there are no card alarms present, this field displays No Alarms.
- **DCONN ALARM STATUS** - Displays diameter connection specific alarms. If there are no connection related alarms present, this field displays No Alarms.
- **TOTAL DEIR SERVICE STATISTICS**-System-wide view of per-service statistics. The report tracks the following information:
  - **SERVICE** --- Service running on the DEIR card. Currently only the EIR service is supported for the DEIR card.
  - **SUCCESS** -Total number of messages successfully processed by the DEIR card for the EIR service.
  - **ERROR** -Total number of messages with errors which are received by the DEIR cards for the EIR service.
  - **WARNINGS** -Total number of messages received for which either IMEI lookup failure occurred or Unknown equipment status is sent in response by the DEIR card for the EIR service.
  - **OVERFLOW** - Number of messages discarded due to congestion on a DEIR card.
  - **TOTAL** - Total number of messages received. It should be the sum of (Success + Error + Warnings) messages.
- **TPS STATISTICS**- Section of the report that provides TPS statistics on each Service Module card or diameter connection.
  - **TPS** - TPS (Transactions per second) indicates the number of Diameter messages which are received on the DEIR cards or specified diameter connection.
  - **PTPS** - PTPS indicates the maximum TPS that occurred on the card or specified diameter connection.
  - **PTIMESTAMP** - The time when the PTPS occurred on the card or specified diameter connection.
- PER CONNECTION SERVICE STATISTICS - Service statistics corresponds to each diameter connection
  - **DCNAME**-Diameter connection name.
  - **STATUS**- UP or DOWN status of the diameter connection.
  - **SUCCESS**-Total number of messages successfully processed on this particular Diameter connection by the DEIR card for the Diameter EIR service.
  - **WARNING**-Total number of messages received on this particular Diameter connection for which either IMEI lookup failure occurred or Unknown equipment status is sent in response by the DEIR card for Diameter EIR service.

- **ERRORS**-Total number of messages with errors which are received on this particular Diameter connection by the DEIR cards for the Diameter EIR service.
- **OVERFLOW**-Number of messages received on this particular Diameter connection and discarded due to congestion.
- **TOTAL**- Total number of messages received on this particular diameter connection. It should be the sum of (Success + Warning + Errors) messages.

- **DCONN STATISTICS** -Statistics of diameter connection are displayed when DCNAME parameter is specified in `rept-stat-deir` command.
  - **SUCCESS**-Total number of messages successfully processed on this particular Diameter connection by the DEIR card for the Diameter EIR service.
  - **ERROR**-Total number of messages with errors which are received on this particular Diameter connection by DEIR cards for the Diameter EIR service.
  - **WARNING**-Total number of messages received on this particular Diameter connection for which either IMEI lookup failure occurred or Unknown equipment status is sent in response by the DEIR card for the Diameter EIR service.
  - **OVERFLOW**-Number of messages received on this particular Diameter connection and discarded due to congestion.
  - **TOTAL**- Total number of messages received. It should be the sum of (Success + Error + Warning) messages.
- **PER CONNECTION TPS STATISTICS** - TPS statistics corresponds to each diameter connection.
  - **DCNAME** -Diameter connection name.
  - **STATUS** -- UP or DOWN status of the diameter connection.
  - **RSVD-TPS** - Reserved TPS is the guaranteed TPS for a diameter connection.
  - **MAX-TPS** - This is the maximum TPS for a diameter connection.
  - **TPS** - TPS (Transactions per second) indicates the number of Diameter messages which are received on the DEIR cards or specified diameter connection.
  - **Peak-TPS** - Peak-TPS indicates the maximum TPS that occurred on the card or specified diameter connection.
  - **PEAKTIMESTAMP** - The time when the Peak-TPS occurred on the card or specified diameter connection.

Related Commands

rtrv-dconn

rept-stat-dlk

Report Status Data Link

Use this command to show the status of the TCP/IP data links. The secondary state (SST) of the TCP/IP data links shows whether the link is available, unavailable, or manually removed from service.

Parameters

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

All data links are shown.

Example

`rept-stat-dlk`

`rept-stat-dlk:loc=1104`

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

The ACM is the only valid card type for this command.

The shelf and card must be equipped.

The specified card must have a TCP/IP data link assigned to it.

The card location, frame, shelf, or slot must be within the allowed range.

The data link must be equipped in the database.

A card location that is valid and defined in the database must be specified.

Notes

None

Output

`rept-stat-dlk`

```
    rlghncxa03w 10-01-27 17:00:36 EST  EAGLE 42.0.0
    DLK             PST          SST       AST
    1104            IS-NR        Active    ----
    1206            IS-NR        Active    ALMINH
    Command Completed.
;
```

`rept-stat-dlk:loc=1104`

```
    rlghncxa03w 10-01-27 17:00:36 EST  EAGLE 42.0.0
    DLK             PST          SST       AST
    1104            IS-NR        Active    ----
      ALARM STATUS       = No Alarms.
```

```
    Command Completed.
;
```

Legend

- **DLK**—Card location of the TCP/IP data link
- **PST**—Primary state of the TCP/IP data link. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the TCP/IP data link. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the TCP/IP data link. See *Possible Values for PST/SST/AST*.

Related Commands

act-dlk, *canc-dlk*, *dlt-dlk*, *ent-dlk*, *rtrv-dlk*, *tst-dlk*

rept-stat-dstn

Report Status Destination

Use this command to generate a report of the MTP point code status for provisioned point codes. Any provisioned destination can be specified, including a cluster destination (*ni-nc-**) or a network destination (*ni-*-**).

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm)*. The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, *, **, ****

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk values *, **, and *** are not valid for the *ni* subfield.

If ** or *** is specified for the *nc* subfield, either *, **, or *** must be specified for the *ncm* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc=000* is not valid if *ni=001-005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006-255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni= 006-255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc).*

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

mode (optional)

The type of display to produce. This parameter displays the point code's subsystem status along with the normal output.

Range:

full

Comprehensive display of point code status, including *rtx*. If entered with a point code, status for that point code is displayed. If specified without a point code, the status of all routesets is displayed.

rtx

Displays exception route status, other than circular routing, if the Origin-based MTP Routing feature is on.

Default:

A summary report is displayed.

stat (optional)

The primary state filter. The state of the destination for which to generate a report. To generate a report for all destinations whose state is DSBLD, specify stat=dsbld.

Range:

all

All of the primary states

alminh

Alarms inhibited

anr

In service abnormal (IS-ANR)

dsbld

Out of service maintenance disabled (OOS-MT-DSBLD)

mt

Out of service maintenance (OOS-MT)

nr

In service normal (IS-NR)

Default:

all

Example

```
rept-stat-dstn
rept-stat-dstn:dpci=2-004-1:mode=full
rept-stat-dstn:dpc=9-3-6:mode=full
rept-stat-dstn:dpc=9-3-*:mode=full
rept-stat-dstn:dpc=9-3-*
rept-stat-dstn:dpc=9-3-**
rept-stat-dstn:dpc=9-3-***
rept-stat-dstn:dpc=9-3-***:stat=mt
rept-stat-dstn:dpc:9-4-***:stat=alminh
rept-stat-dstn:dpc=9-3-*:mode=rtx
rept-stat-dstn:mode=full
rept-stat-dstn:mode=rtx
rept-stat-dstn:dpc=1-1-1
rept-stat-dstn:dpcn16=1-1-1
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

If a dpc parameter is specified, it must be the true destination point code (not an alias) and it must be defined in the database.

The stat parameter can be specified with the dpc parameter only if the dpc parameter specifies one of the*ni-nc-** formats.

An x-list DPC cannot be specified in the dpc parameter.

The mode=rtx parameter cannot be specified unless the Origin-Based MTP Routing feature is enabled and on.

The mode parameter cannot be specified with the dpc parameter if the dpc parameter specifies one of the *ni-nc-** formats.

When the mode=full parameter is specified, the dpc/dpca/dpcn/dpci/dpcn24 parameter must be specified.

The destination address must be a full point code, a network destination, or a cluster point code.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

This command does not report the x-list point codes. Use the `rept-stat-cluster` command for a report of x-list point codes.

If the mode=rtx parameter is specified with a specific DPC, additional linkset, route and exception route information associated with the specified DPC is displayed.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix p-).

Summary description of the reports that are produced by the various DPC parameter syntaxes is shown:

- `rept-stat-dstn:dpc=ni-nc-ncm`—Report for fully provisioned destination *ni-nc-ncm*
- `rept-stat-dstn:dpc=ni-*-*`—Report for provisioned network destination with the specified network indicator. If * is specified in the *nc* field, * must be specified in the *ncm* field.
- `rept-stat-dstn:dpc=ni-**-*`—Report for the full network cluster for the specified *ni*
- `rept-stat-dstn:dpc=ni-***-*`—Report for the full network cluster and the network cluster address (if any) for the specified *ni*
- `rept-stat-dstn:dpc=ni-nc-*`—Report for provisioned cluster destination *ni-nc-**
- `rept-stat-dstn:dpc=ni-nc-**`—Report showing all destinations whose network (*ni*) and cluster (*nc*) components match those specified. The network cluster address *ni-nc-** (if it exists) is not reported.
- `rept-stat-dstn:dpc=ni-nc-***`—Report showing all destinations whose network (*ni*) and cluster (*nc*) components match those specified. The network cluster address *ni-nc-** (if it exists) is also reported.
- `rept-stat-dstn:dpcn24=msa-ssa-sp`—Report for fully provisioned 24-bit destination *main signaling area-sub signaling area-signaling point*

If the mode=rtx parameter is specified without a specific DPC, then status is provided for all exception route sets.

If the mode=full parameter is specified with a specific destination point code, then additional linkset, route, and exception route information associated with the specified destination is displayed, along with information that can be used to correct circular routing. If the mode=full parameter is specified without a specific destination point code, then status is provided for all regular and exception route sets.

Output

If the dpc parameter is not specified:

- If the mode parameter is not specified, then the command output lists the status of all provisioned destination point codes (DPCs) (routesets) in the system.
- If the mode=rtx parameter is specified, then the output lists the status of only those DPCs against which exception routes have been provisioned, and the status of the provisioned exception route sets associated with each DPCs.
- If the mode=full parameter is specified, then the command lists the status of all provisioned DPCs in the system, and the status of the provisioned exception route sets, if any, associated with each DPC.

If the dpc parameter is specified:

- If the mode parameter is not specified, then the output lists the status of all provisioned routes in the route set specified by that DPC.
- If the mode=rtx parameter is specified, then the output lists the status of all provisioned routes in the routeset specified by that DPC, and the status of all provisioned exception routesets associated with that DPC.
- If the mode=full parameter is specified, then the output lists the status of all provisioned routes in the routeset specified by that DPC, the status of all provisioned exception route sets associated with that DPC, any aliases associated with that DPC, and circular routing alarm information if any for that DPC.

This example shows the output when no parameters are specified:

```
rept-stat-dstn
```

```
tekelecstp 10-10-15 14:59:15 EST  EAGLE 43.0.0
rept-stat-dstn
Command entered at terminal #4.
Extended Processing Time may be Required

   DPCA              PST           SST       AST
   001-001-003       OOS-MT        Idle      INACCESS
   001-001-004       OOS-MT        Idle      INACCESS
   001-001-005       OOS-MT        Idle      INACCESS
   001-001-006       OOS-MT        Idle      INACCESS
   001-001-007       OOS-MT        Idle      INACCESS
   001-001-008       OOS-MT        Idle      INACCESS
   001-001-009       OOS-MT        Idle      INACCESS
   001-001-010       OOS-MT        Idle      INACCESS
   001-001-011       OOS-MT        Idle      INACCESS
   001-001-012       OOS-MT        Idle      INACCESS
   001-001-013       OOS-MT        Idle      INACCESS
   001-001-014       OOS-MT        Idle      INACCESS
   001-001-015       OOS-MT        Idle      INACCESS
   001-001-016       OOS-MT        Idle      INACCESS
   001-001-017       OOS-MT        Idle      INACCESS
   001-001-018       OOS-MT        Idle      INACCESS
   001-001-019       OOS-MT        Idle      INACCESS
   001-001-020       OOS-MT        Idle      INACCESS
   001-001-021       OOS-MT        Idle      INACCESS
   001-001-022       OOS-MT        Idle      INACCESS
   001-001-023       OOS-MT        Idle      INACCESS
   001-001-024       OOS-MT        Idle      INACCESS
```

```
      001-001-025       OOS-MT        Idle      INACCESS
      001-002-003       OOS-MT        Idle      INACCESS

      DPCN              PST           SST       AST

      DPCN24            PST           SST       AST

      DPCI              PST           SST       AST

   Command Completed.
;
```

This example shows the output when a cluster destination on the dpc parameter is specified. This output shows the cluster status and routeset information. Information on cluster members is not shown. Use `rept-stat-cluster` to obtain this information.

`rept-stat-dstn:dpc=9-3-*`

```
   tekelecstp 09-03-21 10:31:06 EST  EAGLE 41.0.0
      DPCA              PST           SST       AST
      009-003-*         IS-NR         Allowed   ACCESS
     ALARM STATUS       = No Alarms.
     RTE COST  LSN      APCA          LS STAT   NON-ADJ    ROUTE STAT
      1*  10  lsnstpa   042-036-123   Allowed   Allowed    Allowed
      2   20  lsnstpb   092-240-103   Allowed   Allowed    Allowed
      3   30  lsnstpc   128-101-022   Allowed   Allowed    Allowed
      4   --  --------  ***-***-***   --------  --------   --------
      5   --  --------  ***-***-***   --------  --------   --------
      6   --  --------  ***-***-***   --------  --------   --------

   Command Completed.
;
```

This example shows the output for an FPC or cluster destination for which circular routing has been detected:

`rept-stat-dstn:dpc=9-3-6:mode=full`

```
   tekelecstp 08-03-21 10:31:06 EST  EAGLE 41.0.0
      DPCA              PST           SST       AST
      009-003-006       OOS-MT        Prohibit  INACCESS
     ALARM STATUS       = *C  xxxx Circular routing detected
     RTE COST  LSN           APCA          LS STAT   NON-ADJ    ROUTE STAT
      1*  10   lsnstpa       042-036-123   Allowed   Allowed    Allowed
      2   20   lsnstpb       092-240-103   Allowed   Allowed    Allowed
      3   30   lsnstpc       128-101-022   Allowed   Allowed    Allowed
      4   --   ---------- ---***-***-***   --------  --------   --------
      5   --   ---------- ---***-***-***   --------  --------   --------
      6   --   ---------- ---***-***-***   --------  --------   --------

      SSN   SUBSYSTEM STATUS

      ALIASA          ALIASN           ALIASI
   --------------  -------------    --------------

   CIRCULAR ROUTING INFO:
     XMIT LSN= lsnstpb    RC=--
     RCV  LSN= lsn01a
     MEMBER= ***-***-***
```

```
    Exception Routes:

    Command Completed.
;
```

This example shows the outout when a cluster destination and the mode=full parameter is specified:

```
rept-stat-dstn:dpc=9-3-*:mode=full
```

```
    tekelecstp 09-03-15 10:31:06 EST  EAGLE 41.0.0
       DPCA              PST           SST       AST
       009-003-*         IS-NR         Allowed   ACCESS
      ALARM STATUS       = *C  xxxx Circular routing detected
      RTE COST  LSN      APCA          LS STAT   NON-ADJ    ROUTE STAT
       1*  10  lsnstpa   042-036-123   Allowed   Allowed    Allowed
       2   20  lsnstpb   092-240-103   Allowed   Allowed    Allowed
       3   30  lsnstpc   128-101-022   Allowed   Allowed    Allowed
       4   --  --------  ***-***-***   --------  --------   --------
       5   --  --------  ***-***-***   --------  --------   --------
       6   --  --------  ***-***-***   --------  --------   --------

      SSN   SUBSYSTEM STATUS

       ALIASA          ALIASN            ALIASI
    --------------  --------------    --------------

    CIRCULAR ROUTING INFO:
      XMIT LSN=lsnstpb   RC=20
      RCV  LSN=lsn01a
      MEMBER= 009-003-006

    Exception Routes:

    Command Completed.
;
```

This example shows the circular routing alarm for a cluster destination. The alarm indicates that circular routing was detected for a member of the cluster, but no x-list entry could be created for that cluster. Circular routing detected on a cluster destination does not automatically force the output to display the status of the cluster as “OOS-MT Prohibit INACCESS” as it does for an FPC destination.

```
rept-stat-dstn:dpc=9-3-*
```

```
    stdcfg1a 09-03-16 14:09:24 EST  EAGLE 41.0.0
       DPCA              PST           SST       AST
       009-003-*         IS-NR         Allowed   ACCESS
      ALARM STATUS       = *C  xxxx Circular routing detected
      RTE COST  LSN           APCA          LS STAT   NON-ADJ    ROUTE STAT
       1*  10   lsnstpa       042-036-123   Allowed   Allowed    Allowed
       2   20   lsnstpb       092-240-103   Allowed   Allowed    Allowed
       3   30   lsnstpc       128-101-022   Allowed   Allowed    Allowed
       4   --   ---------- ---***-***-***   --------  --------   --------
       5   --   ---------- ---***-***-***   --------  --------   --------
       6   --   ---------- ---***-***-***   --------  --------   --------

    Command Completed.
;
```

This example shows the output if an FPC is specified for which no subsystems are defined. Also, because aliases cannot be defined for cluster destinations, this report shows only an empty header. The circular routing information portion of this report displays "--------" for the linkset names when no circular routing condition exists for the DPC.

`rept-stat-dstn:dpc=9-3-*:mode=full`

```
    stdcfg1a 08-02-16 14:09:24 EST  EAGLE 38.0.0
    Command entered at terminal #4.
       DPCA              PST           SST       AST
       009-003-*         IS-NR         Allowed   ACCESS
      ALARM STATUS       = No Alarms.
      RTE COST  LSN           APCA          LS STAT   NON-ADJ    ROUTE STAT
       1*  10  lsnstpa        042-036-123   Allowed   Allowed    Allowed
       2   20  lsnstpb        092-240-103   Allowed   Allowed    Allowed
       3   30  lsnstpc        128-101-022   Allowed   Allowed    Allowed
       4   --  ----------- ---***-***-***   --------  --------   --------
       5   --  ----------- ---***-***-***   --------  --------   --------
       6   --  ----------- ---***-***-***   --------  --------   --------

      SSN   SUBSYSTEM STATUS

      ALIASA          ALIASN            ALIASI
      --------------  --------------    --------------

      CIRCULAR ROUTING INFO:
        XMIT LSN= --------   RC=--
        RCV  LSN= --------
        MEMBER= ***-***-***

    Exception Routes:

    Command Completed.
;
```

This example shows the output when the stat parameter and the *ni-nc-*** or *ni-nc-**** DPC formats are specified. The output summary report includes only those destinations whose status matches the state specified.

`rept-stat-dstn:dpc=9-4-***:stat=alminh`

```
    stdcfg1a 10-10-16 14:09:24 EST  EAGLE 43.0.0
    rept-stat-dstn:dpc=9-4-***:stat=alminh
    Command entered at terminal #4.
    Extended Processing Time may be Required
       DPCA              PST           SST       AST
       009-004-006       IS-NR         Allowed   ALMINH
       009-004-007       IS-NR         Allowed   ALMINH
       .
       .
       .
       009-004-056       IS-NR         Allowed   ALMINH

    Command Completed.
;
```

This example shows the output for an ITU national point code where the `chg-stpopts:npcfmti` parameter has been set to 1-1-1-11:

```
rept-stat-dstn:dpcn=1-1-1-1000
```

```
    stdcfg1a 09-03-16 14:09:24 EST  EAGLE 41.0.0
    CAUTION : Node isolated...route status out of date!
     DPCN               PST           SST       AST
     1-1-1-1000         OOS-MT        Prohibit  INACCESS
    ALARM STATUS        = *C  0313 DPC is prohibited
    RTE COST  LSN           APCA          LS STAT   NON-ADJ    ROUTE STAT
     1   10   lsitu         1-1-1-1000    Prohibit  Allowed    Prohibit
     2   --   ---------- ---***-***-***   --------  --------   --------
     3   --   ---------- ---***-***-***   --------  --------   --------
     4   --   ---------- ---***-***-***   --------  --------   --------
     5   --   ---------- ---***-***-***   --------  --------   --------
     6   --   ---------- ---***-***-***   --------  --------   --------

    Command Completed.
;
```

The asterisks in the space after the route numbers in the following examples indicate which route (or combined route) is carrying traffic.

```
rept-stat-dstn:dpc=1-1-1
```

```
    tekelecstp 09-03-24 09:19:04 EST  EAGLE 41.0.0
       DPCA               PST           SST       AST
       001-001-001        IS-NR         Allowed   ACCESS
      ALARM STATUS        = No Alarms.
      RTE COST  LSN           APCA          LS STAT   NON-ADJ    ROUTE STAT
       1*  05   lse1e1         001-001-001   Allowed   Allowed    Allowed
       2*  05   lse1e2         001-002-001   Allowed   Allowed    Allowed
       3   10   lse1e3         001-003-001   Allowed   Allowed    Allowed
       4   --   ---------- ---***-***-***   --------  --------   --------
       5   --   ---------- ---***-***-***   --------  --------   --------
       6   --   ---------- ---***-***-***   --------  --------   --------

    Command Completed.
;
```

No asterisk appears after the route number in the following example; no routes were carrying traffic at the time.

```
rept-stat-dstn:dpc=1-1-1
```

```
    stdcfg1a 09-03-16 14:09:24 EST  EAGLE 41.0.0
    DPCA                PST           SST       AST
    001-001-001         OOS-MT        Prohibit  INACCESS
      ALARM STATUS      = *C  0313 DPC is prohibited
      RTE COST  LSN         APCA          LS STAT   NON-ADJ    ROUTE STAT
       1   05   lse1e1       001-001-001   Prohibit  Allowed    Prohibit
       2   05   lse1e2       001-002-001   Prohibit  Allowed    Prohibit
       3   10   lse1e3       001-003-001   Prohibit  Allowed    Prohibit
       4   --   ---------- ***-***-***   --------  --------   --------
       5   --   ---------- ***-***-***   --------  --------   --------
       6   --   ---------- ***-***-***   --------  --------   --------

    Command Completed.
;
```

This example shows the output when the Origin-Based MTP Routing feature is on, a specific DSTN is requested, and the *rtx* mode is specified:

```
rept-stat-dstn:dpc=9-3-*:mode=rtx
```

```
    tekelecstp 09-05-01 16:21:39 EST  EAGLE 41.0.0
       DPCA               PST           SST       AST
       009-003-*          IS-NR         Allowed   ACCESS
      ALARM STATUS       = No Alarms.
      RTE COST  LSN      APCA       LS STAT   NON ADJ    ROUTE STAT
       1*  10  lsnstpa   042-36-23  Allowed   Allowed    Allowed
       2   20  lsnstpb   092-40-03  Allowed   Allowed    Allowed
       3   30  lsnstpc   128-01-22  Prohibit  Prohibit   Allowed
       4   --  --------  ***-**-**  --------  --------   --------
       5   --  --------  ***-**-**  --------  --------   --------
       6   --  --------  ***-**-**  --------  --------   --------

       Exception Routes:

          OPCA                  PST           SST       AST
          001-001-001           IS-NR         Allowed   ACCESS
          ILSN                  PST           SST       AST
          lsnstpy               IS-NR         Allowed   ACCESS

    Command Completed.
;
```

This example shows the output when the Origin-Based MTP Routing feature is on, a specific DSTN is requested, and the *full* mode is used:

```
rept-stat-dstn:dpc=9-3-*:mode=full
```

```
    stdcfg1a 09-05-16 14:09:24 EST  EAGLE 41.0.0
        DPCA              PST           SST       AST
        009-003-006       OOS-MT        Prohibit  INACCESS
       ALARM STATUS       = *C  0319 REPT-MTPLP-DET: Circ rte det(cong)
       RTE COST  LSN           APCA          LS STAT   NON-ADJ    ROUTE STAT
        1*  10   lsnstpa       042-036-123   Allowed   Allowed    Allowed
        2   20   lsnstpb       092-240-103   Allowed   Allowed    Allowed
        3   30   lsnstpc       128-101-022   Allowed   Allowed    Allowed
        4   --   ---------- ---***-***-***   --------  --------   --------
        5   --   ---------- ---***-***-***   --------  --------   --------
        6   --   ---------- ---***-***-***   --------  --------   --------

      SSN   SUBSYSTEM STATUS

       ALIASA          ALIASN            ALIASI
    --------------  --------------    --------------

    CIRCULAR ROUTING INFO:
      XMIT LSN=lsnstpb   RC=20
      RCV  LSN=lsn01a
      MEMBER  =-----------

    Exception Routes:
          OPCA                  PST           SST       AST
          001-001-001           IS-NR         Allowed   ACCESS

          ILSN                  PST           SST       AST
          lsnstpy               IS-NR         Allowed   ACCESS
```

```
    Command Completed.
;
```

This example shows the output when the Origin-Based MTP Routing feature is on, and the *full* mode is specified:

```
rept-stat-dstn:mode=full
```

```
    tekelecstp 10-10-29 10:26:56 EST  EAGLE 43.0.0
    rept-stat-dstn:mode=full
    Command entered at terminal #4.
    Extended Processing Time may be Required
       DPCA              PST           SST       AST
       001-001-000       OOS-MT        Idle      INACCESS
       003-001-000       OOS-MT        Idle      INACCESS
       002-102-001       OOS-MT        Idle      INACCESS
       001-101-001       OOS-MT        Idle      INACCESS

          OPCA                  PST           SST       AST
          001-001-001           OOS-MT        Idle      INACCESS
          002-001-000           OOS-MT        Idle      INACCESS

          ILSN                  PST           SST       AST
          e2m1s1                OOS-MT        Idle      INACCESS

          CIC   ECIC            PST           SST       AST
          0     1000            OOS-MT        Idle      INACCESS

          SI                    PST           SST       AST
          3                     OOS-MT        Idle      INACCESS

       003-101-001       OOS-MT        Idle      INACCESS
       004-101-001       OOS-MT        Idle      INACCESS
       007-101-001       OOS-MT        Idle      INACCESS
       100-100-*         OOS-MT        Idle      INACCESS
       100-100-001       OOS-MT        Idle      INACCESS

          OPCA                  PST           SST       AST
          001-001-001           OOS-MT        Idle      INACCESS
          002-002-002           OOS-MT        Idle      INACCESS
          001-102-001           OOS-MT        Idle      INACCESS
          200-200-001           OOS-MT        Idle      INACCESS

       DPCN              PST           SST       AST
       1-010-1           OOS-MT        Idle      INACCESS
       1-020-2           OOS-MT        Idle      INACCESS
       1-020-3           OOS-MT        Idle      INACCESS
       1-020-4           OOS-MT        Idle      INACCESS
       1-050-1           OOS-MT        Idle      INACCESS

          OPCA                  PST           SST       AST
          002-001-000           OOS-MT        Idle      INACCESS
          002-101-001           OOS-MT        Idle      INACCESS

       DPCN24            PST           SST       AST

       DPCI              PST           SST       AST
       1-030-1           OOS-MT        Idle      INACCESS
       1-030-2           OOS-MT        Idle      INACCESS
       1-040-4           OOS-MT        Idle      INACCESS
       1-070-1           OOS-MT        Idle      INACCESS
```

```
          OPCN                  PST           SST       AST
          1-050-1               OOS-MT        Idle      INACCESS

          ILSN                  PST           SST       AST
          npc1                  OOS-MT        Idle      INACCESS

    Command Completed.
;
```

This example shows the output when the Origin-Based MTP Routing feature is on and the *rtx* mode is used:

`rept-stat-dstn:mode=rtx`

```
    stdcfg1a 10-10-16 14:09:24 EST  EAGLE 43.0.0
    rept-stat-dstn:mode=rtx
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA              PST           SST       AST
       001-101-001       OOS-MT        Idle      INACCESS

           OPCA                 PST           SST       AST
          001-001-001           OOS-MT        Idle      INACCESS
          002-001-000           OOS-MT        Idle      INACCESS

          ILSN                  PST           SST       AST
          e2m1s1                OOS-MT        Idle      INACCESS

       DPCN              PST           SST       AST
       1-050-1           OOS-MT        Idle      INACCESS

          OPCA                  PST           SST       AST
          002-001-000           OOS-MT        Idle      INACCESS
          002-101-001           OOS-MT        Idle      INACCESS

       DPCN24            PST           SST       AST

       DPCI              PST           SST       AST
       1-070-1           OOS-MT        Idle      INACCESS

          OPCN                  PST           SST       AST
         1-050-1                OOS-MT        Idle      INACCESS

         ILSN                   PST           SST       AST
         npc1                   OOS-MT        Idle      INACCESS

    Command Completed.
;
```

This example shows the output when the mode=full parameter is specified, and the Origin-Based MTP routing feature is not turned on:

`rept-stat-dstn:mode=full`

```
    tekelecstp 10-10-29 10:26:56 EST  EAGLE 43.0.0
    rept-stat-dstn:mode=full
    Command entered at terminal #4.
    Extended Processing Time may be Required
       DPCA              PST           SST       AST
```

```
       001-001-001       OOS-MT        Idle      INACCESS
       002-002-002       OOS-MT        Idle      INACCESS
       003-003-003       OOS-MT        Idle      INACCESS
       004-004-004       OOS-MT        Idle      INACCESS
       005-005-005       OOS-MT        Idle      INACCESS
          SI                    PST           SST       AST
          3                     OOS-MT        Idle      INACCESS
       006-006-006       OOS-MT        Idle      INACCESS
       007-007-007       OOS-MT        Idle      INACCESS
       009-009-*         OOS-MT        Idle      INACCESS
       008-008-*         OOS-MT        Idle      INACCESS

       DPCN              PST           SST       AST
       00101             OOS-MT        Idle      INACCESS
       00102             OOS-MT        Idle      INACCESS
       00103             OOS-MT        Idle      INACCESS
       00104             OOS-MT        Idle      INACCESS
       00105             OOS-MT        Idle      INACCESS
       00106             OOS-MT        Idle      INACCESS
       00107             OOS-MT        Idle      INACCESS

       DPCN24            PST           SST       AST

       DPCI              PST           SST       AST
       2-100-1           OOS-MT        Idle      INACCESS
       2-100-2           OOS-MT        Idle      INACCESS
       2-100-3           OOS-MT        Idle      INACCESS
       2-100-4           OOS-MT        Idle      INACCESS
       2-100-5           OOS-MT        Idle      INACCESS
       2-100-6           OOS-MT        Idle      INACCESS
       2-100-7           OOS-MT        Idle      INACCESS
       1-001-1           OOS-MT        Idle      INACCESS
       1-001-2           OOS-MT        Idle      INACCESS

    Command Completed.
;
```

This example shows the output when the mode=rtx parameter is specified, and the Origin-Based MTP Routing feature is not turned on:

```
rept-stat-dstn:mode=rtx
```

```
    stdcfg1a 10-10-16 14:09:24 EST  EAGLE 43.0.0
    rept-stat-dstn:mode=rtx
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA              PST           SST       AST
       005-005-005       OOS-MT        Idle      INACCESS

          SI                    PST           SST       AST
          3                     OOS-MT        Idle      INACCESS

    Command Completed.
;
```

This example shows the output when dpcn16 parameter is specified.

```
rept-stat-dstn:dpcn16=1-1-1
```

```
    stdcfg1a 09-03-16 14:09:24 EST  EAGLE 41.0.0
    DPCN16                 PST           SST       AST
    001-001-001          OOS-MT        Prohibit  INACCESS
      ALARM STATUS       = *C  0313 DPC is prohibited
      RTE COST  LSN        APCN16        LS STAT   NON-ADJ    ROUTE STAT
       1   05   lse1e1     001-001-001   Prohibit  Allowed    Prohibit
       2   05   lse1e2     001-002-001   Prohibit  Allowed    Prohibit
       3   10   lse1e3     001-003-001   Prohibit  Allowed    Prohibit
       4   --   ---------- ***-***-***   --------  --------   --------
       5   --   ---------- ***-***-***   --------  --------   --------
       6   --   ---------- ***-***-***   --------  --------   --------

    Command Completed.
;
```

Legend

- **DPC/DPCA**—ANSI destination point code of the route
- **DPCN**—ITU-TSS national destination point code of the route
- **DPCN24**—24-bit ITU national destination point code of the route
- **DPCI**—ITU-TSS international destination point code of the route
- **OPC/OPCA**—ANSI origination point code as exception routing criterion of the exception route
- **OPCN**—ITU-TSS national origination point code as exception routing criterion of the exception route
- **OPCN24**—24-bit ITU national origination point code as exception routing criterion of the exception route
- **OPCI**—ITU-TSS international origination point code as exception routing criterion of the exception route
- **ILSN**—Originating linkset as exception routing criterion of the exception route
- **CIC**—Starting Circuit Identification Code used as the exception routing criterion for this exception route
- **ECIC**—Ending Circuit Identification Code with CIC defines the CIC range used as exception routing criterion for this exception route
- **PST**—Primary state of the subsystem. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the subsystem. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the subsystem. See *Possible Values for PST/SST/AST*.

Related Commands

chg-dstn, *chg-rte*, *dlt-dstn*, *dlt-rte*, *ent-dstn*, *ent-rte*, *rept-stat-rte*, *rtrv-dstn*, *rtrv-rte*

rept-stat-e1 Report Status E1

Use this command to display the E1 port status and signaling link status for cards with provisioned E1 ports.

Parameters

e1port (optional)

The E1 port number. When this parameter is specified, only the information for the specified E1 port on the card in the specified card location is displayed.

Range:

1 - 8

Ports 3 through 8 can be specified only for HC-MIM cards.

loc (optional)

The unique identifier of a specific LIME1 card located in the STP.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

Information for all LIME1 cards is reported.

Example

```
rept-stat-e1
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

The loc parameter must be specified when the e1port parameter is specified.

The active TDM location cannot be specified in the loc parameter.

Card locations 1117 and 1118 and the MUX card locations (*xy*09 and *xy*10 where *x* is the frame and *y* is the shelf) cannot be specified in the loc parameter.

Notes

Specifying the command without any parameters displays E1 port status for all cards with provisioned E1 ports.

If the loc parameter is specified, status is displayed for all E1 ports provisioned on the card in the specified location.

If the loc and e1port parameters are specified, the E1 port status summary is displayed for all E1 ports provisioned on the card in the specified location, followed by the status of all signaling links assigned to the specified E1 port on the card.

Output

This example shows the output when no parameters are specified:

```
rept-stat-e1
```

```
    rlghncxa03w 05-01-04 07:01:08 EST  EAGLE5 33.0.0
    LOC    E1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     PARENT
    1203   2        IS-NR        Avail     PAIRED
    1203   3        IS-NR        Avail     -----
    1203   7        OOS-MT       Unavail   -----
    1207   1        IS-NR        Avail     -----
    1207   2        IS-NR        Avail     -----
   Command Completed.
;
```

This example shows the output when the loc parameter is specified:

```
rept-stat-e1:loc=1203
```

```
    rlghncxa03w 05-01-04 07:01:08 EST  EAGLE5 33.0.0
    LOC    E1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     PARENT
    1203   2        IS-NR        Avail     PAIRED
    1203   3        IS-NR        Avail     -----
    1203   7        OOS-MT       Unavail   -----
    Command Completed.
;
```

This example shows the output when the loc and e1port parameters are specified:

```
rept-stat-e1:loc=1203:e1port=1
```

```
    rlghncxa03w 05-01-04 07:01:08 EST  EAGLE5 33.0.0
    LOC    E1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     PARENT
      ALARM STATUS       = No Alarms.
      UNAVAIL REASON     = --
      SLK    TS  PST          SST       AST
      A       1  IS-NR        Avail     ---
      A1      2  IS-NR        Avail     ---
    Command Completed.
;
```

```
rept-stat-e1:loc=1203:e1port=2
```

```
    rlghncxa03w 05-01-04 07:01:08 EST  EAGLE5 33.0.0
    LOC    E1PORT   PST          SST       AST
    1203   2        IS-NR        Avail     PAIRED
      ALARM STATUS       = No Alarms.
      UNAVAIL REASON     = --
    Command Completed.
;
```

Legend

- **LOC**—Card location
- **E1PORT**—Number of the E1 port provisioned on the card in the specified location.
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the card. See *Possible Values for PST/SST/AST*. The values *PARENT* and *PAIRED* refer to odd and even adjacent ports on the card that are provisioned in channel bridging mode.
- **ALARM STATUS**—Either "No Alarms" or current alarm number and text
- **UNAVAIL REASON**—Reason for the E1 port being unavailable
- **SLK**—Signaling link assigned to the E1 port
- **TS**—Timeslot assigned to the signaling link
- **PST**—Primary state of the signaling link. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the signaling link. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the signaling link. See *Possible Values for PST/SST/AST*.

Related Commands

None.

rept-stat-enet — Report Status Ethernet

Use this command to display a summary report of Ethernet status for all cards in the system that have configured Ethernet Interfaces.

Parameters

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

Default:

All ENET data for the card location is displayed.

port (optional)

Ethernet interface port ID.

Range:

a, b

Default:

All port data for ENET is displayed.

Example

```
rept-stat-enet
```

```
rept-stat-enet:loc=1101:port=b
```

Dependencies

Another command is already in progress.

The loc and port parameters must be specified together in the command.

The shelf and card must be equipped, and the card specified by the loc parameter must have an application of IPS, MCP, STPLAN, EROUTE, VSCCP, IPSG, IPLIM, IPLIMI, SS7IPGW, or IPGWI.

The card in the location specified by the loc parameter must support the port specified by the port parameter.

Notes

None.

Output

This example shows the status of all configured Ethernet interfaces in the system:

```
rept-stat-enet
```

```
    eagle10110 07-02-10 14:50:23 EST  EAGLE 35.6.0
    LOC   PORT IPADDR            PST          SST      AST
    1101  A    1.1.1.1           OOS-MT       Fault    ALMINH
    1101  B    123.234.222.111   IS-ANR       Active   -----
    1201  A    111.1.24.200      IS-NR        Active   -----
    1201  B    2.31.234.1        OOS-MT       Fault    -----

    Command Completed.
;
```

This example shows the summary for a specific card location and port when the Ethernet error count exceeds the threshold value:

```
rept-stat-enet:loc=1101:port=b
```

```
    eagle10110 10-01-10 14:54:23 EST  EAGLE 42.0.0
    LOC   PORT IPADDR            PST          SST      AST
    1101  B    123.234.222.111   IS-ANR       Active   -----
      ALARM STATUS       = **  0537 Ethernet error threshold exceeded
```

```
    Command Completed.
;
```

This example shows the Ethernet interface summary for a specified card when the Ethernet interface is up, and the IP address is not assigned by the DHCP server:

```
rept-stat-enet:loc=1102:port=a
```

```
    tekelecstp 10-01-17 12:54:48 MST  EAGLE 42.0.0
    LOC   PORT IPADDR            PST          SST      AST
    1102  A    ---------------   IS-NR        Active   -----
      ALARM STATUS       = No Alarms.

    Command Completed.
;
```

This example shows the Ethernet interface summary for a specified card when the Ethernet interface is removed, and the DHCP lease of an assigned IP address has not expired:

```
rept-stat-enet:loc=1101:port=a
```

```
    tekelecstp 10-01-12 00:29:22 MST  EAGLE 42.0.0
    LOC   PORT IPADDR            PST          SST      AST
    1101  A    192.168.63.213    OOS-MT       Fault    -----
      ALARM STATUS       = **  0539 Ethernet Interface Down

    Command Completed.
;
```

This example shows the summary for a specified card when the Ethernet interface is up:

```
rept-stat-enet:loc=1101:port=a
```

```
    tekelecstp 10-01-02 00:29:22 MST  EAGLE 42.0.0
    LOC   PORT IPADDR            PST          SST      AST
    1101  A    192.168.63.213    IS-NR        Active   -----
      ALARM STATUS       = No Alarms.

    Command Completed.
;
```

Legend

- CARD—Location of the card
- VERSION—Version number of the application loaded on the card. Dashes (- - - - -) in the version column indicate one of the following conditions about the card:
  - The card is configured but is not physically present in the system.
  - The card does not run a GPL, such as TDM or MDAL cards.
  - The card is IS-ANR or is in the process of being loaded.
- TYPE—Card type entered in the database
- APPL—Application loaded on the card
- PST—Primary state of the card. See *Possible Values for PST/SST/AST*.

- SST—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- AST—Associated state of the card. See *Possible Values for PST/SST/AST*.

Related Commands

None.

rept-stat-enum — Report Status ENUM

Use this command to display the overall status of the ENUM service on the EAGLE.

Parameters

loc (optional)

ENUM card location for which card status and card TPS usage data is to be reported.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

mode (optional)

It will display ENUM system alarm status and per card TPS statistics.

Range:

perf

Default:

Perf

peakreset (optional)

Reset peak values to the current TPS values.

Range:

yes

Example

```
rept-stat-enum
rept-stat-enum:peakreset=yes:loc=1101
rept-stat-enum:loc=1101
rept-stat-enum:mode=perf
```

Dependencies

The location specified with this command should be of an ENUM card running the ENUMHC gpl.

An ENUM card running the ENUMHC application must be configured before this command can be entered.

The peakreset and loc parameters can be specified together. No other combination is allowed.

The shelf and card must be equipped, and the card specified by the loc parameter must have an application of enumhc.

The peakreset parameter should be specified with the loc parameter.

Notes

If optional parameters are specified, only the entries that match the entered parameters are displayed.

Output

This example displays output when no parameter is specified:

`rept-stat-enum`

```
Command Executed
    tekelecstp 14-05-29 03:13:20 MST  EST EAGLE 46.1.0
    rept-stat-enum
    Command entered at terminal #21.
;

Command Accepted - Processing
    tekelecstp 14-05-29 03:13:20 MST  EST EAGLE 46.1.0
    ENUM ALARM STATUS = No Alarms
    ENUM Cards Configured= 2      Cards IS-NR= 2

    CARD   VERSION     PST           SST       AST       TPS
    ------------------------------------------------------------
    1207 P 045-018-002 IS-NR         Active    -----     200
    1105   045-018-008 IS-NR         Active    -----     100
    ------------------------------------------------------------

    TOTAL SERVICE STATISTICS:
    =========================================
    SERVICE    SUCCESS    ERROR      TOTAL
    ENUM:      300        185        485

    TOTAL ERROR STATISTICS:
   ================================================================================

    SERVICE    RCODE1     RCODE2     RCODE3     RCODE4     RCODE5     TOTAL
    ENUM:      50         60         45         10         20         185

    Command Completed.
;
```

This example displays output when the LOC parameter is specified:

```
rept-stat-enum:loc=1207
```

```
    tekelecstp 14-05-29 04:10:20 MST  EST EAGLE 46.1.0
    rept-stat-enum:loc=1207
    Command entered at terminal #21.
;

Command Accepted - Processing
    tekelecstp 14-05-29 04:10:20 MST  EST EAGLE 46.1.0
    CARD   VERSION      TYPE    PST            SST          AST
    1207   045-018-002  DSM     IS-NR          Active       -----
    CARD ALARM STATUS       = No Alarms.

    TPS STATISTICS:
    ==============================================================================
                TPS   PEAK-TPS.   PEAKTIMESTAMP
    ------------------------------------------------------------
                200   250         14-05-29 04:06:21

    Command Completed.
;
```

This example displays output when the MODE parameter is specified:

```
rept-stat-enum:mode=perf
```

```
    tekelecstp 14-05-29 04:16:20 MST  EST EAGLE 46.1.0
    rept-stat-enum:mode=perf
    Command entered at terminal #21.
;

Command Accepted - Processing
    tekelecstp 14-05-29 04:16:20 MST  EST EAGLE 46.1.0
    ENUM ALARM STATUS = No Alarms
    ENUM Cards Configured= 2      Cards IS-NR= 2

    TPS STATISTICS:
    ==============================================================================
    CARD   TPS    PTPS    PTIMESTAMP
    ------------------------------------------------------------
    1207 P 200    250     14-05-29 04:06:21
    1105   100    105     14-05-29 03:39:21
    ------------------------------------------------------------

    Command Completed.
;
```

Legend

This section defines the fields of the four rept-stat-enum reports:

- rept-stat-enum
- rept-stat-enum:loc=1207
- rept-stat-enum:mode=perf
- rept-stat-enum:peakreset=yes:loc=1207

A dash (-) in an output field indicates that the statistic does not apply.

- **CARD IS-NR**—Number of ENUM cards running the ENUMHC GPL that can be used by the system (status is In-Service Normal, IS-NR).
- **CARD**—Card location of the ENUM card running the ENUMHC GPL
- **P**—P indicates the primary Service Module card. The primary Service Module card provides the MPS status to the EAGLE. This indicator is displayed between the card location and the GPL version.
- **VERSION**—Version number of the ENUMHC GPL running on the ENUM card.
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- **AST**—Associate state of the card. See *Possible Values for PST/SST/AST*.
- **TPS**—TPS (Transactions per second) indicates the number of ENUM messages which are received on the ENUM card.
- **PTPS/PEAK-TPS**—This field indicates the maximum TPS occurred on the card
- **PTIMESTAMP/PEAKTIMESTAMP**—It is the time when the maximum TPS occurred on the card.
- **ENUM ALARM STATUS**—Displays ENUM system-related alarms. If there are no system alarms present, this field displays No Alarms.
- **CARD ALARM STATUS**—Displays ENUM card-specific alarms. If there are no card alarms present, this field displays No Alarms.
- **TOTAL SERVICE STATISTICS**—System-wide view of per-service statistics. The report tracks the following information:
  - **SERVICE**—The service running on the ENUM card. Currently only the ENUM service is supported for the ENUM card.
  - **SUCCESS**—Total number of messages successfully processed by the ENUM cards.
  - **ERRORS**—Total number of messages with errors which are received or sent by the ENUM cards.
  - **TOTAL**—Total messages received. It should be the sum of (Success + Errors) messages.
- **TOTAL ERROR STATISTICS**—System-wide view of error statistics. The report tracks the following information:
  - **SERVICE**—The service running on the ENUM card. Currently only the ENUM service is supported for the ENUM card.
  - **RCODE1**—Total number of messages responded by the ENUM card for format errors.
  - **RCODE2**—Total number of messages responded by the ENUM card for server failures.
  - **RCODE3**—Total number of messages responded by the ENUM card for invalid domains.
  - **RCODE4**—Total number of messages responded by the ENUM card for requested queries which are not supported in EAGLE.
  - **RCODE5**—Total number of messages responded by the ENUM card for query types and classes which are not supported in EAGLE.

Related Commands

None.

rept-stat-gpl

Report Status Generic Program Load

Use this command to display the version of GPLs currently running for an application, plus the approved and trial versions of the GPL that will run if the card is restarted.

Parameters

display (optional)

Display mode. Specifies whether the report displays only application GPL data for all cards, or both IMT and application GPL data.

Range:

all

gpl (optional)

Generic program load. The GPL for which to retrieve information.

Range:

atmansi -- Used by LIM cards to support the high-speed ATM signaling link feature

atmhc -- Used by E5-ATM and E5-ATM-B cards to allow the card to support up to 3 signaling links

atmitu -- Used by E1 ATM cards to support the high-speed E1 ATM signaling link feature

blbepm -- Flash GPL containing the BIOS ROM image on E5-E1T1, E5-ENET, and E5-ENET-B cards

blbios -- Flash GPL containing the BIOS ROM image on HC-MIM cards that are used for E1 or T1 signaling links

blbsmg -- Flash GPL containing the BIOS ROM image on E5-SM4G and E5-SM8G-B cards

blcpld -- Flash GPL containing the bit files for the CPLD on HC-MIM, E5-E1T1, E5-ENET, and E5-ENET-B cards that are used for E1 or T1 signaling links

bldiag6 -- Flash GPL containing the diagnostic code on E5-E1T1, HC-MIM, E5-ENET, and E5-ENET-B cards

blixp -- Flash GPL containing a tar image with all code required on E5-E1T1, HC-MIM, E5-ENET, and E5-SM4G cards

blmcap -- Flash GPL containing a tar image with all code required on E5-MCAP, E5-ATM-B, E5-ENET-B, and E5-SM8G-B cards

blrom1 -- Flash GPL containing the bootloader code for VxWorks operating system on HC-MIM cards

blvxw6 -- Flash GPL containing the VxWorks operating system on E5-E1T1, and E5-ENET cards that are used for E1 or T1 signaling links.

bpdcm -- Used to support the flash memory Board PROM for DCM, DSM, and GPSM boards, original design

bpdcm2 -- Used to support the flash memory Board PROM for DCM and GPSM boards, revised design

bphcap -- Used to support Board PROM for HCAP flash memory

bphcapt -- Supports Board PROM for HCAP-T flash memory

bphmux -- Supports Board PROM for HMUX flash memory

bpmpl -- Supports Board PROM for MPL flash memory

bpmplt -- Supports Board PROM for E1/T1 flash memory

cdu -- Used in the card manufacturing process.

enumhc -- Used by E5-SM8G-B cards to support the ENUM Mobile Number Portability and Tier One Address Resolution application

eoam -- Used by the GPSM-II card for enhanced OAM functions

eroute -- Used by STC cards for EAGLE 5 Integrated Monitoring Support functions

erthc -- Used by E5-ENET and E5-ENET-B cards when the card acts as an STC card (E5-STC card) for EAGLE 5 Integrated Monitoring Support functions

glshc -- Used by E5-TSM cards to download gateway screening to LIM and SCCP cards

hipr2 -- Communication software used on the High Speed IMT Packet Router (HIPR2) card

imtpci -- Communication software that operates the IMT bus on HC-MIM, E5-E1T1, E5-ENET, and E5-ENET-B cards

ipghc -- Used by E5-ENET and E5-ENET-B cards to support point-to-multipoint IP connectivity for ANSI and ITU point codes

iplhc -- Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ANSI and ITU point codes

ipsg -- Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA

ipshc -- Used by IPSM cards to support the IPS application

mcp -- Used by MCPM cards for the Measurements Platform feature

mcphc -- Used by E5-MCPM-B cards for the Measurements Platform feature

oamhc -- Used by E5-MCAP cards for enhanced OAM functions

pldpmc1 -- Flash GPL used on HC-MIM and E5-E1T1 cards for E1 and T1 signaling links

sccphc -- Used by E5-SM4G and E5-SM8G-B cards to support EPAP-based features and the LNP ELAP Configuration feature. If no EPAP-based or LNP ELAP Configuration feature is turned on, and an E5-SM4G or E5-SM8G-B card is present, then the GPL processes normal GTT traffic.

siphc -- Used by E5-SM8G-B Cards to support SIP application.

slanhc -- Used by E5-ENET and E5-ENET-B cards to support the STPLAN application

ss7hc -- Used by HC-MIM and E5-E1T1 cards. Allows the card to support up to 64 signaling links for E1 and T1 functions.

ss7ml -- Used by MPL and E1/T1 MIM cards. The GPL allows MPL cards to support 8 signaling links. MPL cards support only the DS0 interface. The GPL allows the E1/T1 MIM card to support 8 signaling links for E1 and T1 functions.

utility -- Used by the factory for testing, and when directed by the Customer Care Center

vcdu -- Used in the card manufacturing process

vsccp -- Used by DSM cards to support EPAP-based features and the LNP ELAP Configuration feature. If no EPAP-based or LNP ELAP Configuration feature is turned on, and a DSM card is present, then the GPL processes normal GTT traffic.

vxwslan -- Used by SSEDCM cards to support the STPLAN application

Default:

Display all

loc (optional)

Location. The target card address and versions of all GPLs running at the specified card location. For HC-MIM, E5-ENET, E5-ENET-B, or STC cards, this information includes all non-activated flash GPLs. For cards that are not HC-MIM, STC, E5-ENET, E5-ENET-B or E5-IPSM cards, there is no additional data: this parameter limits the report to the target card address.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110, 1113, 1115

Example

```
rept-stat-gpl
rept-stat-gpl:display=all
rept-stat-gpl:loc=1201
rept-stat-gpl:gpl=hipr2
rept-stat-gpl:gpl=siphc
rept-stat-gpl:gpl=enumhc
```

Dependencies

No other `rept-stat-xxxx` command can be in progress when this command is entered.

Only one of the display=all, loc, and gpl parameters can be specified in the command.

The value specified for the gpl parameter must be supported.

Notes

To check the version of the EPAP or ELAP application, use the `rept-stat-mps` command.

When this command is entered, information is displayed only for the cards that are IS-NR or IS-ANR.

Use the `chg-gpl` command to turn auditing on and off.

Use the `rtrv-gpl` command to display the audit state.

The approved GPL is the GPL that resides on the active fixed disk and was made the approved version by specifying the GPL version number while executing the `act-gpl` command.

The trial GPL is the version of the GPL that was downloaded from the removable drive, but not activated by the `act-gpl` command.

When the `act-gpl` command is executed, the version specified becomes the approved GPL and the previously approved GPL becomes the trial GPL.

If any card is not running the active MASP system release version of a GPL, "ALM" is displayed to indicate that the card is in GPL alarm condition.

If GPL auditing is on, a minor alarm is shown, and "ALM" is displayed for each APPROVED GPL (`rtrv-gpl`) and for each RUNNING GPL (`rept-stat-gpl`) that does not match the GPL in the RELEASE column of the `rtrv-gpl` command output. If GPL auditing is off, the minor alarm is not activated, but "ALM" is displayed for each GPL that does not match the GPL in the RELEASE column.

If no gpl parameter is specified, the approved and trial versions for all GPLs are displayed.

If a GPL is not found, a version of "----------" is displayed. This should happen only for utility and OAM GPLs when the cartridge is not inserted. A utility trial version is never displayed because it can never be run.

If the removable drive is inserted, an "*" (asterisk) is displayed next to the OAM trial version. The asterisk serves as a reminder that the trial version of a GPL is loaded when the card that is running the OAM is restarted. All other cards load their approved versions of GPLs when they are restarted.

If a card is inhibited, "----------" is displayed for the running version.

When the gpl parameter is not specified, the default is to display all application GPLs that are running on provisioned cards. The flashable GPLs (those loaded on the card by using the `init-flash` command) are not displayed.

When the gpl=imt parameter is specified, only the IMT GPLs for each configured card connected to the IMT are displayed.

A plus (+) symbol in the output indicates that the flash GPL currently being run has not yet been activated on the card. See the `act-flash` or `init-flash` command for a list of flash GPLs.

When a GPL is specified in the gpl parameter, the specified GPL for each card connected to the IMT is displayed.

Output

The output of the `rept-stat-gpl` command is site- and configuration-specific. The output examples show typical output for the commands that are entered; the output that is shown can differ from output that appears for a particular system.

This example shows the output when no parameters are defined. All GPLs for the card are listed:

`rept-stat-gpl`

```
    rlghncxa03w 14-05-14 07:01:08 EST  EAGLE 46.1.0
    GPL       CARD      RUNNING           APPROVED      TRIAL
    ATMHC     1103      128-002-000       128-002-000   128-002-000
    ATMHC     1107      128-002-000       128-002-000   128-002-000
    GLSHC     1106      130-001-000       130-001-000   130-001-000
    EOAM      1113      025-002-000       025-002-000   ----------
    EOAM      1115      025-002-000       025-002-000   ----------
    VSCCP     1103      026-001-000       026-001-000   026-001-000
    ATMANSI   1205      025-001-000       025-001-000   025-001-000
    ATMANSI   1211      025-001-000       025-001-000   025-001-000
    SS7ML     1105      027-001-000       027-001-000   027-001-000
    IPSG      1305      040-000-000       040-000-000   040-000-000
    SIPHC     1101      134-035-000       134-035-000   134-035-000
    ENUMHC    1111      135-020-000       135-020-000   135-020-000
    Command Completed.
;
```

This example shows the output for the UTILITY GPL, whether the drive is inserted or not inserted:

`rept-stat-gpl:gpl=utility`

```
    rlghncxa03w 09-01-07 10:23:93 EST  EAGLE 40.1.0
    GPL       CARD      RUNNING           APPROVED      TRIAL
    UTILITY   1101      101-016-000       101-016-000   ----------
    Command Completed.
;
```

This example shows the output when the display=all parameter is specified. IMT and application GPL information is shown.

`rept-stat-gpl:display=all`

```
    rlghncxa03w 14-05-14 10:23:93 EST  EAGLE 46.1.0

    GPL       CARD      RUNNING           APPROVED      TRIAL
    ENUMHC    1111      135-020-000       135-020-000   135-020-000
          BLIXP         135-020-000       135-020-000   135-020-003
    SIPHC     1101      134-035-000       134-035-000   134-035-000
          BLIXP         134-035-000       134-035-000   134-035-001
    EOAM      1113      027-002-000       027-002-000   ----------
          BPDCM2        027-001-000       027-001-000   210-001-003
    EOAM      1115      027-002-000       027-002-000   ----------
          BPDCM2        027-001-000       027-001-000   210-001-003
    VSCCP     1212      027-001-000       027-001-000   027-001-000
          BPDCM         027-001-000       027-001-000   210-001-003
    ATMANSI   1203      027-001-000       027-001-000   027-001-000
          BPHCAP        027-001-000       027-001-000   210-001-003
    BPHMUX    1109      027-005-000       027-005-000   027-005-000
    BPHMUX    1110      027-005-000       027-005-000   027-005-000
```

```
    BPHMUX    1209      027-005-000       027-005-000    027-005-000
    BPHMUX    1210      027-005-000       027-005-000    027-005-000
    HIPR2     1309      027-005-000       027-005-000    027-005-000
    HIPR2     1310      027-005-000       027-005-000    027-005-000
    Command Completed.
;
```

This example shows the output when the loc parameter is specified for a card that is not an HC-MIM or E5-ENET card:

```
rept-stat-gpl:loc=1217
```

```
    rlghncxa03w 07-02-01 10:23:93 EST  EAGLE 37.5.0
    GPL Auditing  ON

    GPL        CARD      RUNNING            APPROVED      TRIAL
    ATMANSI    1217      125-001-000        125-001-000   125-001-000
           BPHCAP        125-001-000        125-001-000   125-001-000
    Command Completed.
;
```

This example includes IPSG cards. The example contains truncated output, indicated by 3 vertical dots.

```
rept-stat-gpl:display=all
```

```
     eagle10110 14-05-14 18:53:54 EST  EAGLE 46.1.0
    GPL Auditing  ON

    GPL        CARD      RUNNING            APPROVED      TRIAL
    OAMHC      1113      133-051-000 ALM    028-051-000   028-051-000  *
           BLMCAP        133-051-000        133-051-000   133-051-000
    OAMHC      1115      028-051-000        028-051-000   028-051-000  *
           BLMCAP        133-051-000        133-051-000   133-051-000
    HIPR2      1109      133-051-000        133-051-000   133-051-000
    HIPR2      1110      133-051-000        133-051-000   133-051-000
    HIPR2      1209      133-051-000        133-051-000   133-051-000
    HIPR2      6110      133-051-000        133-051-000   133-051-000
    .
    .
    .
    VSCCP      3117      001-051-013        001-051-013    001-051-010
           BPDCM         133-042-000        133-042-000    133-042-000
    VSCCP      3201      001-051-013        001-051-013    001-051-010
           BPDCM         133-042-000        133-042-000    133-042-000
    MCP        1108      133-051-000        133-051-000    133-051-000
           BPDCM2        133-042-000        133-042-000    133-042-000
    MCP        5313      133-051-000        133-051-000    133-051-000
           BPDCM2        133-042-000        133-042-000    133-042-000
    SS7HC      2201      133-051-000        133-051-000    133-051-000
           BLIXP         133-050-000        133-050-000    027-051-000
    SS7HC      3307      133-051-000        133-051-000    133-051-000
           BLIXP         133-050-000        133-050-000    027-051-000
    SIPHC      1101      134-035-000        134-035-000    134-035-000
           BLIXP         134-035-000        134-035-000    134-035-001
    ENUMC      1111      135-020-000        135-020-000    135-020-000
           BLIXP         135-020-000        135-020-000    135-020-003
.
```

```
.
.
    IPLHC      2214      133-051-000        133-051-000   133-051-000
           BLIXP         133-050-000        133-050-000   027-051-000
    IPLHC      2314      133-051-000        133-051-000   133-051-000
           BLIXP         133-050-000        133-050-000   027-051-000
    .
    .
    .
    IPSG       3116      133-051-000        133-051-000   133-051-000
           BLIXP         133-050-000        133-050-000   027-051-000
    IPSG       4103      133-051-000        133-051-000   133-051-000
           BLIXP         133-050-000        133-050-000   027-051-000
    .
    .
    .
    PKTGHC     1111      163-051-000        163-051-000   -----------
           BLIXP         133-050-000        133-050-000   027-051-000
    Command Completed.
;
```

This example displays the output when E5-MCAP cards are used:

`rept-stat-gpl`

```
    rlghncxa03w 14-05-14 07:01:08 EST  EAGLE 46.1.0
    GPL        CARD      RUNNING            APPROVED      TRIAL
    SIPHC      1101      134-035-000        134-035-000   134-035-000
    ATMHC      1103      128-002-000        128-002-000   128-002-000
    ATMHC      1107      128-002-000        128-002-000   128-002-000
    GLSHC      1106      130-001-000        130-001-000   130-001-000
    ENUMHC     1111      135-020-000        135-020-000   135-020-000
    OAMHC      1113      030-013-000        030-013-000   030-013-000  *
    OAMHC      1115      030-013-000        030-013-000   030-013-000  *
    SCCP       1212      025-001-000        025-001-000   025-001-000
    VSCCP      1103      026-001-000        026-001-000   026-001-000
    ATMANSI    1205      025-001-000        025-001-000   025-001-000
    ATMANSI    1211      025-001-000        025-001-000   025-001-000
    SS7ML      1105      027-001-000        027-001-000   027-001-000
    IPSG       1305      040-000-000        040-000-000   040-000-000
    Command Completed.
;
```

This example displays the output when an E5-SM8G-B card is running the SIP application:

`rept-stat-gpl:gpl=siphc`

```
   tekelecstp 12-07-27 14:11:48 EST EAGLE 45.0.0
   rept-stat-gpl:gpl=siphc
   Command entered at terminal #4.
   GPL Auditing ON

   GPL        CARD      RUNNING          APPROVED       TRIAL
   SIPHC      1101      134-035-000      134-035-000    134-035-000

   Command completed.
   ;
```

This example displays the output when an E5-SM8G-B card is running the S13 EIR application:

```
rept-stat-gpl:gpl=deirhc
```

```
tekelecstp 13-03-15 14:11:48 EST EAGLE 45.1.0
rept-stat-gpl:gpl=deirhc
Command entered at terminal #4.
GPL Auditing ON

GPL       CARD      RUNNING          APPROVED       TRIAL
DEIRHC    1104      134-060-000      134-060-000    134-060-000

Command Completed.
;
```

This example displays the output when an E5-SM8G-B card is running the ENUM NP application:

```
rept-stat-gpl:gpl=enumhc
```

```
tekelecstp 14-05-14 14:11:48 EST EAGLE 46.1.0
rept-stat-gpl:gpl=enumhc
Command entered at terminal #4.
GPL Auditing ON

GPL       CARD      RUNNING          APPROVED       TRIAL
ENUMHC    1111      135-020-000      135-020-000    135-020-000

Command completed.
;
```

Legend

- **GPL**—GPL associated with the cards in the display
- **CARD**—Card location
- **RUNNING**—GPL version the card is running. If the card is not running the active MASP system release GPL, ALM appears after the GPL version number in this column.
- **APPROVED**—GPL version that is the approved GPL
- **TRIAL**—GPL version that is the trial GPL
- **ACTIVE**—GPL version downloaded using the `init-flash` command and activated using the `act-flash` command
- **INACTIVE**—GPL version downloaded using the `init-flash` command but not activated
- **----------**(dashes)—GPL is not present at the specified location
- *—The trial version will run if the card boots (shown to the right of the TRIAL column)
- **ALM**—Alarm indicator showing the system has an approved GPL that is not the GPL required for this software release according to the active MASP system release table.
- **+**—Currently running flash GPL has not been activated (shown between the RUNNING and APPROVED columns)

Related Commands

act-gpl, *alw-card*, *chg-gpl*, *copy-gpl*, *init-card*, *init-sys*, *rtrv-gpl*

rept-stat-imt

Report IMT Status

The interprocessor message transport bus (IMT bus) is the main communications artery between all subsystems in the system. Use this command to display the primary, secondary, and associated maintenance states of the IMT bus. The primary state indicates whether the bus is normal, abnormal, or OOS for maintenance activity. The secondary state indicates the active/inhibited status of a card for a particular IMT bus.

Parameters

mode (optional)

Use this parameter to provide additional output listing the cards that currently have IMT alarm conditions outstanding. The additional output is repeated for each IMT bus following the bus status information. If no alarms are active on a given bus, no additional output is generated.

Range:

full

Default:

Do not display additional information.

Example

```
rept-stat-imt
rept-stat-imt:mode=full
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

Notes

The card locations are stored only by the active MASP. The information is lost if the system switches from the active to the standby MASP.

The trouble locations are displayed sorted by card location.

Output

```
rept-stat-imt
```

```
    rlghncxa03w 10-12-17 11:58:39 EST  EAGLE 43.0.0

    IMT SYSTEM
      ALARM STATUS       = No Alarms.

    IMT   PST             SST        AST
    A     IS-NR           Active     -----
      ALARM STATUS       = No Alarms.

    IMT   PST             SST        AST
    B     IS-NR           Active     -----
      ALARM STATUS       = No Alarms.

    Command Completed.
;
```

```
rept-stat-imt:mode=full
```

```
    rlghncxa03w 10-12-17 12:03:19 EST  EAGLE 43.0.0

    IMT SYSTEM
      ALARM STATUS       =  *  0110 Failure detected on one IMT bus

    IMT  PST              SST        AST
    A    IS-NR            Active     -----
      ALARM STATUS       = No Alarms.

    IMT  PST              SST        AST
    B    OOS-MT-DSBLD     Fault     -----
      ALARM STATUS       = **  0108 Major IMT failure detected.

    CARDS WITH ACTIVE IMT B ALARMS:
    CARD   DATE     TIME
    1102   04-02-23 11:59:23
    1103   04-02-23 12:01:23
    1204   04-02-23 23:14:07
    1205   04-02-23 23:14:07
    1206   04-02-23 23:14:07
    Command Completed.
;
```

Legend

- **IMT SYSTEM**—Logical entity representing the combination of both A and B IMT busses
- **IMT**—IMT bus A or IMT bus B
- **PST**—Primary state of the subsystem. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the subsystem. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the subsystem. See *Possible Values for PST/SST/AST*.
- **ALARM STATUS**—List of trouble text alarm messages that have been generated for the IMT System or specified IMT bus
  - *—Minor Alarm
  - **—Major Alarm
  - ***C**—Critical Alarm

The states of the IMT bus are combined from the PST, SST and AST states as shown in *Table 48: IMT Bus States*.

Table 48: IMT Bus States

PST	SST	AST	Definition
IS-NR	Active	----	The IMT bus is operating normally.
IS-ANR	Fault	----	The IMT bus has had a failure on at least one but not all cards.
IS-ANR	Manual	----	The IMT bus is inhibited, but some cards have been connected to it.
OOS-MT	Fault	----	The IMT bus has a failure on all cards.
OOS-MT-DSBLD	Manual	----	The IMT bus is inhibited and no cards are connected to it.
OOS-MT-DSBLD	Test	FLT CHK	The IMT Bus is inhibited and undergoing Fault Isolation test.
OOS-MT-DSBLD	Test	EXT BERT	The IMT Bus is inhibited and undergoing Extended BERT.

Related Commands

clr-imt-stats, *conn-imt*, *disc-imt*, *rept-imt-lvl1*, *rept-imt-lvl2*, *rmv-imt*, *rst-imt*

rept-stat-ipconn

Report Status IP Connection

Use this command to display the dynamic status of SIP transport.

Parameters

This command has no parameters.

Example

```
rept-stat-ipconn
```

Dependencies

The SIPNP Feature must be enabled before retrieving the dynamic status of SIP transport.

At least one ENUM card must be provisioned before retrieving the dynamic status of ENUM connections.

A SIP or ENUM card running the SIPHC or ENUMHC application must be configured before this command can be entered.

Notes

None

Output

```
rept-stat-ipconn
```

```
    tekelecstp 12-06-25 16:14:24 EST EAGLE 45.0.0
    rept-stat-ipconn
    Command entered at terminal #4.

    CNAME             STATUS
    ------------------------
    conn1             DOWN
    conn2             UP
    conn5             DOWN

    Command Completed.
;
```

Related Commands

chg-ip-conn, *dlt-ip-conn*, *ent-ip-conn*, *rtrv-ip-conn*

rept-stat-iptps

Report Status IPGWx TPS Utilization

Use this command to display current and peak IPTPS usage for each IPSG / IPGWx linkset in the system or for each link in the IPSG / IPGWx linkset.

Parameters

history

This parameter specifies whether to report the history of IP TPS usage data on IPSG linksets for the last 60 seconds.

Range:

yes

no

Default:

no

link

The link on the card specified in the loc parameter.

Synonym:

port

Range:

a, a1-a31, b, b1-b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling link ports.

loc

The IPSG card location for which IP TPS usage data is to be reported.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

lsn (optional)

Linkset name. The name of the linkset for which the report information is to be displayed.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Default:

All linksets are displayed

peakreset (optional)

Reset peak values to the current TPS values.

Range:

yes

no

Default:

no

tpscost

This parameter specifies whether to report IP TPS usage data for IPSG linksets relative to network conditions, including average MSU size, association RTT, number of links provisioned on the card, and the protocol used (M2PA or M3UA).

Range:

yes

no

Default:

no

Example

```
rept-stat-iptps
rept-stat-iptps:lsn=lsgw1101
rept-stat-iptps:peakreset=yes
rept-stat-iptps:lsn=lsm2pa1:tpscost=yes
rept-stat-iptps:loc=1305:tpscost=yes
rept-stat-iptps:loc=1305:history=yes
rept-stat-iptps:loc=1305:link=a3:history=yes
```

Dependencies

If the linksets are not IPGWx or IPSG, then this command cannot be entered.

The specified linkset name must exist in the database.

The history, link, loc, and tpscost parameters can be specified for only IPSG cards.

If the history parameter is specified, then the loc parameter must be specified.

If the tpscost parameter is specified, then the loc or lsn parameter must be specified.

If the loc parameter is specified, then the tpscost, history, or peakreset parameter must be specified.

Only one of the history, tpscost, and peakreset parameters can be specified in the command.

The loc and lsn parameters cannot be specified together in the command.

The specified linkset must be type IPSG.

Notes

Traffic peak data are stored only in OAM memory and are not preserved when the card that is running the OAM boots, or in the case of an active/standby switchover.

IPSG linksets have SLKTPS linksets configured rather than IPTPS. SLKTPS configures the transactions per second for each link assigned to the IPSG linkset as opposed to IPTPS which configures the

combined transactions per second for the entire IPGW linkset. For an IPSG linkset, the calculated IP TPS value (shown under the 'CONFIG' column in the report) is made up of the aggregate calculated SLKTPS of all of the provisioned links in the linkset. Non-IPSG hosted links are not counted in the calculation as they do not support SLKTPS.

If a linkset contains a mixture of IPLIMx M2PA and IPSG-M2PA links, then the command does not report any data below the TPS header or raise alarms.

For IPSG-M3UA and IPGWx-M3UA links, the `rept-stat-iptps` command also counts the received DAUD messages and transmitted SNMs in response to DAUD audits (along with the other transmitted SNMs).

The process of updating the IP TPS counts for DAUD and DAUD response SNMs is:

- Rcv IP TPS count is updated with the total number of valid DAUD messages that are successfully queued for response processing based on the combination of RCs (Routing Contexts) and APCs (Affected Point Codes) received in the M3UA DAUD message.
- In reply to DAUD, based on the response generated (DUNA or (DAVA/DRST + SCON)), Tx IP TPS counts are updated for each RC/APC combination (either the same as the Rcv counts or twice the Rcv counts respectively).
- If no RC is present, then the Tx/Rcv IP TPS is incremented for the associated link corresponding to the lowest PORT ID for IPSG-M3UA links for the same association.
- For IPGWx-M3UA links, Tx/Rcv IP TPS are always incremented on the default PORT Index (since only one link can be configured in IPGWx GPL).
- For IPGWx-M3UA links, Rcv IP TPS count are also updated with the number of valid and non discarded Deviated DAUD message received (since Deviated DAUD always contains single RC and APC combination).

All of the transmitted SNMs are pegged in IPTPS Tx counts and are considered in the TPS algorithms.

Output

The `rept-stat-iptps` command reports on IPSG and IPGWx linkset IP TPS. The report includes the following information for the system and for each IPSG or IPGWx linkset:

- Configured IP TPS alarm threshold
- Configured IP TPS
- Current IP TPS transmit and receive usage for 15 seconds
- Peak IP TPS transmit and receive usage and timestamp for all 15 second periods since last reset

As of Release 44.0, the `rept-stat-iptps` command is enhanced to report derived IP TPS usage for IPSG linksets.

- Current derived IP TPS transmit and receive usage over a window of 15 seconds
- Peak IP TPS transmit and receive usage and timestamp for all 15 second periods since last reset
- 60 seconds history of the IP TPS transmit and receive usage

The derived IP TPS is calculated by adding the costs for factors such as average MSU size, association round trip time, number of provisioned links on card and protocol used (M2PA or M3UA). The derived TPS has valid values if:

- The specified card location indicates an E5-ENET-B IPSG card or the links in the specified linkset are hosted on E5-ENET-B card,
- the E5-ENET-B IPSG High Throughput feature is turned ON,

- the actual traffic rate running on the ISPG card > 6500 TPS and
- the network configuration or traffic characteristics exceeds optimal configuration limits as shown in *Table 49: Baseline Configuration Changes for the E5-ENET-B Card*.

Table 49: Baseline Configuration Changes for the E5-ENET-B Card

E5-ENET-B Card Baseline Configuration	E5-ENET-B IPSG High Throughput feature OFF	E5-ENET-B IPSG High Throughput feature ON
TPS	6500	9500
Max RTT (ms)	120	50
Avg. MSU size (bytes)	0-272	0-120
Number of associations/links	16	4
Protocol	M2PA and M3UA	M2PA

For all other conditions, including the use of an E5-ENET card instead of an E5-ENET-B card, the derived IP TPS values is invalid and is denoted by dashes (---) in the *Derived TPS* and column.

If an E5-ENET card is used in an example that displays history information, the derived values are invalid and are denoted by dashes in the *Derived Tx* and *Derived RX* columns.

If the linkset is specified, then the command reports the same information for the individual links in the linkset.

If the peakreset=yesparameter is specified, then the command resets all the stored peak values to the current actual usage for each link, and recalculates linkset and system peaks before reporting usage.

If the linkset is specified with the peakreset=yes parameter, then the command recalculates peaks for the specified linkset and resets all the stored peak values to the current actual usage for each link contained in the linkset before reporting usage.

The peaks for transmit and receive, and for link, and linkset IP TPS may all occur at different times.

The IP TPS value shown in the command may contain one extra MSU if the linkset is specified. Because the alarm calculations are implemented using integer math, rounding may occur at each entity (link, linkset) if the IP TPS value for the entity is not evenly divisible by 15. This could occur when performing an IPTPS report for a linkset that has more than one link configured.

For mixed IPLIMx-M2PA and IPSG-M2PA linksets, the command does not report any data or raise alarms.

IPGW linksets display dashes in the *CONFIG/MAX* column.

Asterisk sign indicates that parameter (CONFIG/RSVD or CONFIG/MAX) is used to generate TPS alarm for IPSG links/linkset.

This example shows the output for an IPGW linkset:

```
rept-stat-iptps:lsn=ls1307a
```

```
eagle10212 10-04-03 09:38:48 EST  EAGLE 42.0.0
IP TPS USAGE REPORT
           THRESH  CONFIG/  CONFIG/         TPS   PEAK       PEAKTIMESTAMP
                      RSVD      MAX
-------------------------------------------------------------------------
```

```
LSN
ls1307a      100%    10000      ---  TX:   4800   5000   03-05-05 09:49:09
                                     RCV:   4850   5000   03-05-05 09:49:09
------------------------------------------------------------------------------
LOC   LINK
1307  A       80%     2500     ----  TX:   2399   2500   03-05-05 09:49:09
                                     RCV:   2428   2500   03-05-05 09:49:09
```

This example shows the output when IPSG and IPGW linksets are included:

`rept-stat-iptps`

```
rlghncxa03w 11-03-13 16:20:46 EST  EAGLE 44.0.0
IP TPS USAGE REPORT
           THRESH  CONFIG/  CONFIG/         TPS   PEAK       PEAKTIMESTAMP
                     RSVD      MAX
------------------------------------------------------------------------------
LSN
ls1303a      100%      500*     500  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
ls1305a      100%     2500*    5000  TX:      0     10   11-02-29 12:46:37
                                     RCV:     0     10   11-02-29 12:57:52
ls1305i      100%        0*       0  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
lsitunaa     100%        0*       0  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
lsitunbb     100%        0*       0  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
lsituis      100%        0*       0  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
lsituns      100%        0*       0  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
lsm2pa1      100%     2500*    6500  TX:      0     10   11-02-29 12:56:07
                                     RCV:     0     10   11-02-29 12:58:07
ls1307a      100%      100      ---  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
ls1315a      100%     4000      ---  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
ls1317i      100%     4000      ---  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
lgipgw       100%     4000      ---  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
lgipgw2      100%     4000      ---  TX:      0      0   00-00-00 00:00:00
                                     RCV:     0      0   00-00-00 00:00:00
------------------------------------------------------------------------------
Command Completed.
```

This example shows the output for an IPSG M3UA linkset:

`rept-stat-iptps:lsn=ipsgm3ua`

```
rlghncxa03w 10-04-03 16:20:46 EST  EAGLE 42.0.0
IP TPS USAGE REPORT
           THRESH  CONFIG/  CONFIG/        TPS     PEAK      PEAKTIMESTAMP
                     RSVD      MAX
------------------------------------------------------------------------------

LSN
IPSGM3UA     100%     4000    10000* TX:   3700     4000  03-05-05 09:49:19
```

```
                                     RCV:   3650     4000  03-05-05 09:49:19

------------------------------------------------------------------------------

LOC  LINK
1101    A     80%     2000     5000* TX:   1851     2000  03-05-05 09:49:19

                                     RCV:   1801     2000  03-05-05 09:49:19

1201    A     80%     2000     5000* TX:   1849     2000  03-05-05 09:49:19

                                     RCV:   1799     2000  03-05-05 09:49:19

------------------------------------------------------------------------------
```

This example shows the output for a mixed linkset when IPSG M2PA links are included:

`rept-stat-iptps:lsn=ipsgm2pa`

```
rlghncxa03w 10-04-03 16:20:46 EST  EAGLE 42.0.0
IP TPS USAGE REPORT
           THRESH  CONFIG/  CONFIG/        TPS     PEAK      PEAKTIMESTAMP
                     RSVD      MAX
------------------------------------------------------------------------------

LSN
IPSGM2PA     100%    10000*   20000  TX:   4800     5000  03-05-05 09:49:09

                                     RCV:   4850     5000  03-05-05 09:49:09

------------------------------------------------------------------------------

LOC  LINK
1105    A     80%     2500*    5000  TX:   2399     2500  03-05-05 09:49:09

                                     RCV:   2428     2500  03-05-05 09:49:09

1205    A     80%     2500*    5000  TX:   2401     2500  03-05-05 09:49:09

                                     RCV:   2422     2500  03-05-05 09:49:09

1305    A     80%     ----     ----  TX:   ----     ----  ----------------

                                     RCV:   ----     ----  ----------------

2105    A     80%     ----     ----  TX:   ----     ----  ----------------

                                     RCV:   ----     ----  ----------------

------------------------------------------------------------------------------
```

This example shows the output for an E5-ENET-B IPSG card and displays TPS cost information for a specific location:

`rept-stat-iptps:loc=1305:tpscost=yes`

```
eagle10212 11-07-20 09:07:34 EST  EAGLE 44.0.0
IP TPS USAGE REPORT

               Actual      Derived    Derived PEAK    PEAKTIMESTAMP
```

```
                TPS           TPS          TPS
------------------------------------------------------------------------
LOC
1305            Tx: 8000      8240         8500        11-08-03 10:00:25
                Rcv:8000      8240         8600        11-08-03 10:10:25
------------------------------------------------------------------------
LSN     LINK
lsm2pa1  A      Tx: 4000      4120         4380        11-08-03 10:00:25
                Rcv:4000      4120         4120        11-08-03 10:10:25

lsm2pa2  B      Tx: 4000      4120         4120        11-08-03 10:00:25
                Rcv:4000      4120         4480        11-08-03 10:10:25
------------------------------------------------------------------------

Command Completed.
```

This example shows the output for an E5-ENET-B IPSG card and displays TPS cost information for a linkset:

```
rept-stat-iptps:lsn=lsm2pa1:tpscost=yes
```

```
eagle10212 11-07-20 09:07:34 EST  EAGLE 44.0.0
IP TPS USAGE REPORT

                Actual      Derived   Derived PEAK    PEAKTIMESTAMP
                TPS           TPS         TPS
------------------------------------------------------------------------
LSN
lsm2pa1         Tx: 13400     14430       14675       11-08-03 10:00:25
                Rcv:14200     15000       15320       11-08-03 10:10:25
------------------------------------------------------------------------
LOC   LINK
1305  A         Tx: 6800       7150        7250       11-08-03 10:00:25
                Rcv:7000       7340        7550       11-08-03 10:10:25

1306  B         Tx: 6600       7280        7425       11-08-03 10:00:25
                Rcv:7200       7660        7770       11-08-03 10:10:25
------------------------------------------------------------------------

Command Completed.
```

This example shows the output for an E5-ENET IPSG card when there are no valid derived TPS values:

```
rept-stat-iptps:loc=1307:tpscost=yes
```

```
eagle10212 11-07-20 09:07:34 EST  EAGLE 44.0.0
IP TPS USAGE REPORT

                Actual  Derived   PEAK       PEAKTIMESTAMP
                TPS       TPS      TPS
------------------------------------------------------------------------
LOC
1307            Tx: 200     -      -          00-00-00 00:00:00
                Rcv:400     -      -          00-00-00 00:00:00
------------------------------------------------------------------------
LSN     LINK
lsm2pa1  A      Tx: 100     -      -          00-00-00 00:00:00
                Rcv:150     -      -          00-00-00 00:00:00

lsm2pa2  B      Tx: 100     -      -          00-00-00 00:00:00
                Rcv:250     -      -          00-00-00 00:00:00
------------------------------------------------------------------------
```

```
    Command Completed.
```

This example shows the output for an E5-ENET-B IPSG card and displays history information:

`rept-stat-iptps:loc=1111:history=yes`

```
    eagle10212 12-01-18 09:07:34 EST  EAGLE5 44.0.0
    IP TPS USAGE HISTORY REPORT for Card LOC=1111

    SAMPLE#  SLK        ACTUAL        DERIVED         AVG   AVG TX    AVG RX
                       TX     RX      TX     RX       RTT  MSU SIZE  MSU SIZE
    ------------------------------------------------------------------------
     1       A       1702      0    2331    ---        7     292       0
             A1      3403   3403    4662   4662       14     292     292
    ------------------------------------------------------------------------
    .
    .
    .

    SAMPLE#  SLK        ACTUAL        DERIVED         AVG   AVG TX    AVG RX
                       TX     RX      TX     RX       RTT  MSU SIZE  MSU SIZE
    ------------------------------------------------------------------------
    60      A       1702      0    2331    ---        7     292       0
            A1      3403   3403    4662   4662       14     292     292
    ------------------------------------------------------------------------

    Command Completed.The following example reports
```

This example shows the output for history information for link A of an E5-ENET-B IPSG card:

`rept-stat-iptps:loc=1111:port=a:history=yes`

```
    eagle10212 12-01-18 09:07:34 EST  EAGLE5 44.0.0
    IP TPS USAGE HISTORY REPORT for Card LOC=1111 PORT=A

    SAMPLE#  SLK        ACTUAL        DERIVED         AVG   AVG TX    AVG RX
                       TX     RX      TX     RX       RTT  MSU SIZE  MSU SIZE
    ------------------------------------------------------------------------
    1       A       3403      0    4662    ---        8     292       0
    ------------------------------------------------------------------------
    .
    .
    .

    SAMPLE#  SLK        ACTUAL        DERIVED         AVG   AVG TX    AVG RX
                       TX     RX      TX     RX       RTT  MSU SIZE  MSU SIZE
    ------------------------------------------------------------------------
    60      A       3403      0    4662    ---        9     292       0
    ------------------------------------------------------------------------


    Command Completed.
```

Legend

- **LSN**—Linkset name
- **THRESH**—Threshold at which an alarm will be generated to indicate that the actual linkset TPS is approaching the configured linkset iptps value (lsusealm value as shown in `rtrv-ls` output).

- **CONFIG/RSVD**—Reserved TPS for the linkset
- **CONFIG/MAX**—Maximum TPS for the linkset
- **TPS**—Current transmit (TX) and receive (RCV) TPS for 15 seconds
- **PEAK**—Peak transmit (TX) and receive (RCV) TPS usage for all 15 second periods since the last peak reset
- **PEAKTIMESTAMP**—Date and time that the displayed transmit and receive TPS peaks occurred
- **LOC**—Location of the card that contains a displayed link in the linkset
- **PORT**—A signaling link in the linkset
- **THRESH**—The slkusealm value as shown in `rtrv-ls` output
- **CONFIG/RSVD**—Reserved TPS for each link in the linkset. (-----). There is no configurable TPS for links.
- **CONFIG/MAX**—Maximum TPS for each link in the linkset. (-----). There is no configurable TPS for links.
- **TPS**—Current transmit (TX) and receive (RCV) TPS for 15 seconds
- **PEAK**—Peak transmit (TX) and receive (RCV) TPS usage for all 15 second periods since the last peak reset
- **PEAKTIMESTAMP**—Date and time that the displayed transmit and receive TPS peaks occurred
- **Derived TPS**—Derived transmit (TX) and receive (RCV) TPS for 15 seconds
- **Derived Peak TPS**—Derived peak transmit (TX) and receive (RCV) TPS usage for all 15 second periods since the last peak reset
- **Actual Tx/Rx**—Actual transmit (TX) and receive (RCV) TPS for 60 seconds
- **Derived Tx/Rx**—Actual transmit (TX) and receive (RCV) TPS for 60 seconds
- **Avg TX MSU Size**—Average transmitted MSU size
- **Avg RTT**—Average round trip time
- **Avg RX MSU Size**—Average received MSU size

Related Commands

chg-ctrl-feat, *chg-ls*, *chg-sg-opts*, *enable-ctrl-feat*, *ent-ls*, *rtrv-ctrl-feat*, *rtrv-ls*, *rtrv-sg-opts*

rept-stat-j1 Report Status J1

Use this command to display the J1 port status and signaling link status for cards with provisioned J1 ports.

Parameters

loc (optional)

Card address. The unique identifier of a specific LIMT1 card located in the STP.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 -

4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

Information for all LIMT1 cards having J1 interfaces is reported.

j1port (optional)

J1 port number. This parameter displays information for a J1 port on the card in the specified card location.

Range:

1-8

Example

```
rept-stat-j1
rept-stat-j1:loc=1101
rept-stat-j1:loc=1101:j1port=1
```

Dependencies

No other rept-stat-xxx command can be in progress when this command is entered.

The loc parameter must be specified when the j1port parameter is specified.

The OAM card location cannot be specified for the loc parameter.

MUX card locations (*xy*09 and *xy*10 where *x* is the frame and *y* is the shelf) cannot be specified for the loc parameter.

Card location 1118 cannot be specified.

Notes

Specifying the command without any parameters displays J1 port status for all cards with provisioned J1 ports.

If the loc parameter is specified, status is displayed for all J1 ports provisioned on the card in the specified location.

If the loc and j1port parameters are specified, the J1 port status summary is displayed for all J1 ports provisioned on the card in the specified location, followed by the status of all signaling links assigned to the specified J1 port on the card.

Output

This example shows the output when no parameters are specified:

```
rept-stat-j1
```

```
    tekelecstp 13-12-20 13:33:09 EST  46.0.0-65.3.0
    LOC    J1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     LINE
    1203   2        IS-NR        Avail     LINE
    1203   3        IS-NR        Avail     -----
    1203   7        OOS-MT       Unavail   -----
    1207   1        IS-NR        Avail     -----
    1207   2        IS-NR        Avail     -----
   Command Completed.
;
```

This example shows the output when the loc parameter is specified:

```
rept-stat-j1:loc=1203
```

```
    tekelecstp 13-12-20 13:33:09 EST  46.0.0-65.3.0
    LOC    J1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     LINE
    1203   2        IS-NR        Avail     LINE
    1203   3        IS-NR        Avail     -----
    1203   7        OOS-MT       Unavail   -----
    Command Completed.
;
```

These examples show the output when the loc and j1port parameters are specified:

```
rept-stat-j1:loc=1203:j1port=1
```

```
    tekelecstp 13-12-20 13:33:09 EST  46.0.0-65.3.0
    LOC    J1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     LINE
      ALARM STATUS       = No Alarms.
      UNAVAIL REASON     = --
      SLK    TS  PST          SST       AST
      A       1  IS-NR        Avail     ---
      A1      2  IS-NR        Avail     ---
    Command Completed.
;
```

```
rept-stat-j1:loc=1203:j1port=2
```

```
    tekelecstp 13-12-20 13:33:09 EST  46.0.0-65.3.0
    LOC    J1PORT   PST          SST       AST
    1203   2        IS-NR        Avail     LINE
      ALARM STATUS       = No Alarms.
      UNAVAIL REASON     = --
    Command Completed.
;
```

Legend

- LOC-- Card location
- J1PORT--Number of the J1 port provisioned on the card in the specified location.

- ALARM STATUS--Either "No Alarms" or current alarm number and text.
- UNAVAIL REASON--Reason for the J1 port being unavailable
- SLK--Signaling link assigned to the J1 port
- TS-- Timeslot assigned to the signaling link

Related Commands

chg-j1, *dlt-j1*, *ent-j1*, *rtrv-j1*, *tst-j1*

rept-stat-lfs

Report LFS Test Status

Use this command to generate a report of all the SS7 links that are under LFS test. Along with the link identification information, the command output lists the current LBP, the test pattern, the maximum bit-errors threshold, the bit-errors since the beginning of this test, the maximum test time, and the time elapsed since the beginning of the test.

Parameters

link (optional)

The signaling link port on the card specified in the loc parameter.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling link ports.

loc (optional)

This parameter is mandatory when the link parameter is specified.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1212, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
rept-stat-lfs
rept-stat-lfs:loc=1201
rept-stat-lfs:loc=1201:link=a1
```

Dependencies

The LFS feature must be turned on before this command can be entered.

The card location specified in the loc parameter must be equipped.

The signaling link that is specified in the link parameter must be assigned to the card in the loc parameter location.

Card locations 1113, 1114, 1115, 1116, 1117, 1118, and all *xy*09 and *xy*10 locations (*x* is the frame and *y* is the shelf) cannot be specified in the loc parameter.

The card location (loc parameter) must be an HC-MIM, E5-E1T1, or E5-E1T1-B card, provisioned with the LIMT1 card type, configured with either the SS7ANSI or CCS7ITU application.

If the link parameter is specified, the loc parameter must be specified.

This command cannot be entered during upgrade.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

If no parameters are specified, all links that are in LFS test are displayed.

`rept-stat-lfs`

```
    rlghncxa03w 04-02-27 16:50:24 EST  EAGLE 31.3.0
    SLK      LBP  PATTERN    MAX-ERRORS  BIT_ERRORS  MAX-TIME TEST-TIME
    1201,A     5  B0247              56          30  01:00:00 00:00:50
    1202,A     3  B511               56          27  01:00:00 00:01:05
    1203,A     1  OCTET              56          12  01:00:00 00:02:07
    1204,A     6  ALTERNATE          56          28  01:00:00 00:04:08
    1205,A     2  B0247              56          36  01:00:00 00:03:05
    1206,A     1  B0247              56          15  01:00:00 00:06:06
    1207,A     3  B0247              56          19  01:00:00 00:02:04
    1208,A     5  B0247              56          23  01:00:00 00:04:01
;
```

If only the loc parameter is specified, all links in LFS test on the specified card are displayed.

`rept-stat-lfs:loc=1208`

```
   rlghncxa03w 04-02-27 16:50:24 EST  EAGLE 31.3.0
    SLK      LBP  PATTERN    MAX-ERRORS  BIT_ERRORS  MAX-TIME TEST-TIME
    1208,A     5  B0247              56          23  01:00:00 00:04:01
    1208,B1    4  B0247              56          23  01:00:00 00:08:01
;
```

If the loc and link parameters are specified, only the specified link on the specified card is displayed.

```
rept-stat-lfs:loc=1208:link=a
```

```
   rlghncxa03w 04-02-27 16:50:24 EST  EAGLE 31.3.0
    SLK      LBP  PATTERN    MAX-ERRORS  BIT_ERRORS  MAX-TIME TEST-TIME
    1208,A     5  B0247              56          23  01:00:00 00:04:01
;
```

Legend

- **SLK**—Signaling link identifier; same as loc and link parameters of `act-lbp` command
- **LBP**—The loopback point of this test; same as lbp parameter of `act-lbp` command
- **PATTERN**—Test pattern; same as pattern parameter of `act-lbp` command
- **MAX-ERRORS**—Bit-error threshold allowed for this LFS test; same as maxerr parameter of `act-lbp` command
- **BIT_ERRORS**—Number of bit-errors since the beginning of this test
- **MAX-TIME**—Time window for testing each loop-back point; same as time parameter of `act-lbp` command
- **TEST-TIME**—Amount of time the test has run

Related Commands

rept-stat-slk

rept-stat-lnp LNP Status Report

Use this command to generate a report of the local number portability (LNP) status information.

When this command is entered with no parameters, a summary of the LNP status of all equipped SCCP cards is provided. This summary includes Global Title Translation (GTT) and LNP function status for every SCCP card, as well as LNPQS system information.

When the loc parameter is specified, a detailed status of LNP information for the specified SCCP card is provided. These detailed reports include information for each of the following functions: Global Title Translation (GTT), LNP Message Relay (LNPMR), LNP Query Service (LNPQS), Personal Communication Service LNP Query Service (PLNPQS) (if the PLNP feature is turned on), Wireless LNP Query Service (WNPQS) (if the WNP feature is turned on), Triggerless LNP (TLNP) (if the TLNP feature is turned on), LRNQT (if the ITU TCAP LRN Query feature is turned on), and Automatic Call Gap (ACG).

When the card=sccp-all parameter is specified, a detailed status of LNP information for all SCCP cards is provided.

Parameters

card (optional)

Specify card=sccp-all to display a report of the LNP status of all equipped SCCP cards.

Range:

sccp-all

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

A summary for all cards is displayed.

Example

```
rept-stat-lnp
rept-stat-lnp:card=sccp-all
rept-stat-lnp:loc=1106
```

Dependencies

The LNP feature must be turned on before this command can be entered.

The card and loc parameters cannot be specified together in the command.

The only valid value for the card parameter is *sccp-all*.

No other `rept-stat-xxx` command can be in progress when this command is issued.

At least one SCCP card must be configured in the system.

The value specified for the loc parameter must identify a Service Module card.

Notes

The error information on this report is based on 30-second intervals. The values for number of errors and total messages are for the last 30-second period. The usage information is also updated once every 30 seconds.

When this command is entered with no parameters, a summary of the LNP subsystem status is reported, followed by a summary of the LNP status of all equipped SCCP cards. This summary includes global title translation (GTT) and LNP function status for every SCCP card, as well as LNPQS system information. The GTT status is either ACT (active) or SWDL (software loading). The LNP status is either ACT, OFFLINE, or SWDL. LNPQS system information is then provided in the following fields:

- The ALARM STATUS displays the current alarm on the LNP Subsystem.
- The SSN STATUS and MATE SSN STATUS fields show the state of the LNP subsystems: Prohibited, Restricted, or Allowed.
- The ACG OVERLOAD LEVEL field shows the ACG node overload control level used by the system.
- The system average MIC usage is expressed as a percentage of the number of MICs sent by all cards, divided by the number of responses sent by all cards.

The `rept-stat-lnp` command also provides a summary of the following system-wide LNP statistics.

- The average GTT usage is expressed as the average percentage of GTT usage per card.
- The average LNPMR usage is expressed as the average percentage of LNPMR usage per card.
- The average LNPQS usage is expressed as the average percentage of LNPQS usage per card.
- The average WNPQS usage is expressed as the average percentage of WNPQS usage per card. WNPQS information is displayed only if the WNP feature is turned on.
- The average PLNPQS usage is expressed as the average percentage of PLNPQS usage per card. PLNPQS information is displayed only if the PCS 1900 Number Portability feature (PLNP) is turned on.
- The average LRNQT usage is expressed as the average percentage of LRNQT usage per card. LRNQT information is displayed only if the LRNQT feature is turned on.
- The average CPU usage is expressed as the average percentage of CPU usage per card.
- The total number of GTT, LNPMR, LNPQS, WNPQS (if turned on), TLNP (if turned on), PLNPQS (if turned on), and LRNQT (if turned on) errors for corresponding messages received across all cards.

When the `rept-stat-lnp` command is entered for a specific card (for example, `rept-stat-lnp:loc=xxxx)`, status information for the card at the specified location is provided, followed by the alarm status and detailed LNP status information and statistics for each LNP function.

- GTT STATUS, either ACT (active) or SWDL (software loading).
- GTT USAGE, expressed as a percentage of the amount of CPU used to process GTT messages during the last 30 seconds by the specified card.
- GTT ERRORS, the number of GTT errors detected for the total number of GTT messages received by the specified card.
- LNPMR STATUS, either ACT (active), OFFLINE, or SWDL (software loading).
- LNPMR USAGE, expressed as a percentage of the amount of CPU used to process LNP message relay messages during the last 30 seconds by the specified card.
- LNPMR ERRORS, the number of LNP message relay errors detected for the total number of LNP message relay messages received by the specified card.
- LNPQS STATUS, either ACT (active), OFFLINE, and SWDL (software loading).
- LNPQS USAGE, expressed as a percentage of the amount of CPU used to process LNP query messages during the last 30 seconds by the specified card.
- LNPQS ERRORS, the number of LNP query errors detected for the total number of LNP query messages received by the specified card.
- WNPQS STATUS, either ACT (active), OFFLINE, and SWDL (software loading).
- WNPQS USAGE, expressed as a percentage of the amount of CPU used to process WNP query messages during the last 30 seconds by the specified card.
- WNPQS ERRORS, the number of WNP query errors detected for the total number of WNP query messages received by the specified card.

  Note: IS-41 LNP Queries with a TT associated with the LNPQS service are pegged as IS-41 LNP Queries with a TT associated with the WNP service under the WNPQS counter. The WNPQS STATUS, WNPQS USAGE, and WNPQS ERRORS fields are displayed only if the Wireless Number Portability feature is ON.

- PLNPQS STATUS, either ACT (active), OFFLINE, and SWDL (software loading).
- PLNPQS USAGE, expressed as the amount of CPU used to process PCS 1900 LNP Query messages over the last 30-second period by the specific card.

- PLNPQS ERRORS, the number of PCS query errors detected for the total number of PCS query messages received by the specified card.

  Note: PCS 1900 LNP Queries with a TT associated with the LNPQS service are processed and pegged as IN LNP Queries under the LNPQS counter. The PLNPQS STATUS, PLNPQS USAGE, and PLNPQS ERRORS fields are displayed only if the PCS 1900 Number Portability (PLNP) feature is ON.

- TLNP STATUS, either ACT (active), OFFLINE, and SWDL (software loading).
- TLNP USAGE, expressed as a percentage of the amount of CPU used to process Triggerless LNP Encapsulated IAM messages over the last 30-second period by the specific card.
- TLNP ERRORS, the number of TLNP query errors detected for the total number of TLNP query messages received by the specified card.

  Note: The TLNP STATUS, TLNP USAGE, and TLNP ERRORS fields are displayed only if the Triggerless LNP (TLNP) feature is ON.

- LRNQT STATUS, either ACT (active), OFFLINE, and SWDL (software loading).
- LRNQT USAGE, expressed as a percentage of the amount of CPU used to process LRNQT queries over the last 30-second period by the specific card.
- LRNQT ERRORS, the number of LRNQT query errors detected for the total number of LRNQT messages received by the specified card.

  Note: The LRNQT STATUS, LRNQT USAGE, and LRNQT ERRORS fields are displayed only if the LRNQT feature is ON.

- ACG OVERLOAD LEVEL, the ACG node overload control level being used by the system.
- MIC USAGE, expressed as a percentage of the number of MICs sent by the specific card divided by the number of responses sent by the specified card during the last 30 seconds.
- CPU USAGE, expressed as a percentage of the amount of CPU used to process messages by the specified card during the last 30 seconds.

When the card=sccp-all parameter is specified, detailed information is provided about the status of all SCCP cards. The information displayed in the output is the same as that displayed for the loc=xxxx parameter.

Output

This example shows the output when the WNP, PLNP, TLNP, and LRNQT features are off:

`rept-stat-lnp`

```
rlghncxa03w 08-11-14 10:37:22 EST  EAGLE 40.0.0
LNP SUBSYSTEM REPORT  OOS-MT-DSBLD   Active      -----
  ALARM STATUS = *C  0435 LNP Subsystem is disabled

LNP Cards Configured=  3
CARD   PST           SST            GTT STATUS   LNP STATUS   CPU USAGE
1106   IS-NR         Active         ACT          OFFLINE         10%
1201   IS-NR         Active         ACT          OFFLINE         12%
1310   OOS-MT-DSBLD  Manual         -------      -------          0%

LNPQS:
  SSN STATUS = Prohibited  MATE SSN STATUS  = Allowed
  ACG:  OVERLOAD LEVEL = 0   MIC UASGE =  0%
```

```
    AVERAGE USAGE:
      GTT   = 13% LNPMR = 0%   LNPQS  = 0%
    AVERAGE CPU USAGE  = 11%
    TOTAL ERRORS:
      GTT:         0 out of    2000
      LNPMR:       0 out of       0
      LNPQS:       0 out of       0

    PROVISIONED TABLE QTY:
      TN:           10 of   24000000  (  0%)
      NPA:           1 of     150000  (  0%)
      LRN:           3 of     100000  (  0%)

    Command Completed
;
```

This example shows the output when the card= parameter is specified:

`rept-stat-lnp:card=sccp-all`

```
    tklc1190601 06-04-05 13:45:02 EST  EAGLE5 35.0.0
    CARD   VERSION        PST             SST          AST
    1205   038-003-013    IS-NR           Active       DB_DIFF
      ALARM STATUS       = **  0451 RTDB reload is required
      GTT:   STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPMR: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      WNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      TLNP:  STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      PLNPQS:STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      ACG:   OVERLOAD LEVEL = 0   MIC USAGE =  0%
      CPU USAGE =  5%

    CARD   VERSION        PST             SST          AST
    1317   038-003-013    IS-NR           Active       DB_DIFF
      ALARM STATUS       = **  0451 RTDB reload is required
      GTT:   STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPMR: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      WNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      TLNP:  STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      PLNPQS:STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      ACG:   OVERLOAD LEVEL = 0   MIC USAGE =  0%
      CPU USAGE =  5%

    CARD   VERSION        PST             SST          AST
    2213   038-003-013    IS-NR           Active       DB_DIFF
      ALARM STATUS       = **  0451 RTDB reload is required
      GTT:   STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPMR: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      WNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      TLNP:  STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      PLNPQS:STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      ACG:   OVERLOAD LEVEL = 0   MIC USAGE =  0%
      CPU USAGE =  5%

    CARD   VERSION        PST             SST          AST
    2215   -----------    OOS-MT-DSBLD    Manual       -----
      ALARM STATUS       = No Alarms.
      GTT:   STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
```

```
      LNPMR: STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      LNPQS: STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      WNPQS: STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      TLNP:  STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      PLNPQS:STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      ACG:   OVERLOAD LEVEL = 0   MIC USAGE =  0%
      CPU USAGE =  0%

    CARD   VERSION        PST             SST          AST
    2217   038-003-013    IS-NR           Active       DB_DIFF
      ALARM STATUS       = **  0451 RTDB reload is required
      GTT:   STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPMR: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      WNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      TLNP:  STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      PLNPQS:STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      ACG:   OVERLOAD LEVEL = 0   MIC USAGE =  0%
      CPU USAGE =  5%

    CARD   VERSION        PST             SST          AST
    2317   -----------    OOS-MT          Isolated     -----
      ALARM STATUS       = **  0013 Card is isolated from the system
      GTT:   STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      LNPMR: STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      LNPQS: STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      WNPQS: STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      TLNP:  STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      PLNPQS:STATUS = -------   USAGE =  0%   ERRORS:     0 of     0
      ACG:   OVERLOAD LEVEL = 0   MIC USAGE =  0%
      CPU USAGE =  0%

    CARD   VERSION        PST             SST          AST
    1105   038-003-013    IS-NR           Active       DB_DIFF
      ALARM STATUS       = **  0451 RTDB reload is required
      GTT:   STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPMR: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      LNPQS: STATUS = ACT       USAGE =  1%   ERRORS:     0 of  1003
      WNPQS: STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      TLNP:  STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      PLNPQS:STATUS = ACT       USAGE =  0%   ERRORS:     0 of     0
      ACG:   OVERLOAD LEVEL = 0   MIC USAGE =  0%
      CPU USAGE =  7%

    Command Completed.
;
```

This example shows the output when an LNP feature (LNP ported TNs) quantity greater than 120 million numbers is enabled, the WNP, PLNP and TLNP features are on, and the LRNQT feature is off:

`rept-stat-lnp`

```
    Integrat40 08-11-14 10:37:22 EST  EAGLE5 40.0.0
    LNP SUBSYSTEM REPORT  IS-ANR         Active      -----
      ASSUMING MATE'S LOAD
      ALARM STATUS       = No Alarms.

    LNP Cards Configured=  5
    CARD   PST           SST            GTT STATUS   LNP STATUS   CPU USAGE
    1106   IS-NR         Active         ACT          ACT             23%
```

```
    1201   IS-ANR        Standby        SWDL         SWDL            0%
    1205   OOS-MT-DSBLD  Manual         -------      -------         0%
    1302   OOS-MT        FLT            -------      -------         0%
    1310   IS-ANR        Standby        ACT          SWDL            0%
    LNPQS:
      SSN STATUS = Allowed     MATE SSN STATUS  = Prohibited
      ACG:  OVERLOAD LEVEL = 0   MIC USAGE = 100%

    AVERAGE USAGE:
      GTT   = 13% LNPMR = 0%   LNPQS = 0%
      WNPQS = 0%  TLNP  = 10%  PLNPQS = 0%
    AVERAGE CPU USAGE  = 23%
    TOTAL ERRORS:
      GTT:        1 out of    2000
      LNPMR:      0 out of       0
      LNPQS:      0 out of       0
      WNPQS:      0 out of       0
      PLNPQS:     0 out of       0
      TLNP:       1 out of     500

    PROVISIONED TABLE QTY:
      TN:     76800000 of   96000000  ( 80%)
      NPA:      135000 of     150000  ( 90%)
      LRN:       90000 of     100000  ( 90%)
    Command Completed.
;
```

This example shows the output when the WNP, PLNP, TLNP, and LRNQT features are on:

`rept-stat-lnp`

```
    rlghncxa03w 08-10-01 08:50:14 EST  EAGLE 40.0.0
    LNP SUBSYSTEM REPORT  IS-ANR         Active      -----
    ASSUMING MATE'S LOAD
    LNP Cards Configured=  5
    CARD   PST           SST            GTT STATUS   LNP STATUS   CPU USAGE
    1106   IS-NR         Active         ACT          ACT             28%
    1201   IS-ANR        Standby        SWDL         SWDL             0%
    1205   OOS-MT-DSBLD  Manual         -------      -------          0%
    1302   OOS-MT        Fault          -------      -------          0%
    1310   IS-ANR        Standby        ACT          SWDL             0%

    LNPQS:
      SSN STATUS = Allowed     MATE SSN STATUS  = Prohibited
      ACG:  OVERLOAD LEVEL = 0   MIC USAGE = 100%

    AVERAGE USAGE:
      GTT   = 13% LNPMR = 0%   LNPQS = 0%
      WNPQS = 0%   TLNP = 10%  PLNPQS = 0%
      LRNQT  = 5%

    AVERAGE CPU USAGE  = 28%
    TOTAL ERRORS:
      GTT:        1 out of    2000
      LNPMR:      0 out of       0
      LNPQS:      1 out of     500
      WNPQS:      0 out of       0
      PLNPQS:     0 out of       0
      TLNP:       1 out of     500
      LRNQT:      0 out of     700
    Command Completed.
;
```

This example shows the output when the WNP, PLNP, TLNP, and LRNQT features are on:

```
rept-stat-lnp:loc=1106
```

```
    rlghncxa03w 08-10-01 10:37:22 EST  EAGLE 40.0.0
    CARD  VERSION      TYPE    PST           SST       AST
    1106  021-101-000  TSM     IS-NR         Active    -----
      ALARM STATUS       = No Alarms.
      GTT:   STATUS = ACT       USAGE = 10%   ERRORS:    1 out of  1000
      LNPMR: STATUS = ACT       USAGE = 13%   ERRORS:    0 out of  1300
      LNPQS: STATUS = ACT       USAGE = 20%   ERRORS:    1 out of  2000
      WNPQS: STATUS = ACT       USAGE =  0%   ERRORS:    0 out of     0
      PLNPQS:STATUS = ACT       USAGE =  0%   ERRORS:    0 out of     0
      TLNP:  STATUS = ACT       USAGE =  0%   ERRORS:    0 out of     0
      LRNQT: STATUS = ACT       USAGE =  0%   ERRORS:    0 out of     0
      ACG:   OVERLOAD LEVEL = 0   MIC USAGE = 100%
      CPU USAGE = 43%
     Command Completed.
;
```

Legend

- **CARD**—Locations of the SCCP cards
- **VERSION**—Version number of the GPL the cards are running
- **TYPE**—Type of SCCP card
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the card. See *Possible Values for PST/SST/AST*.

Related Commands

chg-th-alm, *rept-stat-sccp*, *rtrv-th-alm*

rept-stat-ls — Report Status Linkset

Use this command to generate a report of the status of the MTP linksets. When a specific linkset is requested, the output displays a list of the links in the linkset and their secondary status. Output is generated for each of the 16 signaling link codes (SLC). If the Multiple Linksets to Single Adjacent Point Code (MLS) feature is turned on, and an adjacent destination point code is requested, then the output displays a summary status, including the secondary point codes, of the linksets that use that adjacent point code.

Parameters

apc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

apc/apca/apci/apcn/apcn24/apcn16 (optional)

Adjacent point code.

apci (optional)

ITU international point code with subfields *zone-area-id*. The prefix subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

apcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (*members*) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The prefix subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*,*prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

apcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The prefix indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

apcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

lsn (optional)

Linkset name. The name of the linkset for which the report information is to be displayed.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Default:

All linksets are displayed

stat (optional)

The primary state filter. The state of the linksets for which a report will be displayed.

Range:

all

All of the primary states

alminh

Alarms inhibited

anr

In-Service-Abnormal (IS-ANR)

dsbld

Out-of-Service-Maintenance-Disabled (OOS-MT-DSBLD)

mt

Out-of-Service-Maintenance (OOS-MT)

nr

In-Service-Normal (IS-NR)

Default:

all

Example

```
rept-stat-ls
rept-stat-ls:lsn=lsnstpa
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

The linkset specified by the lsn parameter must be equipped in the database.

The stat and lsn parameters cannot be specified together in the command.

The Multiple Linksets to a Single Adjacent Point Code (MLS) feature must be turned on before the apc parameter can be specified.

The lsn, stat, and apc parameters cannot be specified together in the command.

At least one linkset must be associated with the value of the apc parameter.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If no link is equipped for the SLC, the output is "___,__ UEQ."

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

"ASP-STATE" is shown for only IPSG-M3UA linksets.

Output

If the Proxy Point Code feature is enabled, then proxy point code information is displayed.

```
rept-stat-ls
```

```
    eagle10207 08-02-23 10:09:59 EST EAGLE 38.0.0
    LSN         APCA             PST           SST       AST
    ls11234567  001-001-002      OOS-MT        Prohibit  GWS
    ls11345678  001-001-003      OOS-MT        Prohibit  -----
    ls11345679  001-001-004      OOS-MT        Idle      -----
    ls1134567   001-001-005      OOS-MT        Prohibit  -----
    ls113456    001-001-006      OOS-MT        Prohibit  -----
    ls11345     001-001-007      OOS-MT        Prohibit  GWS
    ls113467    001-001-008      OOS-MT        Prohibit  -----
    ls1134      001-001-009      OOS-MT        Prohibit  -----
    ls987       009-008-007      OOS-MT        Idle      -----
    z           009-008-009      OOS-MT        Idle      -----
    cap8        008-008-008      OOS-MT        Idle      -----

    LSN         APCN             PST           SST       AST
    lsnational  16383-aa         OOS-MT        Idle      -----

    LSN         APCN24           PST           SST       AST

    LSN         APCI             PST           SST       AST
    Command Completed.
;
```

This example shows the output for a linkset when the MLS feature is not turned on or the linkset is not created with a secondary point code:

```
rept-stat-ls:lsn=lsnstpa
```

```
    eagle10207 08-02-23 10:09:59 EST  EAGLE 38.0.0

    LSN         APCA         PST           SST       AST
    lsnstpa     110-15-08    IS-NR         Allowed   -----
      SPCA  = --------------
      ALARM STATUS       = No Alarms.
      SCRSET  = ----
      GWSA    = ----
      GWSM    = ----
      GWSD    = ----
      SLC SLK     SST          SLC SLK     SST
      0   1207,A  Avail        8   ----,-  UEQ
      1   1203,A  Avail        9   ----,-  UEQ
      2   1103,B  LPBK         10  ----,-  UEQ
      3   ----,-  UEQ          11  ----,-  UEQ
      4   ----,-  UEQ          12  ----,-  UEQ
      5   ----,-  UEQ          13  ----,-  UEQ
      6   ----,-  UEQ          14  ----,-  UEQ
      7   ----,-  UEQ          15  ----,-  UEQ
    Command Completed.
;
```

This example shows the output when some linksets contain spare and private adjacent point codes:

```
rept-stat-ls
```

```
    tekelecstp 02-03-20 21:22:04 EST  EAGLE 31.12.0
    LSN            APCA             PST           SST       AST
    ls11234567     001-001-002      OOS-MT        Prohibit  GWS
    ls11345678     001-001-003      OOS-MT        Prohibit  -----
```

```
    ls11345679     001-001-004      OOS-MT        Idle      -----
    ls1134567      001-001-005      OOS-MT        Prohibit  -----
    ls113456       001-001-006      OOS-MT        Prohibit  -----
    ls11345      p-001-001-007      OOS-MT        Prohibit  GWS
    ls113467       001-001-008      OOS-MT        Prohibit  -----
    ls1134       p-001-001-009      OOS-MT        Prohibit  -----
    ls987          009-008-007      OOS-MT        Idle      -----
    z              009-008-009      OOS-MT        Idle      -----
    cap8           008-008-008      OOS-MT        Idle      -----

    LSN            APCN             PST           SST       AST
    lsnational   s-09-14-05-3-ab    OOS-MT        Idle      -----

    LSN            APCN24           PST           SST       AST

    LSN            APCI             PST           SST       AST
    Command Completed.
;
```

This example shows the output when the Multiple Linksets to a Single Adjacent Point Code (MLS) feature is turned on, and the linkset is created with a secondary point code:

`rept-stat-ls:lsn=lsnstpa`

```
    eagle10207 08-02-23 10:09:59 EST  EAGLE 38.0.0
    LSN         APCA         PST           SST       AST
    lsnstpa     110-15-08    IS-NR         Allowed   -----
      SPCA  =   120-10-01
      ALARM STATUS       = No Alarms.
      SCRSET  = ----
      GWSA    = ----
      GWSM    = ----
      GWSD    = ----
      SLC SLK     SST          SLC SLK     SST
      0   1207,A  Avail        8   ----,-  UEQ
      1   1203,A  Avail        9   ----,-  UEQ
      2   1103,B  LPBK         10  ----,-  UEQ
      3   ----,-  UEQ          11  ----,-  UEQ
      4   ----,-  UEQ          12  ----,-  UEQ
      5   ----,-  UEQ          13  ----,-  UEQ
      6   ----,-  UEQ          14  ----,-  UEQ
      7   ----,-  UEQ          15  ----,-  UEQ
    Command Completed.
;
```

This example shows the output for an adjacent point code when the MLS feature turned on:

`rept-stat-ls:apc=1-1-2`

```
    eagle10207 07-07-23 10:09:59 EST  EAGLE 37.5.0

    APCA   =   001-001-002
    LSN           SPCA          PST           SST       AST
    ls11234567    001-005-003   OOS-MT        Prohibit  GWS
    ls11345678    004-008-002   OOS-MT        Prohibit  -----
    ls113456      014-012-094   OOS-MT        Prohibit  -----
    Command Completed.
;
```

This example shows the output when possible duplication of adjacent point code values occurs when the MLS feature is turned on:

```
rept-stat-ls
```

```
    eagle10207 07-07-23 10:09:59 EST  EAGLE 37.5.0

    LSN           APCA          PST           SST       AST
    ls11234567    001-001-002   OOS-MT        Prohibit  GWS
    ls11345678    001-001-002   OOS-MT        Prohibit  -----
    ls11345679    001-001-004   OOS-MT        Idle      -----
    ls1134567     001-001-005   OOS-MT        Prohibit  -----
    ls113456      001-001-002   OOS-MT        Prohibit  -----
    ls11345     p-001-001-007   OOS-MT        Prohibit  GWS
    ls113467      001-001-008   OOS-MT        Prohibit  -----
    ls1134      p-001-001-009   OOS-MT        Prohibit  -----
    ls987         009-008-007   OOS-MT        Idle      -----
    z             009-008-009   OOS-MT        Idle      -----
    cap8          008-008-008   OOS-MT        Idle      -----
    LSN           APCN          PST           SST       AST
    lsnational  s-09-14-05-3-ab OOS-MT        Idle      -----
    LSN           APCN24        PST           SST       AST
    LSN           APCI          PST           SST       AST
```

This example shows the output when the Proxy Point Code feature is enabled:

```
rept-stat-ls:lsn=lsnstpa
```

```
    tekelecstp 08-02-29 11:05:47 EST  EAGLE 38.0.0
     LSN           APCA          PST           SST       AST
     lsnstpa       110-15-08     IS-NR         Allowed   -----
        PPCA   =    100-12-04
        ALARM STATUS       = No Alarms.
        SCRSET  = ----
        GWSA    = ----
        GWSM    = ----
        GWSD    = ----
        SLC SLK     SST          SLC SLK     SST
        0   1207,A  Avail        8   ----,-  UEQ
        1   1203,A  Avail        9   ----,-  UEQ
        2   1103,B  LPBK         10  ----,-  UEQ
        3   ----,-  UEQ          11  ----,-  UEQ
        4   ----,-  UEQ          12  ----,-  UEQ
        5   ----,-  UEQ          13  ----,-  UEQ
        6   ----,-  UEQ          14  ----,-  UEQ
        7   ----,-  UEQ          15  ----,-  UEQ
;
```

This example shows the output for proxy linksets using a specified adjacent point code. The MLS feature must be turned on to retrieve information for an adjacent point code.

```
rept-stat-ls:apc=1-1-2
```

```
    tekelecstp 07-03-29 11:05:47 EST  EAGLE 37.5.0

    APCA   =   001-001-002
    LSN           PPCA          PST           SST       AST
    ls11234567    001-005-003   OOS-MT        Prohibit  GWS
    ls11345678    004-008-002   OOS-MT        Prohibit  -----
```

```
    ls113456      014-012-094   OOS-MT        Prohibit  -----
;
```

This example shows the ASP state for IPSG-M3UA linksets state when the linkset is specified:

`rept-stat-ls:lsn=ls1305a`

```
    tekelecstp 08-01-29 18:15:20 EST  EAGLE 38.0.0
    LSN           APCA             PST           SST       AST
    ls1305a       005-213-000      IS-NR         Allowed   -----
      SPCA    = ----------------
      ALARM STATUS       = No Alarms.
      SCRSET  = ----
      GWSA    = ----
      GWSM    = ----
      GWSD    = ----
      SLC SLK      SST       ASP STATE   SLC SLK      SST       ASP STATE
      0   1305,A   Avail     ACTIVE      8   ----,--- UEQ       --------
      1   1305,A1  Unavail   DOWN        9   ----,--- UEQ       --------
      2   ----,--- UEQ       --------    10  ----,--- UEQ       --------
      3   ----,--- UEQ       --------    11  ----,--- UEQ       --------
      4   ----,--- UEQ       --------    12  ----,--- UEQ       --------
      5   ----,--- UEQ       --------    13  ----,--- UEQ       --------
      6   ----,--- UEQ       --------    14  ----,--- UEQ       --------
      7   ----,--- UEQ       --------    15  ----,--- UEQ       --------

    Command Completed.
;
```

This example shows the output when some linksets contain adjacent point codes if J7 support feature is enabled.

`rept-stat-ls`

```
    tekelecstp 02-03-20 21:22:04 EST  EAGLE 31.12.0
    LSN            APCA             PST           SST       AST

    LSN            APCN             PST           SST       AST
    lsnational   s-09-14-05-3-ab    OOS-MT        Idle      -----

    LSN            APCN24           PST           SST       AST

    LSN            APCI             PST           SST       AST

    LSN            APCN16           PST            SST      AST
    lsnational     121-003-015      OOS-MT         Idle    -----

    Command Completed.
;
```

Legend

- **LSN**—Name of the linkset
- **APCA/APCI/APCN/APCN24/APCN16**—Adjacent point code of the linkset (ANSI, ITU-I, ITU-N, ITU-N 24-bit, ITU-N 16-bit)
- **SPCA/SPCI/SPCN/SPCN24**—Secondary point code of the linkset (ANSI, ITU-I, ITU-N, ITU-N 24-bit)

- **PST**—Primary state of the linkset. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the linkset. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the linkset. See *Possible Values for PST/SST/AST*.
- **ALARM STATUS**—List of trouble text alarm messages that have been generated for the specified card
- **SCRN**—Name of the gateway screening screen set associated with the linkset
- **GWSA**—Shows whether gateway screening is used for the specified linkset
- **GWSM**—Shows whether gateway screening messaging is turned on for the specified linkset
- **GWSD**—Shows whether discarding of MSUs that bypass the gateway screening function due to loadshedding is turned on
- **SLC**—Signaling link codes associated with the links in the specified linkset
- **SLK**—Signaling links in the linkset, shown by the card location containing the signaling link and the port on the card containing the signaling link
- **PPCA/PPCI/PPCN/PPCN24/PPCN16**—Proxy point code of the linkset (ANSI, ITU-I, ITU-N, ITU-N 24-bit, ITU-N 16-bit)
- **ASP STATE**—State of AS associated with each signaling link of the IPSG-M3UA linkset. The states displayed are: ACTIVE, INACTIVE, or DOWN.

Related Commands

chg-ls, *dlt-ls*, *ent-ls*, *rtrv-ls*

rept-stat-meas — Report Measurement Status

Use this command to report the status of the Measurements Subsystem (Measurements Platform) or MASPs (Integrated Measurements), including card location and state, IP link status, alarm level, and subsystem state.

Note: If the Integrated Measurements collection function is turned on, then the status reflects the state of the E5-OAM card(s). If the Measurements Platform collection function is turned on, then the status reflects the state of the MCPM cards.

Parameters

This command has no parameters.

Example

```
rept-stat-meas
```

Dependencies

At least one MCPM card must be configured in the system if the Measurements Platform feature is turned on.

No other `rept-stat-xxx` commands can be in progress when this command is issued.

The Integrated Measurements or Measurements Platform feature must be turned on before this command can be entered.

The platformenable=on or oamhcmeas=on parameter must be specified (see the chg-measopts command) before this command can be entered.

Notes

The card status is independent of the IP Network Link status (Port A). The card can be IS-NR even if the network link has failed.

The version of the GPL is shown in the command output if the card is in the IS-NR or IS-ANR state. The `rept-stat-card` command does not show the GPL version if the card is IS-ANR.

Output

Note: The E5-MCPM-B card is an MCPM card. The *Type* field displays MCPM.

Output example with an MCPM card isolated:

`rept-stat-meas`

```
                        PST           SST        AST
    MEAS SS             IS-ANR        Active     -----
        ALARM STATUS =  *  0516 Degraded Mode - 1 card failed

    CARD   VERSION         TYPE    PST           SST        AST
    1107 P 134-000-000     MCPM    IS-NR         Active     -----
       IP Link A                   IS-NR         Active     -----
    1109   -----------     MCPM    OOS-MT        Isolated   -----
       IP Link A                   OOS-MT        Unavail    -----

    CARD 1107 ALARM STATUS = No Alarms
    CARD 1109 ALARM STATUS = Card is isolated from the system
    Command Completed.
;
```

Output example when the Integrated Measurements collection function is turned on:

`rept-stat-meas`

```
                        PST           SST        AST
    MEAS SS             IS-NR         Active     -----
        ALARM STATUS =   No Alarms

    CARD   VERSION      TYPE      GPL        PST           SST        AST
    1113 P 132-049-000  E5MCAP    OAMHC      IS-NR         Active     -----
       IP Link A                             IS-NR         Active     -----
    1115   132-049-000  E5MCAP    OAMHC      IS-NR         Active     -----
       IP Link A                             OOS-MT        Unavail    -----

    CARD 1113 ALARM STATUS = No Alarms
    CARD 1115 ALARM STATUS = No Alarms

    Command Completed.
;
```

Output example with both MCPM cards IS-NR:

```
rept-stat-meas
```

```
    tekelec 11-03-15 20:34:15 EST  EAGLE5 44.0.0
                        PST           SST        AST
    MEAS SS             IS-NR         Active     -----
        ALARM STATUS =   No Alarms

    CARD   VERSION         TYPE    PST           SST        AST
    1106   134-000-000     MCPM    IS-NR         Active     -----
       IP Link A                   IS-NR         Active     -----
    1108   134-000-000     MCPM    IS-NR         Active     -----
       IP Link A                   IS-NR         Active     -----

    CARD 1106 ALARM STATUS = No Alarms
    CARD 1108 ALARM STATUS = No Alarms

    Command Completed.
;
```

Legend

- **VERSION**—Version number of the GPL running on the specified card. The version is shown if the card is in the IS-NR or IS-ANR state.
- **TYPE**—Type of card running the Measurements Subsystem application
- **PST**—Primary state of the Measurements Subsystem or card. See *Possible Values for PST/SST/AST* for more information.
- **SST**—Secondary state of the Measurements Subsystem or card. See *Possible Values for PST/SST/AST* for more information.
- **AST**—Associated state of the Measurements Subsystem or card. See *Possible Values for PST/SST/AST* for more information.
- **MEAS SS**—Measurements Subsystem application running on the card
- **ALARM STATUS**—List of trouble text alarm messages that have been generated for the card and the applications running on the card
- **CARD**—Location of the card. The card with the letter "P" to the right of its card location is the primary card. The primary card transfers scheduled measurements report files to the primary FTP server. When the primary state (PST) of the card is IS-NR, the secondary state (SST) indicates whether the card is active or standby.
- **CARD XXXX ALARM STATUS**—List of trouble text alarm messages that have been generated for the card

Related Commands

rept-stat-card

rept-stat-mfc

Use this command to obtain the status of the Message Flow Control (MFC) services.

Parameters

mode (optional)

The amount and type of information displayed in the report.

Range:

full

display a full report for the specified MFC service

stats

display detailed statistics for the specified MFC service

act

display information about the status of MFC on individual Service cards

Default:

No change to the current value

reset (optional)

This parameter resets the statistics for all sample periods for the specified service.

Range:

yes

sample (optional)

The data sample to be used.

Range:

avg30s

30-second average value calculated over the previous 5 minutes

tot5m

total value summed over the previous 5 minutes

avg1h

1-hour average value calculated over the previous 24 hours

tot24h

total value summed over the previous 24 hours

service (optional)

The MFC service for which information is reported.

Range:

eroute

EROUTE MFC service

inm

INM MFC service

mtp3
MTP3 MFC service

scpdn
SCCP DN MFC service

scpelap
SCCP ELAP MFC service

scpepap
SCCP EPAP MFC service

scpimsi
SCCP IMSI MFC service

slan
SLAN MFC service

snm
SNM MFC service

vsccp
VSCCP MFC service

Example

```
rept-stat-mfc
rept-stat-mfc:service=vsccp:mode=act
rept-stat-mfc:service=eroute
rept-stat-mfc:service=eroute:reset=yes
rept-stat-mfc:service=slan:mode=full
rept-stat-mfc:mode=stats:service=vsccp:sample=avg30s
rept-stat-mfc:mode=stats:service=scpimsi:sample=avg30s
rept-stat-mfc:service=scpepap
rept-stat-mfc:service=scpelap
```

Dependencies

No other command can be in progress when this command is entered.

The mode=stats and sample parameters must be specified together in the command.

If the mode or reset parameter is specified, then the service parameter must be specified.

If a value of *mtp3*, *snm*, or *inm* is specified for the appl parameter, then the mode=act parameter cannot be specified.

The EPAP Data Split feature must be enabled before a value of *scpdn* or *scpimsi* can be specified for the service parameter.

The Dual ExAP Config feature must be enabled before a value of *scpepap* or *scpelap* can be specified for the service parameter.

If both Dual ExAP Config and EPAP Data Split features are enabled *scpepap* cannot be specified.

Output

Abbreviated output is indicated by 3 vertical dots as shown:

.

.

.

If the card does not support thermal monitoring, and if an MFC service is hosted on that card, then N/A is shown in the *THERMAL* column for that card location in `rept-stat-mfc:mode=act` output.

The *UNAVL* state in the output of `rept-stat-mfc:mode=full` indicates the cards that are not in the IS-NR state.

This example shows an MFC report for all the services when EPAP Data Split feature is enabled:

`rept-stat-mfc`

```
    epap240m 12-01-29 14:50:03 CST  EAGLE 45.0.0
    Service   Type      Total
    ------------------------------
    SLAN      SERVER     0
    SLAN      CLIENT     9
    SNM       SYSTEM     13
    INM       SYSTEM     13
    MTP3      SERVER     9
    MTP3      CLIENT     13
    EROUTE    SERVER     0
    EROUTE    CLIENT     11
    VSCCP     SERVER     4
    VSCCP     CLIENT     9
    SCPDN     SERVER     3
    SCPDN     CLIENT     9
    SCPIMSI   SERVER     3
    SCPIMSI   CLIENT     9
    ------------------------------

    Command Completed.
;
```

This example shows an MFC report for all the services when Dual ExAP Config feature is enabled:

rept-stat-mfc

```
    epap240m 12-01-29 14:50:03 CST  EAGLE 45.0.0
    Service   Type      Total
    ------------------------------
    SLAN      SERVER     0
    SLAN      CLIENT     9
    SNM       SYSTEM     13
```

```
    INM       SYSTEM     13
    MTP3      SERVER     9
    MTP3      CLIENT     13
    EROUTE    SERVER     0
    EROUTE    CLIENT     11
    VSCCP     SERVER     4
    VSCCP     CLIENT     9
    SCPEPAP   SERVER     3
    SCPEPAP   CLIENT     9
    SCPELAP   SERVER     1
    SCPELAP   CLIENT     0
    ----------------------------

    Command Completed.
;
```

This example shows a full report for the EROUTE MFC service:

```
rept-stat-mfc:service=eroute:mode=full
```

```
    rlghncxa03w 11-03-04 13:46:07 EST  EAGLE 44.0.0
    LOC    SERVICE   STATE   SERVER  CLIENT
    --------------------------------------
    1101   EROUTE    IS-NR             X
    1103   EROUTE    UNAVL             X
    1105   EROUTE    UNAVL     X
    1106   EROUTE    IS-NR     X
    1113   EROUTE    IS-NR             X
    1115   EROUTE    UNAVL             X
    --------------------------------------
    Totals  6                 2       4

    Command Completed.
;
```

This example shows the EROUTE service 30 second average data calculated over the previous 5 minutes:

```
rept-stat-mfc:service=eroute:mode=stats:sample=avg30s
```

```
    rlghncxa03w 11-03-04 14:36:07 EST  EAGLE 44.0.0
    PER CARD EROUTE SERVER DATA, 30-SEC AVG VALUES CALCULATED OVER PREV 5 MIN

                               SRVC_RQSTS_RCVD                NUM_APPL_ORIG
    FC         MSEC       ----------------------------    --------------------

    EVENTS     IN FC      OUT_FC     IN_FC      DACT       DACTS      FC
    ------------------------------------------------------------------------------

     0          0          568       0          0          0          0
    CARD LOC:   1217   LAST 5 CLIENTS:  1101,1308,1308,1102,1102

    0          0          0          0          0          0          0
    CARD LOC:   1218   LAST 5 CLIENTS:  0   ,0   ,0   ,0   ,0

    ------------------------------------------------------------------------------

    TOTAL SRVC RQSTS RCVD: 568


    PER CARD EROUTE CLIENT DATA, 30-SEC AVG VALUES CALCULATED OVER PREV 5 MIN
```

```
    SVC         SVC         PDUS        PDUS        SRVR        ON_SHLF
    RQSTS       DENIED      SENT        DSCRD       RESLCTD     NOT_AVL
    ------------------------------------------------------------------------

    95          0           195          0           0           0
    CARD LOC:   1101   LAST 5 SERVERS:  1217,0   ,0   ,0   ,0

    96          0           196          0           0           0
    CARD LOC:   1102   LAST 5 SERVERS:  1217,0   ,0   ,0   ,0

    96          0           96          0           0           0
    CARD LOC:   1103   LAST 5 SERVERS:  1217,0   ,0   ,0   ,0

    47          0           47          0           0           0
    CARD LOC:   1308   LAST 5 SERVERS:  1217,0   ,0   ,0   ,0

    ------------------------------------------------------------------------

    SYSTEM TOTALS: PDUs SENT = 1326690530,  PDUs DSCRD = 94670548


    Command Completed.
;
```

This example shows the MFC status of all the EROUTE Service Cards:

```
rept-stat-mfc:appl=eroute:mode=act
```

```
    rlghncxa03w 11-03-04 15:26:07 EST  EAGLE 44.0.0
    PER CARD EROUTE SERVER ACTIVATION DATA
                                IP LINK
    LOC     STATUS    THERMAL   STATUS
    ---------------------------------------
    1201    ACT        OK        OK
    1202    ACT        N/A       OK
    1204    UNAVL      ---       ---
    2215    DACT       BAD       OK
    2216    DACT       N/A       BAD
    4214    ACT        OK        OK
    4215    DACT       OK        BAD
    ---------------------------------------

    Command Completed.
;
```

This example resets the MFC engine statistics at server side and resets application level statistics at client side, for the EROUTE service:

```
rept-stat-mfc:service=eroute:reset=yes
```

```
    rlghncxa03w 11-03-06 13:36:07 EST  EAGLE 44.0.0

    Command Completed.
;
```

This example shows the MFC report for the EROUTE service.

```
rept-stat-mfc:service=eroute
```

```
    rlghncxa03w 11-03-04 13:37:27 EST  EAGLE 44.0.0
    Service   Type      Total
```

```
    ----------------------------
    EROUTE    SERVER     2
    EROUTE    CLIENT     4
    ----------------------------

    Command Completed.
;
```

This example shows the MFC status of all the SLAN Service Cards. This example displays abbreviated output.

`rept-stat-mfc:service=slan:mode=act`

```
    rlghncxa03w 11-03-04 16:36:07 EST  EAGLE 44.0.0
    PER CARD SLAN SERVER ACTIVATION DATA
                                IP LINK   IP LINK      IP LINK
    LOC     STATUS    THERMAL   STATUS    CONGESTION   ACTIVATION
    ------------------------------------------------------------
    1106    ACT        OK        OK        OK           OK
    1201    ACT        OK        OK        OK           OK
    1204    UNAVL      ---       ---       ---          ---
    2215    DACT       N/A       OK        BAD          OK
      .
      .
      .
    4214    ACT        OK        OK        OK           OK
    ------------------------------------------------------------

    Command Completed.
;
```

This example shows the MFC status of all the VSCCP Service Cards. This example displays abbreviated output.

`rept-stat-mfc:service=vsccp:mode=act`

```
    rlghncxa03w 11-03-04 13:36:57 EST  EAGLE 44.0.0
    PER CARD VSCCP SERVER ACTIVATION DATA

    LOC     STATUS    THERMAL
    -------------------------
    1201    ACT        OK
    1204    UNAVL      ---
    1217    ACT        OK
    2215    ACT        N/A
      .
      .
      .
    4214    ACT        OK
    -------------------------

    Command Completed.
;
```

This example shows the MTP3 service 30 second average data calculated over the previous 5 minutes: The server stats will be shown as "-" for SCCP card location.

`rept-stat-mfc:service=mtp3:mode=stats:sample=avg30s`

```
    rlghncxa03w 11-03-04 11:36:07 EST  EAGLE 44.0.0
    PER CARD MTP3 SYSTEM DATA, 30-SEC AVG VALUES CALCULATED OVER PREV 5 MIN
```

```
                SERVER STATS                    CLIENT STATS
         --------------------------      ----------------------------
         FC         MSEC       PDUS      PDUS       PDUS       SRV REQ
LOC     EVENTS     IN FC      RCVD      SENT       DSCRD      DENIED
--------------------------------------------------------------------------

1101    0          0          0         0          0          0
1103    0          0          0         0          0          0
1107    0          0          0         0          0          0
1207    -          -          -         0          0          0
1208    0          0          0         0          0          0
1211    0          0          0         0          0          0
1212    0          0          0         0          0          0
1213    0          0          0         0          0          0
1214    0          0          0         0          0          0
1215    -          -          -         0          0          0
1216    -          -          -         0          0          0
1301    0          0          0         0          0          0
1305    0          0          0         0          0          0
1306    0          0          0         0          0          0
1307    0          0          0         0          0          0
1308    0          0          0         0          0          0
1311    0          0          0         0          0          0
1312    0          0          0         0          0          0
1313    0          0          0         0          0          0
1315    0          0          0         0          0          0
--------------------------------------------------------------------------


Command Completed.
;
```

This example shows a full MFC report for the SNM service:

`rept-stat-mfc:service=snm:mode=full`

```
rlghncxa03w 11-03-04 13:36:07 EST  EAGLE 44.0.0
LOC    SERVICE   STATE   SYSTEM
-------------------------------
1101   SNM       IS-NR     X
1103   SNM       UNAVL     X
1107   SNM       IS-NR     X
1111   SNM       UNAVL     X
-------------------------------
Totals 4                   4

Command Completed.
;
```

This example shows the SNM service 30 second average data calculated over the previous 5 minutes:

`rept-stat-mfc:service=snm:mode=stats:sample=avg30s`

```
rlghncxa03w 11-03-04 13:36:07 EST  EAGLE 44.0.0
PER CARD SNM SYSTEM DATA, 30-SEC AVG VALUES CALCULATED OVER PREV 5 MIN

                SERVER STATS                    CLIENT STATS
         --------------------------      ----------------------------
         FC         MSEC       PDUS      PDUS       PDUS       SRV REQ
LOC     EVENTS     IN FC      RCVD      SENT       DSCRD      DENIED
--------------------------------------------------------------------------
```

```
    1101   0          0          0          0          0          0
    1103   0          0          0          0          0          0
    1107   0          0          0          0          0          0
    1207   0          0          0          0          0          0
    1208   0          0          0          0          0          0
    1211   0          0          0          0          0          0
    1212   0          0          0          0          0          0
    1213   0          0          0          0          0          0
    1214   0          0          0          0          0          0
    1215   0          0          0          0          0          0
    1216   0          0          0          0          0          0
    1301   0          0          0          0          0          0
    1305   0          0          0          0          0          0
    1306   0          0          0          0          0          0
    1307   0          0          0          0          0          0
    1308   0          0          0          0          0          0
    1311   0          0          0          0          0          0
    1312   0          0          0          0          0          0
    1313   0          0          0          0          0          0
    1315   0          0          0          0          0          0
    ------------------------------------------------------------------------------


    Command Completed.
;
```

This example shows an MFC report for the MTP3 service:

`rept-stat-mfc:service=mtp3:mode=full`

```
    rlghncxa03w 11-03-04 13:06:07 EST  EAGLE 44.0.0
    LOC    SERVICE   STATE   SERVER  CLIENT
    ---------------------------------------
    1101   MTP3      IS-NR     X       X
    1103   MTP3      UNAVL     X       X
    1107   MTP3      IS-NR             X
    1111   MTP3      UNAVL             X
    ---------------------------------------
    Totals  6                  2       4

    Command Completed.
;
```

This example shows an MFC report for the SCPEPAP service when Dual ExAP Config feature is enabled.

rept-sta-mfc:service=scpelap:mode=full

```
   rlghncxa03w 11-03-04 13:06:07 EST EAGLE 45.0.0
   LOC    SERVICE   STATE    SERVER   CLIENT
   -------------------------------------------
   1105   SCPELAP   IS-NR       X
   -------------------------------------------
   Totals   1                   1      0

    Command Completed.
 ;
```

Legend

The MFC Engine provides Server card statistics that are computed every hour (based on a Server card's timer); therefore they are typically posted an hour later. Client card statistics update continously; current values will be observed at every invocation of the command.

Related Commands

None.

rept-stat-mon

Report Status Monitoring System

Use this command to display the status of the Fast Copy subsystem on FC-capable cards and the EROUTE subsystem on STC cards and E5-STC cards for the EAGLE 5 Integrated Monitoring Support (E5IS) feature.

Parameters

loc (optional)

Card location. The card location as stenciled on the shelf for an STC or E5-STC card or an FC-capable card in the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

Status for all STC and FC-capable cards is reported.

mode (optional)

This parameter provides extended performance information, including group ticket voucher (TVG) or message flow control (MFC) messaging rates.

If the mode=perf parameter is specified, then only subsystem performance information is displayed.

Range:

perf

type (optional)

Monitoring subsystem type. The type of the subsystem for which the monitoring statistics are displayed.

Range:

fcs

Display the statistics for the Fast Copy subsystem

eroute

Display the statistics for the EROUTE subsystem

Default:

Display the statistics for both the EROUTE and FC subsystems

Example

```
rept-stat-mon
rept-stat-mon:type=eroute
rept-stat-mon:type=fcs
rept-stat-mon:type=eroute:loc=1101
rept-stat-mon:type=fcs:loc=1104
rept-stat-mon:type=eroute:mode=perf
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

At least one STC card must be configured before this command can be entered.

At least one FC-capable card must be provisioned in the system before the type=fcs parameter can be specified.

The loc and mode parameters cannot be specified together in the command.

The type=eroute parameter must be specified before the mode parameter can be specified.

If the loc or mode parameter is specified, then the type parameter must be specified.

Either an STC card or an FC-capable card must be provisioned in the system.

An FC-capable card must be provisioned in the system before the type=fcs parameter can be specified. An STC card must be provisioned in the system before the type=eroute parameter can be specified.

Notes

Fast Copy Cards

E5-ENET or E5-ENET-B cards running the IPSG or IPGHC GPL are considered to be *FC- capable*. A card running the IPGHC GPL must be in the IS-NR State before the card can be considered *FC- capable*. This restriction does not apply to cards running the IPSG GPL. An *FC- capable* card is considered *FC-enabled* when Fast Copy monitoring is enabled for the respective GPL.

For a card to be FC monitored, the following two conditions must be satisfied:

1. FCMODE = FCOPY for the GPL
2. The card must have at least one (1) link with an EMP session established.

When a card is not being FC-Monitored, no FC alarm will be present on the card/port. The card's FCS state remains OFFLINE and the state of FCS ports on the card is OOS-MA/UEQ irrespective of the Ethernet cable being connected on those ports or not.

Output

Note: For an E5-ENET card running the IPGHC GPL, Fast Copy card and link status are displayed in the command output only when the card is in the IS-NR state.

This example displays card- and system-level information for the Fast Copy and EROUTE subsystems:

```
rept-stat-mon
```

```
    rlghncxa03w 11-02-04 16:35:57 IST  EAGLE 44.0.0
    EROUTE SUBSYSTEM REPORT IS-NR          Active     -----
    STC Cards Configured= 4  Cards IS-NR= 2
    EISCOPY BIT = ON
    System Threshold = 80% Total Capacity
    System Peak EROUTE Load:            7080 Buffers/Sec
    System Total EROUTE Capacity:      12000 Buffers/Sec

    SYSTEM ALARM STATUS = No Alarms.

    CARD   VERSION      PST           SST        AST       MESSAGE   CPU
                                                           USAGE     USAGE
    ------------------------------------------------------------------------
    1101   052-008-000  IS-NR         Active     -----      63%      28%
    1103   052-008-001  IS-NR         Active     -----      55%      28%
    1105   255-255-255  OOS-MT        Isolated   -----       0%      0%
    1205   255-255-255  OOS-MT        Isolated   -----       0%      0%
    ------------------------------------------------------------------------
    EROUTE Service Average Messaging Capacity =  59%
    Average CPU Capacity =  28%

    CARDS DENIED EROUTE SERVICE:

    ========================================================================

    FAST COPY SUBSYSTEM REPORT IS-NR          Active     -----
    FC Cards Configured= 3  Cards IS-NR= 3
    SYSTEM ALARM STATUS = No Alarms.

    GPL         FCMODE
    ------------------
    IPSG        FCOPY
    IPGHC       FCOPY
    ------------------

    CARD  GPL    PST          SST        CPU   CARD FCS
    ------------------------------------------------------
    1201  IPSG   IS-NR        Active     34%   ALLOWED
    1202  IPSG   IS-NR        Active     55%   ALLOWED
    1203  IPGHC  IS-NR        Active     10%   ALLOWED
    ------------------------------------------------------
    Command Completed.
;
```

This example displays card- and system-level information for the EROUTE subsystem:

```
rept-stat-mon:type=eroute
```

```
    rlghncxa03w 11-03-11 16:35:57 IST  EAGLE 44.0.0
    EROUTE SUBSYSTEM REPORT IS-NR          Active     -----
    STC Cards Configured= 4  Cards IS-NR= 2
    EISCOPY BIT = ON
    System Threshold = 80% Total Capacity
    System Peak EROUTE Load:            7080 Buffers/Sec
    System Total EROUTE Capacity:      12000 Buffers/Sec

    SYSTEM ALARM STATUS = No Alarms.

    CARD   VERSION      PST           SST        AST       MESSAGE    CPU
                                                           USAGE      USAGE
    ------------------------------------------------------------------------
    1101   052-008-000  IS-NR         Active     -----       63%       28%
    1103   052-008-001  IS-NR         Active     -----       55%       28%
    1203   255-255-255  OOS-MT        Isolated   -----        0%        0%
    1205   255-255-255  OOS-MT        Isolated   -----        0%        0%
    ------------------------------------------------------------------------
    EROUTE Service Average Messaging Capacity =  59%
    Average CPU Capacity =  28%

    CARDS DENIED EROUTE SERVICE:

    Command Completed.
;
```

This example displays card- and system-level information for the Fast Copy subsystem:

```
rept-stat-mon:type=fcs
```

```
    rlghncxa03w 10-02-02 16:35:57 IST  EAGLE 42.0.0
    FAST COPY SUBSYSTEM REPORT IS-NR          Active     -----
    FC Cards Configured= 3  Cards IS-NR= 3
    SYSTEM ALARM STATUS = No Alarms.

    FAST COPY OPTIONS
    ---------------------------------
    FCGPL = IPSG      FCMODE = FCOPY
    FCGPL = IPGHC     FCMODE = FCOPY
    ---------------------------------

    CARD  GPL    PST          SST         CPU  CARD FCS
    ------------------------------------------------------
    1201  IPSG   IS-NR        Active      34%  ALLOWED
    1202  IPSG   IS-NR        Active      55%  ALLOWED
    1203  IPGHC  IS-NR        Active      10%  ALLOWED
    ------------------------------------------------------

    Command Completed.
;
```

The following example shows status of FC ports on a FC capable card when the card is not being FC-Monitored:

```
rept-stat-mon:type=fcs:loc=1107
```

```
   rlghncxa03w 10-01-09 16:35:57 IST  EAGLE 42.0.0
```

```
      CARD  GPL    PST          SST         CPU  CARD FCS
      1107  IPSG   IS-NR        Active      21%  OFFLINE
      ALARM STATUS = No Alarms.

      FCS IP PORT A1:        OOS-MA       Ueq        -----
      ALARM STATUS = No Alarms.
      FCS IP PORT B1:        OOS-MA       Ueq        -----
      ALARM STATUS = No Alarms.

      IMF CONNECTION STATUS TABLE
     ------------------------------------------------------------------------

      IPADDRESS           ALM ID  ASSOC NAME      PKT CNT       SERVICE MODE
     ------------------------------------------------------------------------


      PORT ALARM STATUS
     ------------------------------------------------------------------------

      PORT ID ALARM ID   REASON
     ------------------------------------------------------------------------


      Command Completed.

;
```

This example displays EROUTE subsystem information for the specified card:

```
rept-stat-mon:type=eroute:loc=1101
```

```
    rlghncxa03w 10-01-09 16:35:57 IST  EAGLE 42.0.0
    CARD   VERSION      TYPE    PST           SST          AST
    1101   052-008-000  STC     IS-NR         Active       -----
    CARD ALARM STATUS = No Alarms.
    TOTAL CPU USAGE = 28%
    NTP broadcast = VALID
    STC IP CONNECTION
        PORT   PST            SST
        A      OOS-MT         Unavail
        B      OOS-MT         Unavail

    Command Completed.
;
```

This example displays Fast Copy subsystem information for the specified card. (A) or (B) in the IMF CONNECTION STATUS TABLE indicates the Fast Copy A or Fast Copy B network, respectively.

```
rept-stat-mon:type=fcs:loc=1203
```

```
    rlghncxa03w 10-02-02 16:35:57 IST  EAGLE 42.0.0
    CARD  GPL    PST          SST         CPU  CARD FCS
    1203  IPGHC  IS-NR        Active      10%  ALLOWED
    ALARM STATUS = No Alarms.

    FCS IP PORT A1:        IS-NR        Active     -----
    ALARM STATUS = No Alarms.
    FCS IP PORT B1:        IS-NR        Active     -----
    ALARM STATUS = No Alarms.
```

```
    IMF CONNECTION STATUS TABLE
    ------------------------------------------------------------------------

    IPADDRESS           ALM ID  ASSOC NAME     PKT CNT        SERVICE MODE
    ------------------------------------------------------------------------

    172.21.48.15    (A) 582     sg1203a21      100            Copy Rx MSUs
    172.22.48.15    (B) 582     sg1203a22      200            Copy Tx MSUs

    PORT ALARM STATUS
    ------------------------------------------------------------------------

    PORT ID ALARM ID   REASON
    ------------------------------------------------------------------------

    A       583        Mismatched Fast Copy Network Addresses

    Command Completed.
;
```

This example displays EROUTE subsystem performance statistics:

`rept-stat-mon:type=eroute:mode=perf`

```
    rlghncxa03w 11-03-11 16:35:57 IST  EAGLE 44.0.0
    EROUTE SUBSYSTEM REPORT IS-ANR         Ovrflw=1       -----
    STC Cards Configured= 2  Cards IS-NR= 2
    EISCOPY BIT = ON
    System Threshold = 80% Total Capacity
    System Peak EROUTE Load:           12200 Buffers/Sec
    System Total EROUTE Capacity:      12000 Buffers/Sec

    SYSTEM ALARM STATUS =  *  0482 Card(s) have been denied EROUTE service

    STATISTICS
    ==================================================================
    CARD    CPU USAGE   MESSAGE RATE
    ------------------------------------------------------------------
    1104     55%        6200
    1112     50%        6000
    ------------------------------------------------------------------
    AVERAGE MESSAGING CAPACITY = 80%
    AVERAGE CPU USAGE = 27%
    TOTAL MESSAGING RATE = 12200

    CARDS DENIED EROUTE SERVICE:  1302, 1305

    Command Completed.
;
```

This example displays output when FC-capable cards are configured, and the Fast Copy mode is turned off:

`rept-stat-mon:type=fcs`

```
    rlghncxa03w 10-02-02 16:35:57 IST  EAGLE 42.0.0
    FAST COPY SUBSYSTEM REPORT OOS-MA        Ueq       -----
    FC Cards Configured= 2  Cards IS-NR= 1
    SYSTEM ALARM STATUS = No Alarms.
```

```
    FAST COPY OPTIONS
    --------------------------------
    FCGPL = IPSG      FCMODE = OFF
    FCGPL = IPGHC     FCMODE = OFF
    --------------------------------

    CARD  GPL    PST          SST         CPU  CARD FCS
    ------------------------------------------------------
    1105  IPSG   OOS-MT       Isolated     0%  OFFLINE
    1106  IPGHC  IS-NR        Active      15%  OFFLINE
    ------------------------------------------------------

    Command Completed.
;
```

This example displays card- and system-level information when the Fast Copy subsystem is in the OOS-MT/Uavail state:

```
rept-stat-mon:type=fcs
```

```
    rlghncxa03w 10-02-02 16:35:57 IST  EAGLE 42.0.0
    FAST COPY SUBSYSTEM REPORT OOS-MT         Unavail    -----
    FC Cards Configured= 2  Cards IS-NR= 2
    SYSTEM ALARM STATUS =  *  0597 FC System is Deactivated

    FAST COPY OPTIONS
    --------------------------------
    FCGPL = IPSG      FCMODE = FCOPY
    FCGPL = IPGHC     FCMODE = FCOPY
    --------------------------------

    CARD  GPL    PST          SST         CPU  CARD FCS
    ------------------------------------------------------
    1105  IPSG   IS-NR        Active      12%  DEACTIVATED
    1106  IPGHC  IS-NR        Active      10%  DEACTIVATED
    ------------------------------------------------------

    Command Completed.
;
```

This example displays Fast Copy subsystem information for the specified card when the card is in a DEACTIVATED state:

```
rept-stat-mon:type=fcs:loc=1105
```

```
    rlghncxa03w 10-02-02 16:35:57 IST  EAGLE 42.0.0
    CARD  GPL    PST          SST         CPU  CARD FCS     REASON
    1105  IPSG   IS-NR        Active      12%  DEACTIVATED  CPU Thrshld Exceeded

    ALARM STATUS = **  0590 Fast Copy Application De-activated

    FCS IP PORT A1:         IS-ANR       Restrict   -----
    ALARM STATUS = **  0588 FC Port De-activated
    FCS IP PORT B1:         IS-ANR       Restrict   -----
    ALARM STATUS = **  0588 FC Port De-activated

    IMF CONNECTION STATUS TABLE
    ------------------------------------------------------------------------------

    IPADDRESS           ALM ID  ASSOC NAME     PKT CNT        SERVICE MODE
```

```
    ------------------------------------------------------------------------

    172.21.48.15    (A) 582     sg1203a21      100            Copy Rx MSUs
    172.22.48.15    (B) 582     sg1203a22      200            Copy Tx MSUs

    PORT ALARM STATUS
    ------------------------------------------------------------------------

    PORT ID ALARM ID   REASON
    ------------------------------------------------------------------------


    Command Completed.
;
```

Legend

Information displayed in the EROUTE subsystem report:

- **STC Cards Configured**—Total number of STC cards and E5-STC cards configured in the system
- **Cards IS-NR**—Total number of STC cards and E5-STC cards in IS-NR state
- **EISCOPY BIT**—Indicates whether EIS copy function is turned On or Off
- **System Threshold**—% of system total capacity being used
- **System Peak EROUTE Load**—Current load in Buffers/Sec
- **System Total EROUTE Capacity**—Total capacity in Buffers/Sec
- **SYSTEM ALARM STATUS**—Either "No Alarms" or current alarm number and text
- **CARD**—Card location
- **VERSION**—Version number of the GPL loaded on the card. Dashes (- - - - -) in the version column indicate one of the following conditions about the card:
  - The card does not run a GPL, such as TDM or MDAL cards.
  - The card is configured but is not physically present in the system.
  - The card is IS-ANR or is in the process of being loaded.
- **TYPE—**Card type entered in the database
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the card. See *Possible Values for PST/SST/AST*.
- **EROUTE Service Average Messaging Capacity\AVERAGE MESSAGING CAPACITY**—Average TVG/MFC Capacity in percent
- **Average CPU Capacity\Average CPU Usage**—Average CPU capacity in percent
- **Message usage**—% of system current TVG/MFC rate based on the Max TVG/MFC capacity of the E5-ENET card
- **TOTAL MESSAGING RATE**—Total TVG/MFC processing rate
- **CPU usage**—% of system current CPU usage
- **STC IP PORT**—Status of the STC IP ports A and B

Information displayed in the Fast Copy subsystem report:

- **FC Cards Configured**—Total number of FC-capable cards configured in the system
- **Cards IS-NR**—Total number of FC-capable cards in IS-NR state
- **FCMODE**—Monitoring mode

- **GPL**—Application loaded on the card
- **SYSTEM ALARM STATUS**—Either "No Alarms" or current alarm number and text
- **CARD**—Card location
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- **CPU**—% of system current CPU usage
- **CARD FCS**—Fast Copy status for the card
- **REASON**—Deactivation alarm reason on Card FCS. Possible values are "CPU Thrshld Exceeded" or "Auto-Neg Fails".
- **FCS IP PORT**—status of the FCS IP ports A1 and B1
- **IPADDRESS**—IP addresses of the IMF
- **ASSOC NAME**—Association name
- **PKT CNT**—Snapshot of packets received/sent per association
- **SERVICE MODE**—Type of service granted by the DAS to FC-enabled card

Related Commands

None.

rept-stat-mps

Report the MPS Status

Use this command to display the overall status of the application running on the MPS (multi-purpose server).

- If the LNP ELAP Configuration feature is turned on, the ELAP (EAGLE LNP Application Processor) subsystem status is displayed.
- If the INP/AINPQ feature is turned on, the EPAP (EAGLE Application Processor) subsystem status is displayed.
- If the G-Port (GSM mobile number portability), G-Flex (GSM flexible numbering), or PPSMS (Prepaid SMS Intercept Ph1) feature is turned on, then the GSM (Global System for Mobile Telecommunications) and EPAP status is displayed.
- If the EIR (Equipment Identity Register) feature is turned on, then the status of the EIR component on the card is displayed.
- If the V-Flex (Voice Mail Router) feature is turned on, then the status of the V-Flex component on the card is displayed.
- If the ATINP (ATI Number Portability Query) feature is enabled, then the status of the ATINPQ component on the card is displayed.

Parameters

loc (optional)

The card location of the VSCCP card to be reported on, as stenciled on the shelf of the EAGLE.

Range:

1101 - 1108, 1111 - 1117, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 -

4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
rept-stat-mps:loc=1106
```

Dependencies

One of the following features must be turned on, the ATINP feature must be enabled, or at least one ENUM card must be configured before this command can be entered:

- A-Port
- AINPQ
- DEIR
- G-Flex
- G-Port
- INP
- EIR
- LNP ELAP Configuration
- Prepaid SMS Intercept Ph1
- SIP NP
- V-Flex

At least one Service Module card must be configured in the system before this command can be entered.

The card location specified in the loc parameter must be provisioned as an SCCP card but cannot provide only GTT service.

To specify the `rept-stat-mps` command, no other `rept-stat-xxxx` command can be in progress.

The card location specified in the loc parameter must contain either an SCCP card, a SIP card, an ENUM card, or a DEIR card running the DEIRHC gpl.

A Service Module card running the VSCCP/SIPHC/DEIRHC/ENUMHC application must be configured before this command can be entered.

Notes

When the MPS does not have an alarm on it, the `rept-stat-mps` report indicates in the SST field of the report which MPS is the active and which is the standby. When the MPS has an alarm on it, the SST field shows "Fault," and the Active/Standby information is displayed in the AST field as long as there is an alarm. After the alarm clears, the Active/Standby information appears in the SST field as before.

Output

Note: The status for a particular feature is shown only if that feature is enabled or turned on.

This example shows the possible system response if the LNP ELAP Configuration feature is turned on:

```
rept-stat-mps
```

```
    rlghncxa03w 09-01-07 10:23:93 EST  EAGLE 40.0.0
                       VERSION       PST            SST        AST
    ELAP A             027-015-000   OOS-MT         Fault     Standby
    CRITICAL PLATFORM    ALARM DATA = No Alarms
    MAJOR    PLATFORM    ALARM DATA = h'0123456789ABCDEF
    MINOR    PLATFORM    ALARM DATA = h'0123456789ABCDEF
    CRITICAL APPLICATION ALARM DATA = No Alarms
    MAJOR    APPLICATION ALARM DATA = h'0123456789ABCDEF
    MINOR    APPLICATION ALARM DATA = No Alarms
          ALARM STATUS = ** 0371  Major Platform Failure(s)

                      VERSION       PST            SST        AST
    ELAP B            027-015-000   OOS-MT         Fault     Active
    CRITICAL PLATFORM    ALARM DATA = No Alarms
    MAJOR    PLATFORM    ALARM DATA = No Alarms
    MINOR    PLATFORM    ALARM DATA = No Alarms
    CRITICAL APPLICATION ALARM DATA = h'0123456789ABCDEF
    MAJOR    APPLICATION ALARM DATA = h'0123456789ABCDEF
    MINOR    APPLICATION ALARM DATA = No Alarms
          ALARM STATUS = *C 0373  Critical Application Failure(s)

    CARD   PST          SST       LNP STAT
    1106 P IS-NR        Active    ACT
    1201   IS-ANR       Active    SWDL
    1205   OOS-MT-DSBLD Manual    -------
    1302   OOS-MT       Isolated  -------
    1310   IS-ANR       Standby   SWDL

   CARD 1106 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = No Alarms
      DSM PORT B:      ALARM STATUS       = No Alarms
    CARD 1201 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = **  0084 IP Connection Unavailable
      DSM PORT B:      ALARM STATUS       = **  0084 IP Connection Unavailable
    CARD 1205 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = **  0084 IP Connection Unavailable
      DSM PORT B:      ALARM STATUS       = **  0084 IP Connection Unavailable
    CARD 1302 ALARM STATUS = ** 0013 Card is isolated from the system
      DSM PORT A:      ALARM STATUS       = **  0084 IP Connection Unavailable
      DSM PORT B:      ALARM STATUS       = **  0084 IP Connection Unavailable
    CARD 1310 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = **  0084 IP Connection Unavailable
      DSM PORT B:      ALARM STATUS       = **  0084 IP Connection Unavailable
    Command Completed.
;
```

Possible system response when a specific card is queried, and the INP or AINP feature is turned on:

```
rept-stat-mps:loc=1205
```

```
   rlghncxa03w 04-01-07 10:23:93 EST  EAGLE 31.3.0
   CARD   VERSION       TYPE    PST           SST          AST
   1205   -----------   DSM     OOS-MT-DSBLD  Manual       -----
     DSM PORT A                 OOS-MT        Unavail      -----
              ALARM STATUS       = **  0084 IP Connection Unavailable
     DSM PORT B                 OOS-MT        Unavail      -----
```

```
              ALARM STATUS       = **  0084 IP Connection Unavailable
     INP STAT           = -------
     CARD ALARM STATUS  = No Alarms.
     DSM MEMORY USAGE   = 0%
   Command Completed.
;
```

Possible system response when a specific card is queried, and the EIR feature and the G-Flex, G-Port, or PPSMS feature are turned on. The example also shows that DSM Port A has an IP Connection Unavailable alarm due to failed channels Dnld, TCP, and UDP. DSM Port B has an IP Connection Unavailable alarm due to failed channels Dnld and TCP.

```
rept-stat-mps:loc=1205
```

```
    Integrat40 05-05-24 10:37:22 EST  EAGLE5 34.0.0
    CARD   VERSION       TYPE    PST            SST          AST
    1205   -----------   DSM     OOS-MT-DSBLD   Manual       -----
      DSM PORT A                 OOS-MT         Unavail      -----
                ALARM STATUS       = **  0084 IP Connection Unavailable
      DSM PORT B                 OOS-MT         Unavail      -----
                ALARM STATUS       = **  0084 IP Connection Unavailable
      GSM STAT           = -------
      EIR STAT           = -------
      CARD ALARM STATUS  = No Alarms.
      DSM MEMORY USAGE   = 0%
    Command Completed.
;
```

Possible system response if a specific card is queried, and the G-Flex or G-Port feature and the V-Flex feature are turned on:

```
rept-stat-mps:loc=1205
```

```
    Integrat40 08-05-07 11:37:24 EST  EAGLE5 39.0.0
    CARD   VERSION       TYPE    PST            SST          AST
    1205   -----------   DSM     OOS-MT-DSBLD   Manual       -----
      DSM PORT A                 OOS-MT         Unavail      -----
                ALARM STATUS       = **  0084 IP Connection Unavailable
      DSM PORT B                 OOS-MT         Unavail      -----
                ALARM STATUS       = **  0084 IP Connection Unavailable
      GSM STAT           = -------
      VFLEX STAT         = -------
      CARD ALARM STATUS  = No Alarms.
      DSM MEMORY USAGE   = 0%
    Command Completed.
;
```

Possible system response if the EIR, INP or AINPQ, V-Flex, and the G-Port, G-Flex, or PPSMS features are turned on, and the ATINP feature is enabled.

```
rept-stat-mps
```

```
    rlghncxa03w 09-01-07 10:23:93 EST  EAGLE 40.0.0
                       VERSION       PST            SST        AST
    EPAP A             027-015-000   IS-NR          Active    -----
    CRITICAL PLATFORM    ALARM DATA = No Alarms
    MAJOR    PLATFORM    ALARM DATA = No Alarms
    MINOR    PLATFORM    ALARM DATA = No Alarms
```

```
    CRITICAL APPLICATION ALARM DATA = No Alarms
    MAJOR    APPLICATION ALARM DATA = No Alarms
    MINOR    APPLICATION ALARM DATA = No Alarms
          ALARM STATUS = No Alarms

                       VERSION       PST            SST        AST
    EPAP B             027-015-000   OOS-MT         Fault     Standby
    CRITICAL PLATFORM    ALARM DATA = No Alarms
    MAJOR    PLATFORM    ALARM DATA = No Alarms
    MINOR    PLATFORM    ALARM DATA = No Alarms
    CRITICAL APPLICATION ALARM DATA = No Alarms
    MAJOR    APPLICATION ALARM DATA = No Alarms
    MINOR    APPLICATION ALARM DATA = No Alarms
          ALARM STATUS = No Alarms

    CARD   PST          SST       GSM STAT
    1106 P IS-NR        Active    ACT
    1201   IS-ANR       Active    SWDL
    1205   OOS-MT-DSBLD Manual    -------
    1302   OOS-MT       Isolated  -------
    1310   IS-ANR       Standby   SWDL
    CARD   PST          SST       INP STAT
    1106 P IS-NR        Active    ACT
    1201   IS-ANR       Active    SWDL
    1205   OOS-MT-DSBLD Manual    -------
    1302   OOS-MT       Isolated  -------
    1310   IS-ANR       Standby   SWDL
    CARD   PST          SST       EIR STAT
    1106 P IS-NR        Active    ACT
    1201   IS-ANR       Active    SWDL
    1205   OOS-MT-DSBLD Manual    -------
    1302   OOS-MT       Isolated  -------
    1310   IS-ANR       Standby   SWDL
    CARD   PST          SST       V-FLEX STAT
    1106 P IS-NR        Active    ACT
    1201   IS-ANR       Active    SWDL
    1205   OOS-MT-DSBLD Manual    -------
    1302   OOS-MT       Isolated  -------
    1310   IS-ANR       Standby   SWDL
    CARD   PST          SST       ATINPQ STAT
    1106 P IS-NR        Active    ACT
    1201   IS-ANR       Active    SWDL
    1205   OOS-MT-DSBLD Manual    -------
    1302   OOS-MT       Isolated  -------
    1310   IS-ANR       Standby   SWDL

    CARD 1106 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = No Alarms
      DSM PORT B:      ALARM STATUS       = No Alarms
    CARD 1201 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = No Alarms
      DSM PORT B:      ALARM STATUS       = No Alarms
    CARD 1205 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = No Alarms
      DSM PORT B:      ALARM STATUS       = No Alarms
    CARD 1302 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = No Alarms
      DSM PORT B:      ALARM STATUS       = No Alarms
    CARD 1310 ALARM STATUS = No Alarms
      DSM PORT A:      ALARM STATUS       = No Alarms
      DSM PORT B:      ALARM STATUS       = No Alarms
    Command Completed.
;
```

This example shows the possible system response if a SIP card is queried and the SIP NP feature is turned on:

```
rept-stat-mps:loc=1101
```

```
    tekelecstp 12-07-26 14:41:09 EST EAGLE 45.0.0

    rept-stat-mps:loc=1101

    Command entered at terminal #4.
;
```

```
   tekelecstp 12-07-26 14:41:09 EST EAGLE 45.0.0
   CARD      VERSION          TYPE   PST                 SST          AST
   1101      --------         DSM    OOST-MT-DSBLD       MEA          -----
        DSM PORT A                   OOS-MT              Unavail      -----
                   ALARM STATUS        = ** 0084 IP Connection unavailable
                                         Failed Channels: Prov Dnld UDP
        CARD ALARM STATUS    = **   0441 Incorrect MBD - CPU
        DSM MEMORY USAGE     =      ---%

Command Completed.
;
```

The following example is when Dual ExAP Config feature is enabled and both LNP and EPAP base features turned ON:

```
    exap 12-07-02 15:42:53 MST  EAGLE 45.0.0-64.34.0
    rept-stat-mps
    Command entered at terminal #3.
;
```

```
    exap 12-07-02 15:42:53 MST  EAGLE 45.0.0-64.34.0
                       VERSION       PST            SST        AST
    ELAP A             009-000-000   IS-ANR         Fault      Standby
       CRITICAL PLATFORM    ALARM DATA = No Alarms
       MAJOR    PLATFORM    ALARM DATA = H'3000000000e01001
       MINOR    PLATFORM    ALARM DATA = H'5000000000000200
       CRITICAL APPLICATION ALARM DATA = No Alarms
       MAJOR    APPLICATION ALARM DATA = No Alarms
       MINOR    APPLICATION ALARM DATA = No Alarms
              ALARM STATUS       = **  0372 Major Platform Failure(s)

                       VERSION       PST            SST        AST
    ELAP B             009-000-000   IS-ANR         Fault      Active
       CRITICAL PLATFORM    ALARM DATA = No Alarms
       MAJOR    PLATFORM    ALARM DATA = H'3000000028000900
       MINOR    PLATFORM    ALARM DATA = H'5000000000000200
       CRITICAL APPLICATION ALARM DATA = No Alarms
       MAJOR    APPLICATION ALARM DATA = No Alarms
       MINOR    APPLICATION ALARM DATA = H'6000000000002000
              ALARM STATUS       = **  0372 Major Platform Failure(s)

    CARD   PST          SST         LNP STAT
    1101 P IS-NR        Active      -------

    CARD 1101 ALARM STATUS = No Alarms.
      DSM PORT A:      ALARM STATUS       = No Alarms.
```

```
      DSM PORT B:      ALARM STATUS       = No Alarms.

                       VERSION       PST            SST        AST
    EPAP A             013-000-000   IS-ANR         Fault      Standby
       CRITICAL PLATFORM    ALARM DATA = No Alarms
       MAJOR    PLATFORM    ALARM DATA = No Alarms
       MINOR    PLATFORM    ALARM DATA = No Alarms
       CRITICAL APPLICATION ALARM DATA = No Alarms
       MAJOR    APPLICATION ALARM DATA = No Alarms
       MINOR    APPLICATION ALARM DATA = H'6000000000000008
              ALARM STATUS       =  *  0375 Minor Application Failure(s)

                       VERSION       PST            SST        AST
    EPAP B             013-000-000   IS-ANR         Fault      Active
       CRITICAL PLATFORM    ALARM DATA = No Alarms
       MAJOR    PLATFORM    ALARM DATA = No Alarms
       MINOR    PLATFORM    ALARM DATA = No Alarms
       CRITICAL APPLICATION ALARM DATA = No Alarms
       MAJOR    APPLICATION ALARM DATA = No Alarms
       MINOR    APPLICATION ALARM DATA = H'6000000000000008
              ALARM STATUS       =  *  0375 Minor Application Failure(s)

    CARD   PST          SST         GSM STAT
    1111 P IS-NR        Active      ACT

    CARD   PST          SST         EIR STAT
    1111 P IS-NR        Active      -------

    CARD 1111 ALARM STATUS = No Alarms.
      DSM PORT A:      ALARM STATUS       = No Alarms.
      DSM PORT B:      ALARM STATUS       = No Alarms.

    Command Completed.
;
```

This example shows the possible system response if a DEIR card is queried and the S13/S13' EIR feature is turned ON:

```
rept-stat-mps:loc=1101
```

```
    tekelecstp 13-03-14 14:41:09 EST EAGLE 45.1.0
    rept-stat-mps:loc=1101
    Command entered at terminal #4.
;
```

```
tekelecstp 13-03-14 14:41:09 EST EAGLE 45.1.0
    CARD   VERSION       TYPE    PST            SST          AST
    1101   -----------   DSM     OOS-MT-DSBLD   MEA          -----
      DSM PORT A                 OOS-MT         Unavail      -----
                ALARM STATUS       = **  0084 IP Connection Unavailable
                                     Failed Channels:  Prov  Dnld  UDP
      CARD ALARM STATUS  = **  0441 Incorrect MBD - CPU
      DSM MEMORY USAGE   = ---%

      Command Completed.
;
```

This example shows the possible system response if an ENUM card is queried:

```
rept-stat-mps:loc=1101
```

```
    tekelecstp 14-05-14 14:41:09 EST EAGLE 46.1.0
    rept-stat-mps:loc=1101
    Command entered at terminal #4.
;
    tekelecstp 14-05-14 14:41:09 EST EAGLE 46.1.0
    CARD   VERSION       TYPE    PST            SST          AST
    1101   -----------   DSM     OOS-MT-DSBLD   MEA          -----
      DSM PORT A                 OOS-MT         Unavail      -----
                ALARM STATUS       = **  0084 IP Connection Unavailable
                                     Failed Channels:  Prov  Dnld  UDP
      CARD ALARM STATUS  = **  0441 Incorrect MBD - CPU
      DSM MEMORY USAGE   = ---%

    Command Completed.
;
```

Legend

- **CARD**—Location of the Service Module card. The Service Module card with the designator "P" to the right of its card location is the primary Service Module card as selected by the active ELAP/EPAP. The primary Service Module card provides the ELAP/EPAP status to the OAM. When the primary state (PST) of the ELAP/EPAP is IS-NR, the secondary state (SST) indicates whether the ELAP/EPAP is active or standby.
- **VERSION**—Version number of the GPL that the specified ELAP/EPAP or card is running.
- **PST**—Primary state of the ELAP/EPAP or card. Possible values are described in *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the ELAP/EPAP or card. Possible values are described in *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the ELAP/EPAP or card. Possible values are described in *Possible Values for PST/SST/AST*.
- **EPAP/ELAP A/B**—Application running on the MPS (multi-purpose server) platform. If the LNP ELAP Configuration feature is turned on, the output shows ELAP A/B. If INP, G-Flex, G-Port, or V-Flex is turned on, the output shows EPAP A/B.
- **ALARM STATUS**—List of trouble text alarm messages that have been generated for the MPS and the applications running on the MPS. Each alarm is listed as a 16-character hexadecimal string where each bit represents a unique platform or application alarm. To decode the string, use the procedure in the *EPAP Administration Guide* or the *ELAP Administration and LNP Feature Activation Guide*. There are 6 categories of MPS alarms:
  - Critical platform alarm data
  - Major platform alarm data
  - Minor platform alarm data
  - Critical application alarm data
  - Major application alarm data
  - Minor application alarm data
- **GSM STAT**—Possible states are ACT (active) or SWDL (the GSM component on that card is inactive until the software download completes). GSM STAT information is not displayed if the G-Port, G-Flex and Prepaid SMS Intercept Ph1 features are turned off.

- **INP STAT**—Possible states include ACT (active), OFFL (offline) and SWDL (the INP component on that card is inactive until the software download completes). INP STAT information is not displayed if the INP feature is turned off.
- **LNP STAT**—Possible states include ACT (active), OFFL (offline) and SWDL (the LNP component on that card is inactive until the software download completes). LNP STAT information is not displayed if the LNP ELAP Configuration feature is turned off.
- **EIR STAT**—Possible states include ACT (active), OFFL (offline), and SWDL (the EIR component on that card is inactive until software download completes). EIR STAT information is not displayed if the EIR feature is not enabled.
- **VFLEX STAT**—Possible states include ACT (active), OFFL (offline), and SWDL (the V-Flex component on that card is inactive until software download completes). V-Flex STAT information is not displayed if the V-Flex feature is not on.
- **ATINPQ STAT**—Possible states include ACT (active), OFFL (offline), and SWDL (the ATINPQ component on that card is inactive until software download completes). ATINPQ STAT information is not displayed if the ATINP feature is not enabled.
- **DSM MEMORY USAGE**—Percentage of Service Module memory used to store the ELAP/EPAP database.

  For EPAP, the percentage of the card memory is displayed. For example, 50% of the memory on an E5-SM4G-B card means that 2GB are used.

  For ELAP/LNP, the percentage that is displayed depends on the enabled or default feature access key (FAK) quantity for LNP ported TNs, LNP ported LRNs, and LNP ported NPANXXs in the system (see the `rtrv-ctrl-feat` command output). The percentage is the greatest of: 1) TNs provisioned divided by LNP ported TNs FAK quantity, 2) LRNs provisioned divided by LNP ported LRNs FAK quantity, or 3) NPANXXs provisioned divided by LNP ported NPANXXs FAK quantity.

- **CARD XXXX ALARM STATUS**—List of trouble text alarm messages that have been generated for the card
- **DSM Port A/B**—List of trouble text alarm messages that have been generated for the port on the Service Module card.
- **IP Connection Unavailable**—The failed channels on those ports with IP Connection Unavailable alarms. Possible channels reported are:
  - Prov—RTDB Provisioning Channel
  - Dnld—RTDB Download Channel
  - TCP—Transmission Control Protocol Channel
  - UDP—User Datagram Protocol Channel

Related Commands

rept-stat-card, *rept-stat-sccp*

rept-stat-mux

Report the MPS Status

Use this command to list all the MUX cards and the location and status of the cards.

Parameters

This command has no parameters.

Example

```
rept-stat-mux
```

Dependencies

None

Notes

None

Output

```
rept-stat-mux
```

```
    tekelecstp 10-02-21 11:19:03 EST  EAGLE 42.0.0
    CARD   TYPE     PST           SST       AST       BITRATE  BITRATE  BERT
                                                       (OPER)   (ACT)    STATUS
    ------------------------------------------------------------------------------

    1109   HIPR2    IS-NR         Active    -----     HIGH     LOW      PASS

    1110   HIPR2    IS-NR         Active    -----     HIGH     LOW      UNKNOWN

    1209   HIPR2    IS-NR         Active    -----     HIGH     LOW      FAIL

    1210   HIPR2    IS-NR         Active    -----     HIGH     LOW      PASS

    Command Completed.
;
```

Legend

- **CARD**—MUX card location
- **TYPE**—Type of card
- **PST**—Primary state of the card. Possible values are described in *Possible Values for PST/SST/AST* in Appendix A.
- **SST**—Secondary state of the card. Possible values are described in *Possible Values for PST/SST/AST* in Appendix A.
- **AST**—Associated state of the card. Possible values are described in *Possible Values for PST/SST/AST* in Appendix A.
- **BITRATE(OPER)**—Maximum operational bit rate that the Fibre-Channel ring is capable of. If the operational bit rate is HIGH, the Fibre-Channel ring can be switched between the HIGH rate and the LOW rate.

- **BITRATE(ACT)**—Bit rate currently used by the Fibre-Channel ring. This rate is determined by various parameters such as the operational bit rate of the other bus, availability of a High Rate Feature Access Key, etc.
- **BERT STATUS**—BERT (Bit Error Rate Test) status of the MUX card. BERT is a diagnostic test that is initiated by the MUX cards on the IMT Bus during Bus alignment. Possible values are:
  - **PASS**—BERT passed for the MUX card
  - **FAIL**—BERT failed for the MUX card
  - **UNKNOWN**— This value should not be seen. If it is observed, please contact My Oracle Support (MOS).

Related Commands

rept-stat-card

rept-stat-rtd Report Status RTD

Use this command to report Run Time Diagnostics (RTD) for EAGLE cards, including the status of internal integrity checks and the RTD subsystem alarm. This display can help determine the cause when an RTD subsystem alarm occurs, or when associated issues are reported.

This command is also used to reset MSU validation statistics and clear the RTD subsystem alarm.

Parameters

force (optional)

This parameter is used with the reset=yes parameter to clear statistics for a card when the RTD subsystem alarm is present.

Range:

yes

loc (optional)

Location. The card location as stenciled on the shelf of the system.

Note: This parameter can be used to either retrieve or reset statistics for a card location. To reset the statistics, the loc and reset parameters must be specified together in the command.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

reset (optional)

This parameter clears the statistics by setting them to zero and resets the checksum card indicator error and RTD subsystem alarm.

Range: *yes*

Clears the statistics.

If this parameter is specified with the loc parameter, then statistics are cleared for the specified card. If this parameter is specified, and the loc parameter is not specified, then statistics are cleared for all cards in the system.

Example

```
rept-stat-rtd
rept-stat-rtd:loc=1107
rept-stat-rtd:reset=yes:force=yes
rept-stat-rtd:loc=1107:reset=yes
```

Dependencies

If the reset=yes parameter is specified, then the force=yes parameter must be specified to clear the statistics and checksum failure indicators.

The card specified by the loc parameter must be an IPLIMx, IPGWx, IPSG, SCCP, Service Module, HC-MIM, E5-E1T1, E5-E1T1-B, E5-ATM, or E5-ATM-B card.

The card in the location specified by the loc parameter must be in service.

The reset=yes parameter must be specified to clear the statistics.

The force=yes parameter must be specified.

The loc parameter cannot have a non-numeric value.

The following card locations are not valid for this command: 1114, 1116, 1117, 1118 (E5-TDM and E5-MDAL cards), and all *xy*09 and *xy*10 locations where *x* is the frame and *y* is the shelf (MUX cards).

The card slot must be equipped and in service.

Notes

MSU Validation Statistics

The statistics from internal integrity checks are displayed for all in-service LIM and SCCP cards. The reported statistics are dynamic and are not maintained when a card is re-initialized.

The displayed reports contain message validation totals since the last time the diagnostic information for the cards was reset.

The individual statistics that are reported re-start at zero after the maximum values are reached and are cleared when reset by the `rept-stat-rtd` command.

Summary Report (rept-stat-rtd)

The report displayed shows the summary statistics or overall totals for MSU validation statistics for all LIM and SCCP cards in the system. It also includes the status for the RTD subsystem and the RTD subsystem alarm.

Card Summary Report (rept-stat-rtd:loc=)

When the loc parameter is specified in the `rept-stat-rtd` command, the report displayed shows the detailed MSU validation statistics report for the specified card. The report shows statistics from integrity checks performed by the specified card on MSUs transferred to and from LIM/SCCP cards and includes the timestamp when the card last detected an error during integrity checks. The statistics are only displayed for cards with non-zero totals.

The integrity checks are performed on a subset of the MSUs transferred between cards. When card(s) report errors during the integrity checks, the RTD subsystem alarm is activated. The error statistics reported should be used along with the UIMs or alarms to help identify the source of the problem.

RTD Subsystem Alarm

The RTD subsystem alarm is triggered when a card reports that a checksum error was detected during internal card integrity checks.

The RTD subsystem alarm remains active in the system until the statistics are reset using the `rept-stat-rtd` command, and no further indications of checksum errors are reported during internal card integrity checks.

Output

If the `rept-stat-rtd` command is entered with no parameters, then a summary status for the RTD subsystem and alarm and summary statistics for all of the LIM/SCCP cards in the system are displayed.

If the loc parameter is specified in the `rept-stat-rtd` command, then detailed statistics are displayed for the specified card location. Only cards with non-zero totals are reported in the location specific report.

This example displays a summary report on the status of the RTD subsystem and RTD subsystem alarm with MSU validation statistics for all LIM/SCCP cards in the system.

`rept-stat-rtd`

```
    eagle10110 07-02-22 20:32:58 EST  EAGLE 35.6.0
    Retrieving data from cards...

    RTD  SUBSYSTEM REPORT IS-NR         Active     -----
    RTD  ALARM STATUS =  No Alarms

              MSU Validation Statistics
            ============================
            Total Rx   Total Rx      Total
    CARD    Error      Validated        Tx
    1101           0         275       710
    1102           0         200       200
    1103           0         200      1000
    1105           0        1360       275
    1107           0         200       100
    1108           0         100       100
  ------------------------------------------------------------------------
    END OF REPORT
;
```

This example displays a detailed report for card 1101. The report indicates that the card received MSUs from several cards in the system.

```
rept-stat-rtd:loc=1101
```

```
    eagle10110 07-02-22 20:32:58 EST  EAGLE 35.6.0
    Retrieving data from card …
    CARD SUMMARY: 1101     Last Alarm Timestamp: --------- --------

                         MSU Validation Statistics
                      ================================

                      Total Rx     Total Rx    Total Tx
    SRC/DEST             Error    Validated
    CARD
    1102                     0          100         100
    1103                     0            0           0
    1105                     0           75         360
    1107                     0          100         200
    1108                     0           50          50

    ---------------------------------------------------------------------------

    ;END OF REPORT
;
```

This example displays a summary report for cards 1101 - 1108. The report indicates that the cards received checksum errors in MSUs from other cards.

```
rept-stat-rtd
```

```
    eagle10110 07-02-22 20:32:58 EST  EAGLE 35.6.0
    Retrieving data from card...

    RTD  SUBSYSTEM REPORT IS-ANR         Active     -----
    RTD  ALARM STATUS =  541 MSU cksum error threshold exceeded

              MSU Validation Statistics
            ============================
            Total Rx    Total Rx     Total
    CARD       Error   Validated        Tx
    1101         100         275       500
    1102          25         200       300
    1103           0         200       500
    1105           0         600       125
    1107          50         250       100
    1108           0         100       100
    ---------------------------------------------------------------------------

    ;END OF REPORT
;
```

This example displays a detailed report for card 1101. The report indicates that the card received MSUs with checksums from cards 1102, 1103, and 1105 and MSUs with checksum errors from card 1103.

```
rept-stat-rtd:loc=1101
```

```
    eagle10110 07-02-22 20:32:58 EST  EAGLE 35.6.0
    Retrieving data from card …
    CARD SUMMARY: 1101     Last Alarm Timestamp: mm-dd-yy hh:mm:ss

                      MSU Validation Statistics
```

```
                ================================
                Total Rx     Total Rx    Total Tx
    SRC/DEST       Error    Validated
    CARD
    1102               0           75         100
    1103             100          100         100
    1105               0          100         100
    1107               0            0         100
    1108               0            0         100
```

This example displays the option for resetting MSU validation statistics of all cards in the system.

```
rept-stat-rtd:reset=yes
```

```
    eagle10110 07-02-22 20:32:58 EST  EAGLE 35.6.0
    Clear RTD Statistics command(s) issued...
    Command Completed.
;
```

This example displays the option for resetting MSU validation statistics and checksum failure indicators for all cards in the system and clearing the RTD subsystem alarm.

```
rept-stat-card:reset=yes:force=yes
```

```
    eagle10110 07-02-22 20:34:06 EST  EAGLE 35.6
    Clear RTD Statistics command(s) issued...
    Command Completed.

    eagle10110 07-02-22 20:32:58 EST  EAGLE 35.6.0
    5501.0542    RTD SYSTEM             MSU cksum error threshold cleared
;
```

Legend

This section defines the fields of the `rept-stat-rtd` reports.

PST—Possible values are described in *Possible Values for PST/SST/AST*. For this command, IS-NR specifically means no checksum errors were found during the last reporting period; IS-ANR specifically means that a card or cards reported checksum errors during MSU integrity checks when the RTD status was previously IS-NR, and the RTD System Alarm(s) was raised.

Total Rx Error (for a Summary Report)—Total MSUs received with checksum errors, including MSUs with checksum errors received from all cards in the system.

Total Rx Error (for a Location-Specified Report)—Total MSUs with checksum errors received at the card specified by the LOC parameter from SRC/DEST CARD.

Total Rx Validated (for a Summary Report)—Total MSUs with checksum received and validated from all cards in the system.

Total Rx Validated (for a Location-Specified Report)—Total MSUs with checksum received and validated at the card specified by the LOC parameter from SRC/DEST CARD.

Total Tx (for a Summary Report)—Total MSUs with checksum applied and transmitted to all cards in the system.

Total Tx (for a Location-Specified Report)—Total MSUs with checksums transmitted from the card specified in the LOC parameter to SRC/DEST CARD.

Last Alarm Timestamp—Timestamp for last reported checksum error for the card specified in the LOC parameter.

SRC/DEST CARD—Source card transmitting MSUs with checksums received by the card specified in the LOC parameter. Destination card receiving MSUs with checksums transmitted from card specified in LOC parameter.

RTD Subsystem—Indicates RTD Device Status (IS-NR, etc.).

RTD Alarm Status—Indicates whether an alarm is present for the RTD Device.

Related Commands

None.

rept-stat-rte Report Status Route

Use this command to display the signaling route status for a particular destination.

Parameters

dpc (optional)

Range:

*p-, 000-255, *, **, ****

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk values *, **, and *** are not valid for the *ni* subfield.

If ** or *** is specified for the *nc* subfield, either *, **, or *** must be specified for the *ncm* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc=000* is not valid if *ni=001-005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006-255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni= 006-255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

mode (optional)

This parameter specifies the type of display to produce.

Range:

full

Comprehensive display of point code status, including *rtx*. If specified with a point code, then the status for that point code is displayed. If specified without a point code, then the status of all routes is displayed.

rtx

Displays exception route status, other than circular routing, if the Origin-based MTP Routing feature is on.

Default:

A summary report is displayed.

stat (optional)

The primary state filter.

Range:

all

All of the primary states

alminh

Alarms inhibited

anr

In service abnormal (IS-ANR)

dsbld

Out of service maintenance disabled (OOS-MT-DSBLD)

mt

Out of service maintenance (OOS-MT)

nr

In service normal (IS-NR)

Default:

all

Example

```
rept-stat-rte
rept-stat-rte:dpc=5-25-0
rept-stat-rte:dpci=5-5-0:mode=full
rept-stat-rte:dpci=5-5-0:mode=rtx
rept-stat-rte:mode=rtx
rept-stat-rte:mode=full
rept-stat-rte:dpc=5-25-**
```

```
rept-stat-rte:dpcn16=1-2-3
```

Dependencies

An x-list DPC cannot be specified in the dpc parameter.

If the mode=full parameter is specified, then the dpc/dpca/dpcn/dpci/dpcn24 parameter must be specified.

If the dpc parameter specifies an *ni-nc-** format, then the mode parameter cannot be specified.

The dpc parameter must specify an*ni-nc-** format before the stat parameter can be specified with the dpc parameter.

No other `rept-stat-xxx` command can be in progress when this command is entered.

If a dpc parameter is specified, then the value must be the true destination point code (not an alias) and the value must be defined in the database.

The Origin-Based MTP Routing feature must be turned on before the mode=rtx parameter can be specified.

The destination address must be a full point code, a network destination, or a cluster point code.

The pst and mode parameters cannot be specified together in the command.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

This command does not report the x-list point codes. Use the `rept-stat-cluster` command for a report of x-list point codes.

If the mode=rtx parameter is specified with a specific DPC, additional linkset, route and exception route information associated with the specified DPC is displayed.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Summary of DPC parameter syntaxes

- `rept-stat-dstn:dpc=ni-nc-ncm` —Requests a report for fully provisioned destination*ni-nc-ncm*.
- `rept-stat-dstn:dpc= ni-*-*` —Requests a report for provisioned network destination with the specified network indicator. If * is specified in the *nc* field,* must be specified in the *ncm* field.
- `rept-stat-dstn:dpc= ni-**-*` —Requests a report for the full network cluster for the specified*ni*.
- `rept-stat-dstn:dpc= ni-***-` — Requests a report for the full network cluster and the network cluster address (if any) for the specified *ni*.
- `rept-stat-dstn:dpc= ni-nc-*` —Requests a report for provisioned cluster destination *ni-nc-**.
- `rept-stat-dstn:dpc= ni-nc-**` —Requests a report showing all destinations whose network (*ni*) and cluster (*nc*) components match those specified. Note, however, that the network cluster address on *ni-nc-** (if it exists) is not reported.

- `rept-stat-dstn:dpc= ni-nc-***` —Requests a report showing all destinations whose network (*ni*) and cluster (*nc*) components match those specified. The network cluster address (if it exists) is also reported.
- `rept-stat-dstn:dpcn24=msa-ssasp` —Requests a report for fully provisioned 24-bit destination point*main signaling area-sub signaling area signaling point*.

If the mode=rtx parameter is specified without a specific DPC, then status is provided for all exception route sets.

If the mode=full parameter is specified with a specific destination point code, then additional linkset, route, and exception route information associated with the specified destination is displayed, along with information that can be used to correct circular routing. If the *mode=full* parameter is specified without a specific destination point code, then status is provided for all regular and exception route sets.

Output

If the dpc parameter is not specified:

- If the mode parameter is not specified, then the command output lists the status of all provisioned destination point codes (DPCs) (routesets) in the system.
- If the mode=rtx parameter is specified, then the output lists the status of only those DPCs against which exception routes have been provisioned, and the status of the provisioned exception route sets associated with each DPCs.
- If the mode=full parameter is specified, then the command lists the status of all provisioned DPCs in the system, and the status of the provisioned exception route sets, if any, associated with each DPC.

If the dpc parameter is specified:

- If the mode parameter is not specified, then the output lists the status of all provisioned routes in the route set specified by that DPC.
- If the mode=rtx parameter is specified, then the output lists the status of all provisioned routes in the routeset specified by that DPC, and the status of all provisioned exception routesets associated with that DPC.
- If the mode=full parameter is specified, then the output lists the status of all provisioned routes in the routeset specified by that DPC, the status of all provisioned exception route sets associated with that DPC, any aliases associated with that DPC, and circular routing alarm information if any for that DPC.

This example shows how summary information for all provisioned cluster and noncluster DPCs is reported.

`rept-stat-rte`

```
tekelecstp 10-10-15 14:59:49 EST  EAGLE 43.0.0
rept-stat-rte
Command entered at terminal #4.
Extended Processing Time may be Required
   DPCA              PST           SST       AST
   001-001-003       OOS-MT        Idle      INACCESS
   001-001-004       OOS-MT        Idle      INACCESS
   001-001-005       OOS-MT        Idle      INACCESS
   001-001-006       OOS-MT        Idle      INACCESS
```

```
       001-001-007       OOS-MT        Idle      INACCESS
       001-001-008       OOS-MT        Idle      INACCESS
       001-001-009       OOS-MT        Idle      INACCESS
       001-001-010       OOS-MT        Idle      INACCESS
       001-001-011       OOS-MT        Idle      INACCESS
       001-001-012       OOS-MT        Idle      INACCESS
       001-001-013       OOS-MT        Idle      INACCESS
       001-001-014       OOS-MT        Idle      INACCESS
       001-001-015       OOS-MT        Idle      INACCESS
       001-001-016       OOS-MT        Idle      INACCESS
       001-001-017       OOS-MT        Idle      INACCESS
       001-001-018       OOS-MT        Idle      INACCESS
       001-001-019       OOS-MT        Idle      INACCESS
       001-001-020       OOS-MT        Idle      INACCESS
       001-001-021       OOS-MT        Idle      INACCESS
       001-001-022       OOS-MT        Idle      INACCESS
       001-001-023       OOS-MT        Idle      INACCESS
       001-001-024       OOS-MT        Idle      INACCESS
       001-001-025       OOS-MT        Idle      INACCESS
       001-002-003       OOS-MT        Idle      INACCESS

       DPCN              PST           SST       AST

       DPCN24            PST           SST       AST

       DPCI              PST           SST       AST

    Command Completed.
;
```

This example shows how specifying a cluster destination on the dpc parameter shows the cluster status and routeset information. Information on cluster members (both provisioned and x-list) is not shown. Use the `rept-stat-cluster` command to obtain this information.

```
rept-stat-rte:dpc=9-3-*
```

```
    rlghncxa03w 04-07-07 14:59:11 EST  EAGLE 31.9.0
       DPCA               PST           SST       AST
       009-003-*          IS-NR         Allowed   ACCESS
      ALARM STATUS       = No Alarms.
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1*  10  lsnstpa   042-036-123  Allowed   Allowed    Allowed
       2   20  lsnstpb   092-240-103  Allowed   Allowed    Allowed
       3   30  lsnstpc   128-101-022  Allowed   Allowed    Allowed
       4   --  --------  ***-***-***  --------  --------   --------
       5   --  --------  ***-***-***  --------  --------   --------
       6   --  --------  ***-***-***  --------  --------   --------
;
```

This example shows how specifying an FPC or cluster destination for which circular routing has been detected, along with the mode=full parameter, displays the name of the linkset on which the circular routing test message was transmitted. It also displays the linkset on which the circularly routed message was received.

```
rept-stat-rte:dpc=9-3-6:mode=full
```

```
    rlghncxa03w 04-01-07 14:59:11 EST  EAGLE 31.3.0
       DPCA               PST           SST       AST
       009-003-006        OOS-MT        Prohibit  INACCESS
```

```
    ALARM STATUS       = = *C  xxxx Circular routing detected
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
        1   10  lsnstpa   042-036-123  Allowed   Allowed    Allowed
        2   20  lsnstpb   092-240-103  Allowed   Allowed    Allowed
        3   30  lsnstpc   128-101-022  Allowed   Allowed    Allowed
        4   --  --------  ***-***-***  --------  --------   --------
        5   --  --------  ***-***-***  --------  --------   --------
        6   --  --------  ***-***-***  --------  --------   --------
       SSN   SUBSYSTEM STATUS

       ALIASA       ALIASN       ALIASI
       -----------  -----------  -----------
       CIRCULAR ROUTING
         XMIT LSN= lsnstpb
         RCV  LSN= lsn01a
     MEMBER= ***-***-***
    Command Completed.
;
```

This example shows a typical report when a cluster destination and mode=full is specified. The interpretation of the circular routing status for cluster destinations is slightly different from the status for full point code destinations.

`rept-stat-rte:dpc=9-3-*:mode=full`

```
    rlghncxa03w 04-01-07 14:59:11 EST  EAGLE 31.3.0
       DPCA               PST           SST       AST
       009-003-*          IS-NR         Allowed   ACCESS
      ALARM STATUS       = *C  xxxx Circular routing detected
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1   10  lsnstpa   042-036-123  Allowed   Allowed    Allowed
       2   20  lsnstpb   092-240-103  Allowed   Allowed    Allowed
       3   30  lsnstpc   128-101-022  Allowed   Allowed    Allowed
       4   --  --------  ***-***-***  --------  --------   --------
       5   --  --------  ***-***-***  --------  --------   --------
       6   --  --------  ***-***-***  --------  --------   --------
      SSN   SUBSYSTEM STATUS
     ALIASA       ALIASN       ALIASI
     -----------  -----------  -----------
      CIRCULAR ROUTING INFO:
       XMIT LSN=lsnstpb   RC=20
       RCV  LSN=lsn01a
       MEMBER= 009-003-006
    Command Completed.
;
```

This example shows how the circular routing alarm for a cluster destination is displayed. A circular routing alarm for a cluster destination indicates that circular routing was detected for a member of the cluster, but no x-list entry could be created for that cluster. Circular routing detected on a cluster destination does not automatically force the output to display the status of the cluster as “OOS-MT Prohibit INACCESS” as it does for a full point code destination.

`rept-stat-rte:dpc=9-3-*`

```
    rlghncxa03w 04-01-07 14:59:11 EST  EAGLE 31.3.0
       DPCA               PST           SST       AST
       009-003-*          IS-NR         Allowed   ACCESS
      ALARM STATUS       = *C  xxxx Circular routing detected
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
```

```
       1   10  lsnstpa   042-036-123  Allowed   Allowed    Allowed
       2   20  lsnstpb   092-240-103  Allowed   Allowed    Allowed
       3   30  lsnstpc   128-101-022  Allowed   Allowed    Allowed
       4   --  --------  ***-***-***  --------  --------   --------
       5   --  --------  ***-***-***  --------  --------   --------
       6   --  --------  ***-***-***  --------  --------   --------
    Command Completed.
;
```

This example shows how a subsystem information header is displayed without subsystem information, as when an FPC is specified without defining any subsystems. Because aliases cannot be defined for cluster destinations, this report shows only an empty header, as when an FPC is specified without defining aliases. The circular routing information portion of the report displays "--------" for the linkset names when no circular routing condition exists for the DPC.

`rept-stat-rte:dpc=9-3-*:mode=full`

```
    rlghncxa03w 04-07-07 14:59:11 EST  EAGLE 31.9.0
       DPCA               PST           SST       AST
       009-003-*          IS-NR         Allowed   ACCESS
      ALARM STATUS       = No Alarms.
      RTE COST  LSN      APCA         LS STAT   NON-ADJ    ROUTE STAT
       1*  10  lsnstpa   042-036-123  Allowed   Allowed    Allowed
       2   20  lsnstpb   092-240-103  Allowed   Allowed    Allowed
       3   30  lsnstpc   128-101-022  Allowed   Allowed    Allowed
       4   --  --------  ***-***-***  --------  --------   --------
       5   --  --------  ***-***-***  --------  --------   --------
       6   --  --------  ***-***-***  --------  --------   --------
      SSN   SUBSYSTEM STATUS
      ALIASA       ALIASN       ALIASI
      -----------  -----------  -----------
      CIRCULAR ROUTING
        XMIT LSN= --------
        RCV  LSN= --------
        MEMBER= ***-***-***
    Command Completed.
;
```

This example shows how specifying the stat parameter and the *ni-nc-*** or *ni-nc-**** DPC formats causes the output summary report to include only those destinations whose status matches the state specified.

`rept-stat-rte:dpc=9-4-***:stat=alminh`

```
    rlghncxa03w 10-10-29 13:30:00 EST  EAGLE 43.0.0
    rept-stat-rte:dpc=9-4-***:stat=alminh
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA               PST           SST       AST
       009-004-006        IS-NR         Allowed   ALMINH
       009-004-007        IS-NR         Allowed   ALMINH
       .
       .
       .
       009-004-056        IS-NR         Allowed   ALMINH
    Command Completed.
;
```

This example shows a retrieval specifying an ITU national point code where the `chg-stpopts:npcfmti` parameter has been set to 1-1-1-11:

```
rept-stat-rte:dpcn=1-1-1-1000
```

```
    rlghncxa03w 04-02-31 13:30:00 EST  EAGLE 31.3.0
    CAUTION : Node isolated...route status out of date!
       DPCN               PST           SST       AST
       1-1-1-1000         OOS-MT        Prohibit  INACCESS
    ALARM STATUS       = *C  0313 DPC is prohibited
    RTE COST  LSN      APCN         LS STAT   NON-ADJ    ROUTE STAT
    1   10  lsitu     1-1-1-1000   Prohibit  Allowed    Prohibit
    2   --  --------  ***-***-***  --------  --------   --------
    3   --  --------  ***-***-***  --------  --------   --------
    4   --  --------  ***-***-***  --------  --------   --------
    5   --  --------  ***-***-***  --------  --------   --------
    6   --  --------  ***-***-***  --------  --------   --------
Command Completed.
;
```

This example shows a private adjacent point code:

```
rept-stat-rte:mode=full:dpc=1-1-2
```

```
    rlghncxa03w 05-01-07 13:30:00 EST  EAGLE 31.12.0
       DPCA                PST           SST       AST
       001-001-002         OOS-MT        Idle      INACCESS
      ALARM STATUS       = No Alarms.
      RTE COST  LSN           APCA          LS STAT   NON-ADJ    ROUTE STAT
       1   01   ls11234567    001-001-002   Prohibit  Allowed    Prohibit
       2   02   ls12345678  p-001-001-002   Prohibit  Allowed    Prohibit
       3   --   ---------- ---***-***-***   --------  --------   --------
       4   --   ---------- ---***-***-***   --------  --------   --------
       5   --   ---------- ---***-***-***   --------  --------   --------
       6   --   ---------- ---***-***-***   --------  --------   --------
      SSN   SUBSYSTEM STATUS

         ALIASA       ALIASN         ALIASI
         000-000-001  -----------    -----------
    CIRCULAR ROUTING INFO:
      XMIT LSN=----------   RC=--
      RCV  LSN=----------
      MEMBER  =-----------
    Command Completed.
;
```

This example shows how the asterisks in the space after the route numbers in the following examples indicate which route (or combined route) is carrying traffic.

```
rept-stat-rte:dpc=1-1-1
```

```
    tekelecstp 04-09-24 09:19:04 EST  EAGLE 31.9.0
       DPCA                PST           SST       AST
       001-001-001         IS-NR         Allowed   ACCESS
      ALARM STATUS       = No Alarms.
      RTE COST  LSN           APCA          LS STAT   NON-ADJ    ROUTE STAT
       1*  05   lse1e1         001-001-001   Allowed   Allowed    Allowed
       2*  05   lse1e2         001-002-001   Allowed   Allowed    Allowed
       3   10   lse1e3         001-003-001   Allowed   Allowed    Allowed
```

```
      4   --   ---------- ---***-***-***   --------  --------   --------
      5   --   ---------- ---***-***-***   --------  --------   --------
      6   --   ---------- ---***-***-***   --------  --------   --------
   Command Completed.
;
```

This example shows how no asterisk appears after the route number when no routes were carrying traffic.

`rept-stat-rte:dpc=1-1-1`

```
   tekelecstp 06-05-24 09:19:04 EST  EAGLE 35.0.0
      DPCA               PST          SST       AST
      001-001-001        OOS-MT       Prohibit  INACCESS
     ALARM STATUS      = *C  0313 DPC is prohibited
     RTE COST  LSN       APCA         LS STAT   NON-ADJ    ROUTE STAT
      1   05   lse1e1    001-001-001  Prohibit  Allowed    Prohibit
      2   05   lse1e2    001-002-001  Prohibit  Allowed    Prohibit
      3   10   lse1e3    001-003-001  Prohibit  Allowed    Prohibit
      4   --   ---------- ***-***-***   --------  --------   --------
      5   --   ---------- ***-***-***   --------  --------   --------
      6   --   ---------- ***-***-***   --------  --------   --------
   Command Completed.
;
```

This example shows the output when the primary route is not carrying traffic.

`rept-stat-rte:dpc=1-1-1`

```
   tekelecstp 06-05-24 09:19:04 EST  EAGLE 35.0.0
      DPCA               PST          SST       AST
      001-001-001        IS-ANR       Restrict  ACCESS
     ALARM STATUS      = *C 0334 DPC Subsystem is Abnormal
     RTE COST  LSN       APCA         LS STAT   NON-ADJ    ROUTE STAT
      1   05   lse1e1    001-001-001  Prohibit  Allowed    Prohibit
      2   05   lse1e2    001-002-001  Prohibit  Allowed    Prohibit
      3*  10   lse1e3    001-003-001  Allowed   Allowed    Allowed
      4   --   ---------- ***-***-***   --------  --------   --------
      5   --   ---------- ***-***-***   --------  --------   --------
      6   --   ---------- ***-***-***   --------  --------   --------
   Command Completed.
;
```

This example shows how the *rtx* mode displays all exception route sets provisioned against the specified DPC when the Origin-Based MTP Routing feature is enabled and on:

`rept-stat-rte:dpc=9-3-*:mode=rtx`

```
   tekelecstp 09-05-01 16:21:39 EST  EAGLE 41.0.0
      DPCA              PST          SST       AST
      009-003-*         IS-NR        Allowed   ACCESS
     ALARM STATUS      = No Alarms.
     RTE COST  LSN     APCA       LS STAT   NON ADJ    ROUTE STAT
      1   10  lsnstpa  042-36-23  Allowed   Allowed    Allowed
      2   20  lsnstpb  092-40-03  Allowed   Allowed    Allowed
      3   30  lsnstpc  128-01-22  Prohibit  Prohibit   Allowed
      4   --  --------  ***-**-**  --------  --------   --------
      5   --  --------  ***-**-**  --------  --------   --------
```

```
      6   --  --------  ***-**-**  --------  --------   --------

      Exception Routes:

         OPCA                 PST           SST       AST
         001-001-001          IS-NR         Allowed   ACCESS
         ILSN                 PST           SST       AST
         lsnstpy              IS-NR         Allowed   ACCESS
   Command Completed.
```

This example shows how all provisioned exception route sets are displayed in addition to the regular route sets when the Origin-Based MTP Routing feature is enabled and on and the *full* mode is specified.

```
rept-stat-rte:dpc=9-3-*:mode=full
```

```
   tekelecstp 09-05-01 16:21:39 EST  EAGLE 41.0.0
      DPCA               PST           SST       AST
      009-003-006        OOS-MT        Prohibit  INACCESS
     ALARM STATUS       = = *C  0319 REPT-MTPLP-DET: Circ rte det(cong)
     RTE COST  LSN      APCA          LS STAT   NON ADJ    ROUTE STAT
      1   10  lsnstpa   042-036-123   Allowed   Allowed    Allowed
      2   20  lsnstpb   092-240-103   Allowed   Allowed    Allowed
      3   30  lsnstpc   128-101-022   Allowed   Allowed    Allowed
      4   --  --------  ***-***-***   --------  --------   --------
      5   --  --------  ***-***-***   --------  --------   --------
      6   --  --------  ***-***-***   --------  --------   --------
     SSN   SUBSYSTEM STATUS

      ALIASA          ALIASN            ALIASI
   --------------  --------------    --------------
   CIRCULAR ROUTING INFO:
     XMIT LSN=lsnstpb   RC=20
     RCV  LSN=lsn01a
     MEMBER  =-----------

   Exception Routes:

         OPCA                 PST           SST       AST
         001-001-001          IS-NR         Allowed   ACCESS

         ILSN                 PST           SST       AST
         lsnstpy              IS-NR         Allowed   ACCESS

   Command Completed.
;
```

This example shows how all provisioned exception route sets are displayed in addition to the regular route sets if the Origin-Based MTP Routing feature is enabled and on and the *full* mode is specified.

```
rept-stat-rte:mode=full
```

```
   tekelecstp 10-10-01 14:06:10 EST  EAGLE 43.0.0
   rept-stat-rte:mode=full
   Command entered at terminal #4.
   Extended Processing Time may be Required
      DPCA                PST           SST       AST
      004-004-004         OOS-MT        Idle      INACCESS

         OPCA                 PST           SST       AST
         001-001-001          IS-NR         Allowed   ACCESS
```

```
          ILSN                 PST           SST       AST
          lsnstpy              IS-NR         Allowed   ACCESS

       DPCN                 PST           SST       AST
       00001                IS-NR         Allowed   ACCESS

          SI                   PST           SST       AST
          10                   IS-NR         Allowed   ACCESS

       00002                IS-NR         Allowed   ACCESS
       00005                OOS-MT        Prohibit  INACCESS
       00004                OOS-MT        Prohibit  INACCESS

       DPCN24               PST           SST       AST

       DPCI                 PST           SST       AST
    Command Completed.
;
```

This example shows how all provisioned exception routes are displayed if the Origin-Based MTP Routing feature is enabled and on and the *rtx* mode is specified.

`rept-stat-rte:mode=rtx`

```
    tekelecstp 10-10-29 14:06:10 EST  EAGLE 43.0.0
    rept-stat-dstn:mode=rtx
    Command entered at terminal #4.
    Extended Processing Time may be Required
       DPCA                 PST           SST       AST
       004-004-004          OOS-MT        Idle      INACCESS

          OPCA                 PST           SST       AST
          001-001-001          IS-NR         Allowed   ACCESS

          ILSN                 PST           SST       AST
          lsnstpy              IS-NR         Allowed   ACCESS

       DPCN              PST           SST       AST
       00001             IS-NR         Allowed   ACCESS

          SI                   PST           SST       AST
          10                   IS-NR         Allowed   ACCESS
    Command Completed.
;
```

This example shows the output of routes provisioned for ITU-N16.

`rept-stat-rte:dpcn16=2-14-0`

```
    tekelecstp 02-05-08 03:18:02 EST  UNKNOWN ??.?.?-64.71.1
    CAUTION : Node isolated...route status out of date!
       DPCN16            PST           SST       AST
       002-14-00         OOS-MT        Prohibit  INACCESS
      ALARM STATUS       = *C  0313 DPC is prohibited
      RTE COST  LSN           APC           LS STAT   NON-ADJ    ROUTE STAT
       1   10   ls1           002-14-00     Prohibit  Allowed    Prohibit
       2   --   ---------- ---***-***-***   --------  --------   --------
       3   --   ---------- ---***-***-***   --------  --------   --------
       4   --   ---------- ---***-***-***   --------  --------   --------
```

```
       5   --   ---------- ---***-***-***   --------  --------   --------
       6   --   ---------- ---***-***-***   --------  --------   --------

    Command Completed.
;
```

Legend

- **DPC/DPCA**—ANSI destination point code of the route
- **DPCN**—ITU-TSS national destination point code of the route
- **DPCN24**—24-bit ITU national destination point code of the route
- **DPCN16**--- 16-bit ITU national destination point code of the route
- **DPCI**—ITU-TSS international destination point code of the route
- **OPC/OPCA**—ANSI origination point code as exception routing criterion of the exception route
- **OPCN**—ITU-TSS national origination point code as exception routing criterion of the exception route
- **OPCN24**—24-bit ITU national origination point code as exception routing criterion of the exception route
- **OPCI**—ITU-TSS international origination point code as exception routing criterion of the exception route
- **ILSN**—Originating linkset as exception routing criterion of the exception route
- **CIC**—Starting Circuit Identification Code used as the exception routing criterion for this exception route
- **ECIC**—Ending Circuit Identification Code together with CIC defines the CIC range that is used as exception routing criterion for this exception route.
- **PST**—Primary state of the subsystem. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the subsystem. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the subsystem. See *Possible Values for PST/SST/AST*.

Related Commands

chg-dstn, *chg-rte*, *dlt-dstn*, *dlt-rte*, *ent-dstn*, *ent-rte*, *rept-stat-dstn*, *rtrv-dstn*, *rtrv-rte*

rept-stat-rtkey

Report the Status of Routing Keys

Use this command to generate a summary report of the status of the system routing keys.

Parameters

This command has no parameters.

Example

```
rept-stat-rtkey
```

Dependencies

None

Notes

The report generated by this command contains the following information:

- The maximum of static entries (SRKQ) in the routing key table
- The current number of static routing key entries in the routing key table
- The percentage of the static routing key table entries that is provisioned

Output

`rept-stat-rtkey`

```
    rlghncxa03w 10-10-27 14:59:11 EST  EAGLE 43.0.0
    SRKQ = 250

    Static Route Key table is (50 of 250) 20% full

    Static Route Key Socket Association table is (80 of 4000) 2% full
;
```

Related Commands

chg-appl-rtkey, *dlt-appl-rtkey*, *ent-appl-rtkey*, *rtrv-appl-rtkey*

rept-stat-rtx

Report Status Exception Route

Use this command to display the signaling route status for one or more exception routes to a particular destination.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

cic (optional)

Starting Circuit Identification Code. This parameter is used alone or together with the ecic parameter as exception routing criteria for the specified exception route.

Range:

0 - 16383

dpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, *, **, ****

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk values *, **, and *** are not valid for the *ni* subfield.

If ** or *** is specified for the *nc* subfield, either *, **, or *** must be specified for the *ncm* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc=000* is not valid if *ni=001-005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006-255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni= 006-255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national destination point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

ecic (optional)

Ending Circuit Identification Code. This parameter, together with the cic parameter, defines the CIC range that is used as exception routing criteria for the specified exception route.

Range:

0 - 16383

ilsn (optional)

Incoming Link Set Name. The name of the originating linkset. This value is used as part of the exception routing criteria for the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters.

mode (optional)

The type of display to produce.

Range:

full

Displays routes from the associated routeset and exception route table for the specified destination point code per criteria.

opc (optional)

Origination point code. ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

opca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Origination point code.

opci (optional)

Origination Point Code. ITU international origination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

Origination Point Code. ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

Origination Point Code. 24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The prefix indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

Origination Point Code. 16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

si (optional)

Service Indicator. This parameter is used as part of the exception routing criteria for the specified exception route.

Range:

0 - 15

Example

```
rept-stat-rtx
rept-stat-rtx:dpc=1-101-1
rept-stat-rtx:dpc=1-101-1:opc=1-2-1
rept-stat-rtx:dpc=100-100-1:opc=1-1-1:mode=full
rept-stat-rtx:dpcn16=001-1-2
```

Dependencies

If the dpcn parameter is specified, its format must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

The dpc parameter and the class criteria parameters (opc/ilsn/cic/si) must be specified before the mode parameter can be specified.

The dpc parameter must be specified before the class criteria parameters (opc/ilsn/cic/si) can be specified.

Notes

Each exception route set can have up to 6 associated routes.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

This command can be cancelled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

This example provides the status of all exception route sets provisioned in the system, sorted by DPC:

```
rept-stat-rtx
```

```
stdcfg2b 09-05-24 01:54:32 EST  EAGLE 41.0.0

   DPCA                PST           SST       AST
   001-101-001         IS-NR         Allowed   ACCESS

      OPCA                 PST           SST       AST
      001-002-001          IS-ANR        Restrict  ACCESS

      SI                   PST           SST       AST
      10                   OOS-MT        Prohibit  ACCESS
      12                   OOS-MT        Prohibit  ACCESS

   DPCA                PST           SST       AST
   004-101-001         IS-NR         Allowed   ACCESS

      SI                   PST           SST       AST
      10                   IS-NR         Allowed   ACCESS

   DPCA                PST           SST       AST
   007-101-001         OOS-MT        Prohibit  INACCESS

      OPCA                 PST           SST       AST
      003-001-020          OOS-MT        Prohibit  INACCESS

Command Completed.
```

This example displays the status of exception route sets provisioned against a particular DPC:

```
rept-stat-rtx:dpc=1-101-1
```

```
stdcfg2b 09-03-24 01:54:32 EST  EAGLE 41.0.0

   DPCA                PST           SST       AST
   001-101-001         IS-NR         Allowed   ACCESS

      OPCA                 PST           SST       AST
      001-002-001          IS-ANR        Restrict  ACCESS

      SI                   PST           SST       AST
      10                   OOS-MT        Prohibit  ACCESS
      12                   OOS-MT        Prohibit  ACCESS

Command Completed.
```

This example displays detailed status and alarm information for a specific exception route set provisioned against a DPC:

```
rept-stat-rtx:dpc=1-101-1:opc=1-2-1
```

```
stdcfg2b 06-03-24 02:11:31 EST  EAGLE 35.0.0

   DPCA             OPCA              PST           SST       AST
   001-101-001      001-002-001       IS-ANR        Restrict  ACCESS
  ALARM STATUS      =  *  0533 RTX is restricted
  RTE COST  LSN          APCA          LS STAT   NON-ADJ    ROUTE STAT
   1   09   e2e7         007-001-000   Prohibit  Allowed    Prohibit
```

```
       2*  10   e2e4          004-001-000   Allowed   Allowed    Allowed
       3   --   ---------- ---***-***-***   --------  --------   --------
       4   --   ---------- ---***-***-***   --------  --------   --------
       5   --   ---------- ---***-***-***   --------  --------   --------
       6   --   ---------- ---***-***-***   --------  --------   --------

    Command Completed.
;
```

This example displays the status of exception route sets provisioned against a particular DPC:

`rept-stat-rtx:dpcn16=001-02-03`

```
    stdcfg2b 09-03-24 01:54:32 EST  EAGLE 45.0.0

       DPCN16                PST           SST       AST
       001-02-03             IS-NR         Allowed   ACCESS

          OPCI                 PST           SST       AST
          001-002-001          IS-ANR        Restrict  ACCESS

          SI                   PST           SST       AST
          10                   OOS-MT        Prohibit  ACCESS
          12                   OOS-MT        Prohibit  ACCESS

    Command Completed.
```

Legend

- **DPC/DPCA**—ANSI destination point code of the exception route
- **DPCN**—ITU-TSS national destination point code of the exception route
- **DPCN24**—24-bit ITU national destination point code of the exception route
- **DPCN16---**16-bit ITU national destination point code of the exception route
- **DPCI**—ITU-TSS international destination point code of the exception route
- **OPC/OPCA**—ANSI origination point code as exception routing criterion of the exception route
- **OPCN**—ITU-TSS national origination point code as exception routing criterion of the exception route
- **OPCN24**—24-bit ITU national origination point code as exception routing criterion of the exception route
- **OPCN16---**16-bit ITU national origination point code as exception routing criterion of the exception route
- **OPCI**—ITU-TSS international origination point code as exception routing criterion of the exception route
- **ILSN**—Originating linkset as exception routing criterion of the exception route
- **CIC**—Starting Circuit Identification Code used as the exception routing criterion for this exception route
- **ECIC**—Ending Circuit Identification Code together with CIC defines the CIC range that is used as exception routing criterion for this exception route.
- **SI**—Service Indicator used as the exception routing criterion for this exception route
- **PST**—Primary state of the subsystem. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the subsystem. See *Possible Values for PST/SST/AST*.

- **AST**—Associated state of the subsystem. See *Possible Values for PST/SST/AST*.

Related Commands

chg-rtx, *dlt-rtx*, *ent-rtx*, *rtrv-rtx*

rept-stat-sccp Report Status SCCP

Use this command to display the following types of reports:

- `rept-stat-sccp` (with no parameters)—displays the status of the Service Module cards and the services executing on those cards:
  - A-Port (IS41 Mobile Number Portability)
  - AIQ (IS41 Analyzed Information Query)
  - ATINPQ (ATI Number Portability Query)
  - EIR (Equipment Identity Register)
  - G-Flex (GSM Flexible Numbering)
  - G-Port (GSM Mobile Number Portability)
  - GTT (Global Title Translation)
  - IAR (Info Analyzed Relay)
  - IDP Relay (Prepaid IDP Query Relay)
  - IGM (IS41 GSM Migration)
  - INP (INAP-based Number Portability)
  - INPMR (INP Message Relay)
  - LNP (Local Number Portability)
  - LNPMR (LNP Message Relay)
  - LRNQT (ITU TCAP LRN Query)
  - MNPSMS (Portability Check for Mobile Originated SMS)
  - MO SMS B-Party Routing
  - MO SMS IS41-to-GSM Migration
  - MO-based GSM SMS NP
  - MO-based IS41 SMS NP
  - MTPRTD (MTP Routed messages serviced by the SCCP card)
  - PPSMS (Prepaid SMS Intercept)
  - TLNP (Triggerless LNP)
  - TTR (Triggerless TCAP Relay)
  - V-Flex (Voice Mail Router)

The command also displays any cards that are denied SCCP service.

- `rept-stat-sccp:mode=perf` —targets the general SCCP traffic performance for Service Module cards. The report supplies message rates for group ticket voucher (TVG) or message flow control (MFC) performance.
- `rept-stat-sccp:loc=nnnn` —provides a detailed view of the status of SCCP services provided by a specific Service Module card

Note: The `rept-stat-sccp` and `rept-stat-sccp:mode=perf` reports include the status of the Service Module cards (E5-SM4G and E5-SM8G-B cards) but do not differentiate between the card types.

Note: To retrieve traffic statistics for the LNP feature, the `rept-stat-lnp` command can also be used.

Note: Statistics are displayed for the supported features as follows:

- AIQ—AIQ Subsystem Report and Service Statistics
- APORT, GPORT, and IGM—MNP Service Statistics
- ATINPQ—ATINPQ Subsystem Report and Service Statistics
- EIR—EIR Subsystem Report and Service Statistics
- G-Flex—GFLEX Service Statistics
- GTT—GTT Service Statistics
- IAR—IAR Service Statistics
- IDP Relay—IDPR Service Statistics
- INPQ—INP Subsystem Report and Service Statistics (includes INPQ and INPMR - AINPQ is combined with INPQ)
- INPMR-INP Message Relay Service Statistics
- LNP—LNP Subsystem Report and Service Statistics (including LNPMR, LNPQS, WNPQS, TLNP, PLNPQS and LRNQT)
- LNPMR-LNP Message Relay Service Statistics
- LNPQS-LNP Query Service Statistics
- MO SMS IS41-to-GSM Migration, MO-based GSM SMS NP, MO-based IS41 SMS NP, PPSMS—SMSMR Service Statistics
- MTPRTD-MTP Routed (MTP routed messages serviced by the SCCP card) Statistics.
- TLNP-Triggerless LNP Service Statistics
- TTR-Triggerless TCAP Relay Service Statistics
- V-Flex—VFLEX Subsystem Report and Service Statistics
- WNPQS-Wireless LNP Query Service Statistics

Note: If traffic is being generated while Service Module cards are loading, then superfluous counts may be displayed in Daily and Overall Peak SCCP Loads. To correct this occurrence, reset the Peak SCCP Loads using the `rept-stat-sccp:peakreset=yes` command.

Parameters

data (optional)

The subsystem data type used in the report.

Range:

dn

report on the SCCP DN subsystem

imsi

report on the SCCP IMSI subsystem

epap

report on SCCP EPAP subsystem

elap

report on SCCP ELAP subsystem

gtt

report on SCCP GTT subsystem

loc (optional)

The location of the Service Module card to be reported on.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

Report a summary of all cards.

mode (optional)

Use this parameter to provide extended performance information, including output about group ticket voucher (TVG) or message flow control (MFC) performance and message rates for direct assignments.

Range:

perf

Default:

No extended performance information is displayed.

peakreset (optional)

Reset all Peak values to zero.

Range:

yes

Example

```
rept-stat-sccp
rept-stat-sccp:mode=perf
rept-stat-sccp:loc=1106
rept-stat-sccp:data=epap
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

A Service Module card running the VSCCP application must be configured before this command can be entered.

Only one optional parameter at a time can be specified in the command.

The value specified for the loc parameter must identify a configured Service Module card running the VSCCP application.

The EPAP Data Split feature must be enabled before the data parameter can be specified.

The Dual ExAP Config feature must be enabled before specifying parameter DATA = ELAP/EPAP/GTT.

If both Dual ExAP Config and EPAP Data Split features are Enabled, DATA = EPAP parameter cannot be specified.

The parameters DATA and LOC cannot be specified together. They are mutually exclusive.

Notes

None

Output

If the EIR, G-Port, INP, 1100 TPS/DSM for ITU NP, AINPQ, A-Port, IGM, E5-SM4G Throughput Capacity, IAR, or V-Flex features are enabled, then the **ansigflex** system option is disabled.

Note: Output for this command displays the status for services associated with features that are enabled and turned on. If a feature is not turned on, then the services for that feature are not displayed. The following examples display output when all possible features are turned on.

This example shows a summary report for all the features corresponding to EPAP-based services and subsystems:

```
rept-stat-sccp
```

```
tekelecstp 10-04-06 18:02:43 EST  EAGLE5 42.0.0
SCCP SUBSYSTEM REPORT   IS-ANR         Active     -----
     SCCP ALARM STATUS   = *C  0453 Exceeded Service Error Threshold Lvl 2
GFLEX SERVICE REPORT    IS-ANR         Active     -----
     GFLEX ALARM STATUS  =  *  0527 Service abnormal
MNP SERVICE REPORT      IS-NR          Active     -----
     MNP ALARM STATUS    = No Alarms
INPQ SUBSYSTEM REPORT   OOS-MT         Unavail    -----
     INPQ:   SSN STATUS  = ----------  MATE SSN STATUS = ----------
     INP ALARM STATUS    = *C  0395 INP Subsystem is not available
EIR  SUBSYSTEM REPORT   OOS-MT         Unavail    -----
     EIR:    SSN STATUS  = ----------  MATE SSN STATUS = ----------
     EIR ALARM STATUS    = *C  0455 EIR Subsystem is not available
VFLEX SUBSYSTEM REPORT  OOS-MT         Unavail    -----
     VFLEX:  SSN STATUS  = ----------  MATE SSN STATUS = ----------
     VFLEX ALARM STATUS  = *C  0551 VFLEX Subsystem is not available
ATINPQ SUBSYSTEM REPORT OOS-MT         Unavail    -----
     ATINPQ: SSN STATUS  = ----------  MATE SSN STATUS = ----------
     ATINPQ ALARM STATUS = *C  0565 ATINPQ Subsystem is not available
AIQ SUBSYSTEM REPORT    IS-NR          Active     -----
     AIQ:    SSN STATUS  = Allowed     MATE SSN STATUS = ----------
     AIQ ALARM STATUS    = No Alarms
```

```
    SCCP Cards Configured= 1      Cards IS-NR= 1
    System Daily Peak SCCP Load       8      TPS 10-01-06 18:00:03
    System Overall Peak SCCP Load     8      TPS 00-00-00 00:00:00
    System Total SCCP Capacity        2550   TPS (2550   max SCCP Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold       2040   TPS ( 80% System   N SCCP Capacity)


    CARD   VERSION      PST           SST        AST       MSU   CPU
                                                           USAGE USAGE
    ------------------------------------------------------------------
    1101 P 007-013-002  IS-NR         Active     -----      45%   45%
    ------------------------------------------------------------------
    SCCP Service Average MSU Capacity =   45%   Average CPU Capacity =   45%

    AVERAGE CPU USAGE PER SERVICE:
      GTT    =  15%  GFLEX  =   5%  MNP    =  10%  SMSMR  =  10%  IDPR   =   0%

      IAR    =   0%  MTPRTD =   1%
      INPMR  =   2%  INPQ   =   3%  EIR    =   0%  VFLEX  =   0%  ATINPQ =   0%

      AIQ    =   0%

    TOTAL SERVICE STATISTICS:
                                    FAIL     REROUTE\      FORWARD
      SERVICE    SUCCESS    ERRORS   RATIO     WARNINGS        TO GTT     TOTAL

      GTT:          1995         5      0%            -             -      2000

      GFLEX:         500         1      0%            4            10       515

      MNP:           800         0      0%            2             3       805

      SMSMR:          67        23     25%           12            14       116

      IDPR:            0         0      0%            0             0         0

      IAR:             0         0      0%            0             0         0

      MTPRTD:          6         0      0%            -             -         6

      INPMR:          50         5      0%            0            15        70

      INPQ:          499         1      0%            0             -       500

      EIR:             0         0      0%            -             -         0

      VFLEX:           0         0      0%            -             -         0

      ATINPQ:          0         0      0%            -             -         0

      AIQ:             0         0      0%            -             -         0


    Command Completed.
;
```

This example shows the output for a card location for features corresponding to EPAP-based services and subsystems:

```
rept-stat-sccp:loc=1101
```

```
    tekelecstp 10-04-06 19:41:33 EST  EAGLE5 42.0.0
    CARD   VERSION      TYPE    PST            SST          AST
    1101   127-038-000  DSM     IS-NR          Active       -----
    CARD ALARM STATUS       = No Alarms
      GTT:    STAT = ACT       CPU USAGE = 10%
      GFLEX:  STAT = ACT       CPU USAGE = 10%
      MNP:    STAT = ACT       CPU USAGE = 10%
      SMSMR:  STAT = ACT       CPU USAGE = 20%
      IDPR:   STAT = -------   CPU USAGE = 0%
      IAR:    STAT = -------   CPU USAGE = 0%
      MTPRTD: STAT = ACT       CPU USAGE = 10%
      INPMR:  STAT = -------   CPU USAGE = 0%
      INPQ:   STAT = -------   CPU USAGE = 0%
      EIR:    STAT = -------   CPU USAGE = 0%
      VFLEX:  STAT = -------   CPU USAGE = 0%
      ATINPQ: STAT = -------   CPU USAGE = 0%
      AIQ:    STAT = -------   CPU USAGE = 0%
                               ---------------
                               TOTAL     = 50%

    CARD SERVICE STATISTICS
      SERVICE     SUCCESS    ERRORS      WARNINGS      FORWARD TO GTT     TOTAL

      GTT:           1995         5             -                   -      2000

      GFLEX:          500         1             4                  10       515

      MNP:            500         1             4                  10       515

      SMSMR:           50         2             3                  15        70

      IDPR:             0         0             0                   0         0

      IAR:              0         0             0                   0         0

      MTPRTD:           6         0             -                   -         6

      INPMR:            0         0             0                   0         0

      INPQ:             0         0             0                   -         0

      EIR:              0         0             -                   -         0

      VFLEX:            0         0             -                   -         0

      ATINPQ:           0         0             -                   -         0

      AIQ:              0         0             -                   -         0


    Command Completed.
;
```

This example shows a performance report for the EPAP-based services:

```
rept-stat-sccp:mode=perf
```

```
    tekelecstp 11-03-06 17:32:58 EST  EAGLE5 44.0.0
    SCCP SUBSYSTEM REPORT   IS-NR          Active     -----
```

```
     SCCP ALARM STATUS   = No Alarms
GFLEX SERVICE REPORT    IS-NR          Active     -----
     GFLEX ALARM STATUS  = No Alarms
MNP SERVICE REPORT      IS-NR          Active     -----
     MNP ALARM STATUS    = No Alarms

SCCP Cards Configured= 1      Cards IS-NR= 1
System Daily Peak SCCP Load       0      TPS 11-03-06 17:23:29
System Overall Peak SCCP Load     0      TPS 00-00-00 00:00:00
System Total SCCP Capacity        6800   TPS (6800   max SCCP Capacity)
System SCCP Capacity Calc. Method (N)
System TPS Alarm Threshold        5440   TPS ( 80% System   N SCCP Capacity)


TPS STATISTICS
=====================================================================
CARD   CPU      TOTAL       CLASS 0          CLASS 1
       USAGE    MSU RATE    MESSAGING RATE   MESSAGING RATE
---------------------------------------------------------------------
1205     5%        0           0                0
---------------------------------------------------------------------
AVERAGE MSU USAGE =   0%
AVERAGE CPU USAGE =   5%
TOTAL MSU RATE    =   0

STATISTICS FOR PAST 30 SECONDS
=====================================================================
TOTAL MSUS:            0
TOTAL ERRORS:          0

HIGHEST 01 OVERALL DAILY PEAKS        LAST 01 DAILY PEAK SCCP LOADS
=============================================================================

0      TPS 00-00-00 00:00:00          0      TPS 11-03-06 17:23:29

Command Completed.
;
```

This example shows a summary report for all of the features corresponding to ELAP-based subsystems:

`rept-stat-sccp`

```
tekelecstp 10-04-06 18:02:43 EST  EAGLE5 42.0.0
SCCP SUBSYSTEM REPORT   IS-ANR         Active     -----
     SCCP ALARM STATUS   = *C  0453 Exceeded Service Error Threshold Lvl 2
LNP SUBSYSTEM REPORT    OOS-MT         Unavail    -----
     LNP:    SSN STATUS  = ----------  MATE SSN STATUS = ----------
     LNP ALARM STATUS    = *C  0424 LNP Subsystem is not available
AIQ SUBSYSTEM REPORT    IS-NR          Active     -----
     AIQ:    SSN STATUS  = Allowed     MATE SSN STATUS = ----------
     AIQ ALARM STATUS    = No Alarms

SCCP Cards Configured= 1      Cards IS-NR= 1
System Daily Peak SCCP Load       8      TPS 10-01-06 18:00:03
System Overall Peak SCCP Load     8      TPS 00-00-00 00:00:00
System Total SCCP Capacity        2550   TPS (2550   max SCCP Capacity)
System SCCP Capacity Calc. Method (N)
System TPS Alarm Threshold        2040   TPS ( 80% System   N SCCP Capacity)


CARD   VERSION      PST           SST        AST       MSU   CPU
                                                       USAGE USAGE
```

```
    ------------------------------------------------------------------
    1101 P 007-013-002  IS-NR         Active     -----      45%   45%
    ------------------------------------------------------------------
    SCCP Service Average MSU Capacity =   45%   Average CPU Capacity =   45%

    AVERAGE CPU USAGE PER SERVICE:
      GTT    =   0%
      LNPMR  =  20%  LNPQS  =  15%  WNPQS  =  12%  TLNP   =  14%  PLNPQS =  19%

      LRNQT  =  23%  AIQ    =   1%

    TOTAL SERVICE STATISTICS:
                                    FAIL     REROUTE\      FORWARD
      SERVICE    SUCCESS    ERRORS   RATIO     WARNINGS        TO GTT     TOTAL

      GTT:          1995         5      0%            -             -      2000

      LNPMR:         500         1      0%            -             -       515

      LNPQS:         800         0      0%            -             -       805

      WNPQS:          67        23     25%            -             -       116

      TLNP:            0         0      0%            -             -         0

      PLNPQS:          0         0      0%            -             -         0

      LRNQT:          50         5      0%            -             -        70

      AIQ:             0         0      0%            -             -         0


    Command Completed.
;
```

This example shows the output for a card location for all of the features corresponding to ELAP-based subsystems:

`rept-stat-sccp:loc=1101`

```
    tekelecstp 10-04-06 19:41:33 EST  EAGLE5 42.0.0
    CARD   VERSION      TYPE    PST           SST          AST
    1101   127-038-000  DSM     IS-NR         Active       -----
    CARD ALARM STATUS       = No Alarms
      GTT:    STAT = ACT       CPU USAGE = 10%
      LNPMR:  STAT = ACT       CPU USAGE = 10%
      LNPQS:  STAT = ACT       CPU USAGE = 10%
      WNPQS:  STAT = -------   CPU USAGE = 0%
      TLNP:   STAT = -------   CPU USAGE = 0%
      PLNPQS: STAT = -------   CPU USAGE = 0%
      LRNQT:  STAT = -------   CPU USAGE = 0%
      AIQ:    STAT = -------   CPU USAGE = 0%
                               ---------------
                               TOTAL     = 30%

    CARD SERVICE STATISTICS
      SERVICE     SUCCESS    ERRORS      WARNINGS      FORWARD TO GTT     TOTAL

      GTT:           1995         5             -                   -      2000

      LNPMR:          500        15             -                   -       515
```

```
      LNPQS:          500        15             -                    -       515

      WNPQS:            0         0             -                    -         0

      TLNP:             0         0             -                    -         0

      PLNPQS:           0         0             -                    -         0

      LRNQT:            0         0             -                    -         0

      AIQ:              0         0             -                    -         0


    Command Completed.
;
```

This example shows a performance report for the ELAP-based subsystems:

`rept-stat-sccp:mode=perf`

```
    tekelecstp 11-03-06 17:32:58 EST  EAGLE5 44.0.0
    SCCP SUBSYSTEM REPORT   IS-NR          Active     -----
         SCCP ALARM STATUS   = No Alarms
    LNP SUBSYSTEM REPORT    OOS-MT         Unavail    -----
         LNP:    SSN STATUS  = ----------  MATE SSN STATUS = ----------
         LNP ALARM STATUS    = *C  0424 LNP Subsystem is not available

    SCCP Cards Configured= 1      Cards IS-NR= 1
    System Daily Peak SCCP Load       0      TPS 11-03-06 17:23:29
    System Overall Peak SCCP Load     0      TPS 00-00-00 00:00:00
    System Total SCCP Capacity        6800   TPS (6800   max SCCP Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold        5440   TPS ( 80% System   N SCCP Capacity)


    TPS STATISTICS
    ==================================================================
    CARD   CPU      TOTAL       CLASS 0          CLASS 1
           USAGE    MSU RATE    MESSAGING RATE   MESSAGING RATE
    ------------------------------------------------------------------
    1205     5%        0           0                0
    ------------------------------------------------------------------
    AVERAGE MSU USAGE =   0%
    AVERAGE CPU USAGE =   5%
    TOTAL MSU RATE    =   0

    STATISTICS FOR PAST 30 SECONDS
    ==================================================================
    TOTAL MSUS:            0
    TOTAL ERRORS:          0

    HIGHEST 01 OVERALL DAILY PEAKS        LAST 01 DAILY PEAK SCCP LOADS
    ================================================================================

    0      TPS 00-00-00 00:00:00          0      TPS 11-03-06 17:23:29

    Command Completed.
;
```

This example shows a summary report of SCCP subsystem:

```
rept-stat-sccp
```

```
    tekelecstp 10-08-17 13:35:38 EDT  EAGLE 42.0.0
    SCCP SUBSYSTEM REPORT   IS-ANR         Active     -----
         SCCP ALARM STATUS   = **  0262 GTT Duplicate Actn processing stopped

    SCCP Cards Configured= 9      Cards IS-NR= 8
    System Daily Peak SCCP Load       30147  TPS 10-08-17 13:33:36
    System Overall Peak SCCP Load     30147  TPS 10-08-17 13:33:36
    System Total SCCP Capacity        54400  TPS (54400  max SCCP Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold       43520  TPS ( 80% System   N SCCP Capacity)


    CARD   VERSION      PST           SST        AST       MSU   CPU
                                                           USAGE USAGE
    ------------------------------------------------------------------
    1201   036-027-001  IS-NR         Active     -----       0%    1%
    1203   036-027-001  IS-NR         Active     -----       0%    3%
    1205   036-027-001  IS-NR         Active     -----       0%    2%
    1211   036-027-001  IS-NR         Active     -----       0%    3%
    1213   036-027-001  IS-NR         Active     -----      74%   38%
    1215   036-027-001  IS-NR         Active     -----     100%   42%
    1217   036-027-001  IS-NR         Active     -----     100%   40%
    1101   036-027-001  IS-NR         Active     -----     100%   42%
    1107   -----------  OOS-MT        Isolated   -----       0%    0%
    ------------------------------------------------------------------
    SCCP Service Average MSU Capacity =  46%   Average CPU Capacity =  21%

    AVERAGE CPU USAGE PER SERVICE:
      GTT    =  10%

    TOTAL SERVICE STATISTICS:
                                    FAIL     REROUTE\      FORWARD
      SERVICE    SUCCESS    ERRORS   RATIO     WARNINGS        TO GTT     TOTAL

      GTT:        898797         0      0%            -             -    898797


     CARDS NOT PROCESSING GTT DUPLICATE ACTION:
        1215, 1217, 1101

    Command Completed.
;
```

This example shows the output for DN data when EPAP Data Split feature is Enabled:

```
rept-stat-sccp:data=dn:mode=perf
```

```
    epap240m 12-01-29 15:25:01 CST  Eagle 45.0.0
    SCCP DN SUBSYSTEM REPORT   IS-ANR         Active     -----
         SCCP ALARM STATUS   = No Alarms

    SCCP Cards Configured= 3      Cards IS-NR= 1
    System Daily Peak SCCP Load       0      TPS 12-01-29 14:44:31
    System Overall Peak SCCP Load     0      TPS 00-00-00 00:00:00
    System Total SCCP Capacity        850    TPS (850    max SCCP Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold       680    TPS ( 80% System   N SCCP Capacity)


    CARD   VERSION      PST           SST        AST       MSU   CPU   DATA
```

```
                                                                USAGE USAGE TYPE
    ----------------------------------------------------------------------
    1101 P 099-016-000  IS-NR         Active     -----       0%    1%  DN
    1105   -----------  OOS-MT-DSBLD  MEA        -----       0%    0%  COMB
    1107   099-016-000  IS-ANR        Standby     29%        0%    5%  COMB
    ----------------------------------------------------------------------
    SCCP Service Average MSU Capacity =   0%   Average CPU Capacity =   1%

    HIGHEST 01 OVERALL DAILY PEAKS
    ======================================
    TPS    s%  d%  i%  DATE     TIME
    ------------------------------------
    0      100/0  /0   00-00-00 00:00:00

    LAST 01 DAILY PEAK SCCP LOADS
    ====================================
    TPS    s%  d%  i%  DATE     TIME
    ------------------------------------
    0      100/0  /0   12-01-29 14:44:31


    Command Completed.
;
```

This example shows the output when Dual ExAP Config feature is Enabled:

`rept-stat-sccp:data=elap:mode=perf`

```
    epap240m 12-01-29 15:25:01 CST  Eagle 45.0.0
    SCCP ELAP SUBSYSTEM REPORT   IS-ANR         Active     -----
         SCCP ALARM STATUS   = No Alarms

    SCCP Cards Configured= 3      Cards IS-NR= 1
    System Daily Peak SCCP Load       0      TPS 12-01-29 14:44:31
    System Overall Peak SCCP Load     0      TPS 00-00-00 00:00:00
    System Total SCCP Capacity        850    TPS (850    max SCCP Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold       4000    TPS ( 80% System   N SCCP Capacity)


    CARD   VERSION      PST           SST        AST       MSU   CPU   DATA
                                                           USAGE USAGE TYPE
    ----------------------------------------------------------------------
    1101 P 099-016-000  IS-NR         Active     -----       0%    1%  ELAP
    1105   -----------  OOS-MT-DSBLD  MEA        -----       0%    0%  ELAP
    1107   099-016-000  IS-ANR        Standby     29%        0%    5%  ELAP
    ----------------------------------------------------------------------
    SCCP Service Average MSU Capacity =   0%   Average CPU Capacity =   1%

    HIGHEST 01 OVERALL DAILY PEAKS
    ============================================
    TPS    sccp%  epap%  elap%  DATE     TIME
    ---------------------------------------------
    0      100    0      0      00-00-00 00:00:00

    LAST    01   DAILY   PEAK   SCCP    LOADS
    ============================================
    TPS    sccp%  epap%  elap%  DATE     TIME
    ---------------------------------------------
    0      100    0      0      00-00-00 00:00:00
```

This example shows the output when both the Dual ExAP Config and the EPAP Data Split features are Enabled:

`rept-stat-sccp:data=dn:mode=perf`

```
epap240m 12-01-29 15:25:01 CST  Eagle 45.0.0
SCCP DN SUBSYSTEM REPORT   IS-ANR         Active     -----
     SCCP ALARM STATUS   = No Alarms

SCCP Cards Configured= 3      Cards IS-NR= 1
System Daily Peak SCCP Load       0      TPS 12-01-29 14:44:31
System Overall Peak SCCP Load     0      TPS 00-00-00 00:00:00
System Total SCCP Capacity        850    TPS (850    max SCCP Capacity)
System SCCP Capacity Calc. Method (N)
System TPS Alarm Threshold       5000    TPS ( 80% System   N SCCP Capacity)


CARD   VERSION      PST           SST        AST       MSU   CPU   DATA
                                                       USAGE USAGE TYPE
------------------------------------------------------------------------
1101 P 099-016-000  IS-NR         Active     -----       0%    1%  DN
1105   -----------  OOS-MT-DSBLD  MEA        -----       0%    0%  EPAP
1107   099-016-000  IS-ANR        Standby     29%        0%    5%  EPAP
------------------------------------------------------------------------
SCCP Service Average MSU Capacity =   0%   Average CPU Capacity =   1%

HIGHEST 01 OVERALL DAILY PEAKS
================================================
TPS    sccp%  dn%  imsi%  elap%  DATE     TIME
------------------------------------------------
0      100    0    0      0      00-00-00 00:00:00

LAST 01 DAILY PEAK SCCP LOADS
================================================
TPS    sccp%  dn%  imsi%  elap%  DATE     TIME
------------------------------------------------
0      100    0    0      0      00-00-00 00:00:00
```

Legend

This section defines the fields of the three `rept-stat-sccp` reports:

- `rept-stat-sccp` with no parameters
- `rept-stat-sccp:mode=perf`
- `rept-stat-sccp:loc=nnnn`

A dash (-) in an output field indicates that the statistic does not apply.

Note: The ERRORS and TOTAL ERRORS fields indicate that errors have occurred for Service Module cards in the system. Refer to UIMs generated by the system for the specific errors, and refer to the *Maintenance Guide* for error explanations and recovery procedures.

Report Type: `rept-stat-sccp` with no parameters

- **SCCP SUBSYSTEM REPORT**, **GFLEX/MNP SERVICE REPORT** and **LNP/INPQ/EIR/VFLEX/ATINPQ/AIQ SUBSYSTEM REPORT**—Summary of the SCCP subsystem status, GFLEX and MNP service status, LNP, INPQ (INP Query), EIR, VFLEX, ATINPQ and AIQ subsystem status

- **SCCP CARDS CONFIGURED**—Number of provisioned Service Module cards running the VSCCP application
- **CARD IS-NR**—Number of Service Module cards that can be used by the system (status is In-Service Normal, IS-NR)
- **SYSTEM PEAK SCCP LOAD**—Highest SCCP transactions-per-second (TPS) processed by the EAGLE
- **SYSTEM TOTAL SCCP CAPACITY**—Sum of the maximum capacity of all active SCCP cards
- **SYSTEM TPS ALARM THRESHOLD**—Percentage of traffic that triggers an alarm to warn that the EAGLE is approaching the total system SCCP transactions-per-second (TPS) capacity. This value is set by the `chg-th-alm` command.
- **CARD**—Card location of the cards running the VSCCP application
- **P**—When G-Flex, GPORT, INP, APORT, EIR, V-Flex, IAR, or IGM feature is turned on, a P indicates the primary Service Module card. The primary Service Module card provides the MPS status to the EAGLE. This indicator is displayed between the card location and the GPL version.
- **VERSION**—Version number of the GPL running on the Service Module card
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the card. See *Possible Values for PST/SST/AST*.
- **MSU USAGE**—Percentage of the maximum number of MSUs received by each card during the last 30 seconds
- **CPU USAGE**—Percentage of the amount of CPU used by each card during the last 30 seconds to process messages and to handle other foreground and background tasks
- **SCCP SERVICE AVERAGE MSU CAPACITY**—Average MSU capacity used over the last 30-second interval. This field includes all services provided by the Service Module cards.
- **AVERAGE CPU CAPACITY**—Average CPU capacity used over the last 30-second interval. This field includes all services provided by the Service Module cards.
- **AVERAGE CPU USAGE PER SERVICE**—System-wide view of the service traffic composition.
- **TOTAL SERVICE STATISTICS**—System-wide view of per-service statistics for the last 30-second interval. An "A" in the field indicates that the statistic does not apply. The report tracks the following information:
  - **SERVICE**
  - **SUCCESS**—Total number of successful messages processed by the specified card for each service. Applies to all services.
  - **ERRORS**—Total number of messages with errors for each service. Applies to all services.
  - **WARNINGS**—Total number of messages that output UIM warnings and were forwarded to GTT by the specified card for G-Flex, MNP, SMSMR, IDPR, IAR, INPMR and INPQ services
  - **FORWARD TO GTT**—Total number of messages that could not find a match in the MPS database (did not produce any errors or warnings) and were successfully forwarded to GTT by the specified card for G-Flex, MNP, SMSMR, IDPR, IAR and INPMR services

Report Type: `rept-stat-sccp:mode=perf`

This report includes the status of E5-SM4G and E5-SM8G-B cards, but does not differentiate between these card types.

- **SCCP SUBSYSTEM REPORT**, **LNP SUBSYSTEM REPORT** and **GFLEX/MNP SERVICE REPORT**—Summary status of the SCCP subsystem, GFLEX and MNP services, LNP subsystem along with their corresponding Alarm Status
- **SCCP CARDS CONFIGURED**—Number of Service Module cards provisioned

- **CARD IS-NR**—Number of Service Module cards that can be used by the system (status is in-service normal, IS-NR)
- **SYSTEM PEAK SCCP LOAD**—Highest SCCP TPS processed by the EAGLE
- **SYSTEM TOTAL SCCP CAPACITY**—Sum of the maximum capacity of all active Service Module cards
- **SYSTEM TPS ALARM THRESHOLD—**Percentage of traffic that triggers an alarm to warn that the EAGLE is approaching the total system SCCP TPS capacity. This value is set by the `chg-th-alm` command.
- **TPS STATISTICS**—Section of the report that provides TPS statistics on each Service Module card
  - **CARD**—Card location of the cards running the VSCCP application
  - **CPU USAGE**—Percentage of the amount of CPU used to process messages by each card during the last 30 seconds
  - **TOTAL MSU RATE**—Total number of messages processed per second. This and the other message rates are obtained from statistics maintained by the Service Module card for the last 30-second period.
  - **CLASS 0 and CLASS 1 MESSAGING RATE—**Number of messages received per second.

The next section of the `rept-stat-sccp:mode=perf` report provides system-wide SCCP traffic statistics.

AVERAGE MSU USAGE

Total of the MSU usage fields from each Service Module card divided by the number of active Service Module cards

AVERAGE CPU USAGE

Total of the CPU usage fields from each Service Module card divided by the number of active Service Module cards

TOTAL MSU RATE

Sum of all MSU rates processed by all active Service Module cards

STATISTICS FOR PAST 30 SECONDS

Statistics that represent the last 30-second period

TOTAL MSUS

Sum of all transactions on all active Service Module cards

TOTAL ERRORS

Sum of all errors on all active Service Module cards

Report Type: `rept-stat-sccp:loc=nnnn`

- **CARD**—Card location of the card running the VSCCP application
- **VERSION**—Version number of the GPL the card is running
- **TYPE**—Type of the card
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the card. See *Possible Values for PST/SST/AST*.
- **CARD ALARM STATUS**—If there are no card alarms present, this field displays No Alarms.

The next section of the `rept-stat-sccp:loc=nnnn` report supplies the status of the individual services provided by the card and the associated CPU usage for the service.

GTT: STAT

Possible values are ACTIVE and SWDL (software loading)

SMSMR: STAT

Possible values are ACTIVE and SWDL (software loading)

IDPR: STAT

Possible values are ACTIVE and SWDL (software loading)

IAR: STAT

Possible values are ACTIVE and SWDL (software loading)

INPMR: STAT

Possible values are ACTIVE and SWDL (software loading)

MTPRTD: STAT

Possible values are ACTIVE and SWDL (software loading)

GFLEX: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

MNP: STAT

Possible values are ACTIVE, OFFLINE, and SWDL (software loading)

INPQ: STAT

Possible values are ACTIVE, OFFLINE, and SWDL (software loading)

EIR: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

VFLEX: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

LNPMR: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

LNPQS: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

WNPQS: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

TLNP: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

PLNPQS: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

LRNQT: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

ATINPQ: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

AIQ: STAT

Possible values are ACTIVE, OFFLINE and SWDL (software loading)

TOTAL

Sum of the CPU usage for the services running over the previous 30-second period

CARD SERVICE STATISTICS

Card service statistics over the previous 30-second period for the specified card. The report tracks the following:

SERVICE

Name of the individual service provided by the card

SUCCESS

Total number of successful messages processed by the specified card for each service. Applies to all services.

ERRORS

Total number of messages with errors for each service. Applies to all services.

WARNINGS

Total number of messages that output UIM warnings and were forwarded to GTT by the specified card for G-Flex, MNP, SMSMR, IDPR, IAR, INPMR and INPQ services

FORWARD TO GTT

Total number of messages that could not find a match in the MPS database (did not produce any errors or warnings) and were successfully forwarded to GTT by the specified card for G-Flex, MNP, SMSMR, IDPR, IAR, and INPMR services

TOTAL

Total number of SUCCESS, ERRORS, WARNINGS, and FORWARD TO GTT messages

Related Commands

chg-th-alm, *rtrv-th-alm*

rept-stat-seas

Report Status SEAS Command

Use this command to generate a summary report of the status of the SEAS subsystem on the EAGLE. This command reports the status of the CCS MR connections if the SEAS Over IP feature is turned on. See the *Maintenance Guide* for information about the SEAS alarms.

Parameters

This command has no parameters.

Example

```
rept-stat-seas
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

Notes

None

Output

This example shows output when the SEAS Over IP feature is turned on.

`rept-stat-seas`

```
tekelecstp 07-01-11 16:47:51 EST  EAGLE 37.5.0

    SEAS SYSTEM                          PST         SST          AST
------------------------------------------------------------------------------

                                       IS-NR       Avail        -----
    ALARM STATUS = No Alarms
    TERM         IPADDR           PORT    PST         SST          AST
------------------------------------------------------------------------------

    18           120.30.10.11     15      IS-NR       Active       -----
    ALARM STATUS = No Alarms
    40           128.30.15.12     16      IS-NR       Active       -----
    ALARM STATUS = No Alarms
```

Legend

- **PST**—Primary state of the subsystem. Possible values are described in *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the subsystem. Possible values are described in *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the subsystem. Possible values are described in *Possible Values for PST/SST/AST*.
- **SEAS SYSTEM**—Overall SEAS component

Related Commands

alw-trm, *chg-trm*, *inh-trm*, *rept-stat-sys*, *rept-stat-trbl*, *rept-stat-trm*

rept-stat-seculog

Display Security Log Status Information

Use this command to display the following information about the security log on the active and standby OAMs:

- The active or standby status of each log

- The number of new (that is, not uploaded) entries in each log
- The percentage of log space used by those new entries
- Whether overflow has occurred since the last upload
- Whether a recording failure has occurred since the last upload
- The date and time of the oldest and newest records in the log
- The date and time when the last successful upload of the log occurred

Parameters

This command has no parameters.

Example

```
rept-stat-seculog
```

Dependencies

No other security log command can be in progress when this command is entered.

Notes

The %FULL field displays the amount of space in the log taken up by new (not uploaded) entries. That number is obtained by dividing the number displayed in the ENTRIES field by the overall storage capacity of the log (10,000 entries). Because the log stays full of entries at all times, new entries overwrite existing entries.

The percentage full computed is rounded up to the next integer with one exception: the value of 100 is not displayed until the log is truly 100% full.

The log capacity is 10,000 records. To determine how many more commands can be logged before an overflow condition occurs, subtract the value displayed in the ENTRIES field from 10,000.

The status of the active OAM's log is always reported first in the output report, followed by the status of the standby log; in other words, they are not*necessarily* displayed numerically by the location number.

The report displays dates in the format *yy-mm-dd*, where *yy* is the year, *mm* is the month, and *dd* is the date. The report displays times in the format of *hh:mm:ss*, where *hh* is hours, *mm* is minutes, and *ss* is seconds.

Output

This example shows the output in the normal security log state. All un-uploaded records appear in the log on the active OAM.

```
rept-stat-seculog
```

```
rlghncxa03w 05-07-29 16:40:40 EST  EAGLE 28.1.0
             -- SINCE LAST UPLOAD --  OLDEST   NEWEST   LAST
LOC  ROLE    ENTRIES %FULL OFLO FAIL  RECORD   RECORD   UPLOAD
```

```
    1114 Active  8312    84    No   No    96-08-12 05-07-04 05-07-16
                                          11:23:56 15:59:06 14:02:22

    1116 Standby 0       0     No   No    96-09-12 05-07-30 05-07-30
                                          11:24:12 14:00:06 14:02:13
;
```

This example shows the output when the active security log is full and has overflowed.

`rept-stat-seculog`

```
    rlghncxa03w 05-07-29 16:40:40 EST  EAGLE 28.1.0
                -- SINCE LAST UPLOAD --  OLDEST   NEWEST   LAST
    LOC  ROLE    ENTRIES %FULL OFLO FAIL  RECORD   RECORD   UPLOAD
    1114 Active  10000   100   Yes  No    96-08-12 05-07-04 05-07-16
                                          11:23:56 15:59:06 14:02:22

    1116 Standby 0       0     No   No    96-09-12 05-07-30 05-07-30
                                          11:24:12 14:00:06 14:02:13
;
```

This example shows the output when both logs contain un-uploaded entries. The standby log on 1116 should be uploaded.

`rept-stat-seculog`

```
    rlghncxa03w 05-07-29 16:40:40 EST  EAGLE 28.1.0
                -- SINCE LAST UPLOAD --  OLDEST   NEWEST   LAST
    LOC  ROLE    ENTRIES %FULL OFLO FAIL  RECORD   RECORD   UPLOAD
    1114 Active  8312    84    No   No    96-08-12 05-07-04 05-07-16
                                          11:23:56 15:59:06 14:02:22

    1116 Standby 693     7     No   No    96-09-12 05-07-30 05-07-30
                                          11:24:12 14:00:06 14:02:13
;
```

This example shows the output if data cannot be retrieved from the standby OAM (for example, in simplex mode).

`rept-stat-seculog`

```
    rlghncxa03w 05-07-29 16:40:40 EST  EAGLE 28.1.0
                -- SINCE LAST UPLOAD --  OLDEST   NEWEST   LAST
    LOC  ROLE    ENTRIES %FULL OFLO FAIL  RECORD   RECORD   UPLOAD
    1114 Active  8312    83    No   No    96-08-12 05-07-04 05-07-16
                                          11:23:56 15:59:06 14:02:22

    1116 Standby -----   ---   ---  ---   -------- -------- --------
                                          -------- -------- --------
;
```

Legend

- **LOC**—Address of the TDM card (with the hard disk on it) that contains the log. It is always the card at location 1114 or 1116.

- **ROLE**—Current role of the security log at that location. This value is always the same as the role of the OAM associated with the TDM card: *active* or *standby*.
- **-- SINCE LAST UPLOAD**—Applies to the four columns directly below the heading on the output. It indicates that the fields below display information obtained since the last upload.
  - **ENTRIES**—Shows how many un-uploaded commands are currently recorded in the log. This value resets to 0 (zero) when the log is uploaded using `copy-seculog` .
  - **%FULL**—Shows, as a percentage, how much space in the log the ENTRIES field value occupies
  - **OFLO**—Overflow indicator. Overflow occurs if the log is not uploaded periodically: new entries start overwriting un-uploaded entries. Displays *No* if no overflow has occurred and *Yes* if overflow has occurred
  - **FAIL**——Failed indicator. Displays *No* if no logging failure has occurred. Displays *Yes* to indicate that a logging failure has occurred that has prevented one or more entries from being recorded in the log successfully.

  Note: Whether the system is able to set the logging failure flag in the security log header depends on the nature of the failure. If a `copy-disk` command is processing, the system sets the flag when the `copy-disk` command finishes processing. However, if the active fixed disk fails for some reason, or the security log happens to be in a bad sector that develops, the system is unable to set the logging failure flag.
- **OLDEST RECORD/NEWEST RECORD**—Date and time recorded in the oldest and newest record in the log. Allows the administrator to know the time period that the log covers. The log records all commands that were issued between 6/3/96 at 13:45:03 up to 8/5/96 at 06:58:55. The NEWEST RECORD for the active log is the current date, because the log will have recorded the `rept-stat-seculog` command that was just entered to produce the report.
- **LAST UPLOAD**—Date and time when the log was last uploaded successfully. That is, the `copy-seculog` command successfully copied the log to the FTA.

Related Commands

chg-attr-seculog, *rtrv-attr-seculog*

rept-stat-sip Report Status SIP

Use this command to display the overall status of the SIP service on the EAGLE.

Parameters

loc (optional)

The SIP card location for which SIP TPS usage data is to be reported.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 – 6118

peakreset (optional)

Reset peak values to the current TPS values.

Range:

yes

no

Default:

no

mode (optional)

Performance data of SIP cards and their connections.

Range:

perf

Default:

perf

Example

```
rept-stat-sip
rept-stat-sip:peakreset=yes:loc=1101
rept-stat-sip:loc=1101
rept-stat-sip:mode=perf
rept-stat-sip:mode=perf:loc=1101
```

Dependencies

The location specified with this command should be of a SIP card.

A SIP card running the SIPHC application must be configured before this command can be entered.

Parameter peakreset should be specified with loc parameter.

Notes

If optional parameters are specified, only the entries that match the entered parameters are displayed.

Output

This example displays output when no parameter is specified:

```
rept-stat-sip
```

```
tekelecstp 02-03-20 05:58:25 EST EAGLE 46.0.0
    rept-stat-sip
```

```
    SIP ALARM STATUS = No Alarms
    SIP cards Configured= 2 Cards IS-NR= 2

    CARD   VERSION     PST           SST       AST       TPS
    ------------------------------------------------------------
    1107   045-003-053 IS-ANR        Standby   100%+     0
    ------------------------------------------------------------

    TOTAL SERVICE STATISTICS:
    ==========================================================================
    SERVICE    SUCCESS    ERROR      WARNINGS   BYPASS     TOTAL
    SIPNP:     5          2          1          2          10

    Command Completed.
;
```

This example displays output when the LOC parameter is specified:

`rept-stat-sip:loc=1107`

```
Command Accepted - Processing

  tekelecstp 02-03-20 06:00:17 EST EAGLE 46.0.0
  rept-stat-sip:loc=1107

    CARD   VERSION      TYPE    PST            SST          AST
    1101   045-003-053  DSM     IS-NR          Active       -----
    CARD ALARM STATUS = No Alarms

    TPS STATISTICS
    ==========================================================================

                  TPS   PEAK TPS.   PEAKTIMESTAMP

----------------------------------------------------------------------------------------------------------------------

                  2503  2508        02-03-20 06:02:04

    PER CONNECTION STATISTICS
    ==========================================================================

    CNAME              STATUS TPS    INVITE  3XX     ERROR
    ------------------------------------------------------------
    C1                 DOWN   0      0       0       0
    C2                 DOWN   0      0       0       0
    C3                 UP     2503   75113   75113   0
    UdpC4              UP     0      0       0       0
    ------------------------------------------------------------
  Command Completed.
;
```

This example displays output when the MODE parameter is specified:

`rept-stat-sip:mode=perf`

```
Command Accepted - Processing
```

```
  tekelecstp 02-03-20 06:05:55 EST EAGLE 46.0.0
  rept-stat-sip:mode=perf
    SIP ALARM STATUS = No Alarms
    SIP Cards Configured= 2      Cards IS-NR= 2

    TPS STATISTICS:
    ==============================================================================
    CARD   TPS    PTPS    PTIMESTAMP
    ------------------------------------------------------------
    1101 P 2507   2511    02-03-20 06:05:52
    1107   0      0       00-00-00 00:00:00
    ------------------------------------------------------------

    Command Completed.
;
```

This example displays output when both MODE and LOC parameters are specified:

`rept-stat-sip:mode=perf:loc=1101`

```
Command Accepted - Processing

  tekelecstp 02-03-20 06:08:24 EST EAGLE 46.0.0
  rept-stat-sip:mode=perf:loc=1101

    CARD   VERSION      TYPE    PST            SST          AST
    1101   045-003-053  DSM     IS-NR          Active       -----
    CARD ALARM STATUS       =  No Alarms

    TPS STATISTICS:
    ==============================================================================
                TPS   PEAK TPS.   PEAKTIMESTAMP
    ------------------------------------------------------------
                2501  2517        02-03-20 06:06:21

    PER CONNECTION STATISTICS:
    ==============================================================================
    CNAME               TPS    PTPS    PTIMESTAMP
    ------------------------------------------------------------
    C1                  0      0       00-00-00 00:00:00
    C2                  0      0       00-00-00 00:00:00
    C3                  2501   2517    02-03-20 06:06:21
    udpC4               0      0       00-00-00 00:00:00

    Command Completed.
;
```

Related Commands

None.

rept-stat-slan — Report Status of the STPLAN

Use this command to generate a summary report of the status of the E5-ENET and E5-ENET-B cards that make up the STPLAN subsystem.

Parameters

mode (optional)

Use this parameter to provide extended performance information, including group ticket voucher (TVG) and message flow control (MFC) message rates.

Range:

perf

Default:

No extended performance information is displayed

Example

```
rept-stat-slan
```

```
rept-stat-slan:mode=perf
```

Dependencies

No other `rept-stat-xxx` commands can be in progress when this command is entered.

At least one E5-ENET or E5-ENET-B card that makes up the STPLAN must be configured.

Notes

The HOST Cap. field value is obtained by averaging usage percentages for data links from each E5-ENET and E5-ENET-B card to the host.

The EAGLE Cap. field value is obtained by averaging usage percentages for E5-ENET and E5-ENET-B traffic received from LIMs.

System level usage for host capacity (the AVERAGE USAGE per HOST CAPACITY field in the `rept-stat-slan` output) is obtained by averaging the usage percentages for the data links to the host from each E5-ENET and E5-ENET-B card.

EAGLE level usage for E5-ENET and E5-ENET-B card capacity (the AVERAGE USAGE per EAGLE CAPACITY field) is obtained by averaging usage percentages for E5-ENET and E5-ENET-B traffic received from LIMs.

Output

The following example shows output with at least one card in an IS-NR state:

```
rept-stat-slan
```

```
rlghncxa03w 04-02-27 16:53:22 EST   EAGLE 31.3.0
SLAN Subsystem Report  IS-NR          Active     -----
SLAN Cards Configured= 2      Cards IS-NR= 2
```

```
    CARD   VERSION      PST            SST       AST    HOST Cap.  EAGLE Cap.
        ------------------------------------------------------------------------

    1206   021-010-000  IS-NR          Active    ----       42%         16%
    1104   021-010-000  IS-NR          Active    ALMINH     36%         12%
        ------------------------------------------------------------------------

    AVERAGE USAGE per HOST CAPACITY  =  39%
    AVERAGE USAGE per EAGLE CAPACITY =  14%
    CARDS DENIED SLAN SEVICE:
                            1101, 1204
    Command Completed.
;
```

`rept-stat-slan:mode=perf`

```
    rlghncxa03w 11-03-04 13:36:07 EST  EAGLE 44.0.0
    SLAN Subsystem Report  IS-NR          Active      -----
    SLAN Cards Configured= 3      Cards IS-NR= 3
    CARD   HOST    EAGLE    MESSAGING
           CAP     CAP      RATE
    ------------------------------------------------------------------------
    1101   50%     30%      140
    1102   55%     33%      435
    1103   47%     28%      435
    1104   80%     32%      622
    ------------------------------------------------------------------------
    AVERAGE USAGE per HOST CAPACITY  =  51%
    AVERAGE USAGE per EAGLE CAPACITY =  30%

    CARDS DENIED SLAN SERVICE:
                            2103
    Command Completed.
;
```

Legend

- **SLAN Subsystem Report**—Status of the STPLAN subsystem
- **STPLAN Cards Configured**—Number of E5-ENET and E5-ENET-B cards used by the STPLAN contained in the system.
- **Cards IS_NR**—Number of E5-ENET and E5-ENET-B cards contained in the system whose status is in service normal (IS-NR)
- **CARD**—Locations of the E5-ENET and E5-ENET-B cards
- **VERSION**—Version number of the GPL running on the STPLAN card
- **PST**—Primary state of the E5-ENET and E5-ENET-B cards. The possible values are described in *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the E5-ENET and E5-ENET-B cards. The possible values are described in *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the E5-ENET and E5-ENET-B cards. The possible values are described in *Possible Values for PST/SST/AST*.
- **HOST CAP**—Amount of traffic being sent to the host from each E5-ENET and E5-ENET-B card, expressed as a percentage of the total amount of traffic that can be sent to the host.

- **EAGLE CAP**—Amount of traffic being sent to each E5-ENET and E5-ENET-B card, that is received from the LIMs, expressed as a percentage of the total amount of traffic that can be sent to the E5-ENET and E5-ENET-B card.
- **AVERAGE USAGE per HOST CAPACITY**—Amount of traffic being sent to all hosts from all E5-ENET and E5-ENET-B cards, expressed as a percentage of the total amount of traffic that can be sent to all hosts from all E5-ENET and E5-ENET-B cards.
- **AVERAGE USAGE per EAGLE CAPACITY—**Amount of traffic being sent to all E5-ENET and E5-ENET-B cards that is received from the LIMs, expressed as a percentage of the total amount of traffic that can be sent to all E5-ENET and E5-ENET-B cards.
- **CARDS DENIED SLAN SERVICE**—Card locations that cannot use the STPLAN application.
- **CARDS DISABLED COPY SERVICE**—Card locations that cannot use the stop and copy action of the gateway screening feature.

The report displayed with the `rept-stat-slan:mode=perf` command shows these fields:

- **HOST CAP**—Average of usage percentages for the TCP/IP data links to the host from each E5-ENET and E5-ENET-B card.
- **EAGLE CAP**—Average of usage percentages for the E5-ENET and E5-ENET-B traffic that is received from the LIMs.
- **TVG RATE**—Number of messages per second received from all SS7 links and any other group ticket voucher paced message source. Obtained from statistics maintained by the E5-ENET and E5-ENET-B cards for the last 30-second period.
- **AVERAGE USAGE per HOST CAPACITY**—Amount of traffic being sent to all hosts from all E5-ENET and E5-ENET-B cards, expressed as a percentage of the total amount of traffic that can be sent to all hosts from all E5-ENET and E5-ENET-B cards.
- **AVERAGE USAGE per EAGLE CAPACITY—A**mount of traffic being sent to all E5-ENET and E5-ENET-B cards that is received from the LIMs, expressed as a percentage of the total amount of traffic that can be sent to all E5-ENET and E5-ENET-B cards.

Related Commands

rept-stat-alm, *rept-stat-card*, *rept-stat-dlk*, *rept-stat-imt*, *rept-stat-sys*, *rept-stat-trbl*

rept-stat-slk

Report Status Signaling Link

Use this command to generate a report of the MTP signaling links status. The secondary state (SST) indicates whether the link is available, unavailable, or manually removed from service.

Use this command to generate a separate report of status of the E1 associated with a signaling link. The status includes the location of the E1 card and the UAM text. If the E1 association is not provisioned, “E1 association unknown” is displayed. If the card is not type LIME1, no E1 output is generated.

Use this command to generate a separate report of status of the T1 associated with a signaling link. The status includes the location of the T1 card and the UAM text. If the card is not type LIMT1, no T1 output is generated.

Parameters

l2stats (optional)

Report L2 status

Range:

align

Display alignment data only

both

Display alignment and service data

brief

Display up to 10 alignment events only

no

Do not display level 2 status information

service

Display service data only

Default:

no

link (optional)

The signaling link on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling link ports.

Default:

Display all

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

All cards containing signaling links are displayed.

stat (optional)

A report on cards whose status is the same as the state indicated by the parameter

Range:

all

All of the primary states

alminh

Alarms inhibited

anr

In-Service-Abnormal (IS-ANR)

dsbld

Out-of-Service-Maintenance-Disabled (OOS-MT-DSBLD)

mt

Out-of-Service-Maintenance (OOS-MT)

nr

In-Service-Normal (IS-NR)

Default:

Display all

Example

```
rept-stat-slk
rept-stat-slk:loc=1201:link=a
rept-stat-slk:stat=alminh
rept-stat-slk:loc=1203:link=b:l2stats=both
rept-stat-slk:loc=1203:link=b:l2stats=brief
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

If the loc or link parameter is specified, then the stat parameter cannot be specified.

When the loc parameter is specified, the link parameter must be specified.

The card must be equipped and must be one of the following cards:

- E5-E1T1, E5-E1T1-B, or HC-MIM card running the SS7ANSI or CCS7ITU application
- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPLIM, IPLIMI, or IPSG application

The location specified by the loc parameter cannot be one of those reserved for non-LIM or non-DCM cards.

The signaling link must be an SS7 signaling link to display level 2 statistics (l2stats).

On point-to-multipoint IP links (E5-ENET /E5-ENET-B cards equipped as SS7IPGW or IPGWI links), l2stats output is not available.

The specified signaling link must be provisioned in the database.

A card location that is valid and defined in the database must be specified.

The card in the location specified by the loc parameter must be in service.

The link=b parameter cannot be specified for SS7IPGW links.

Neither the stat or loc and port parameters can be specified with this command.

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

This command is not valid for IPSG-M3UA signaling links.

Notes

Not every card location represents a signaling link. Be sure to address a signaling link in this command.

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

The *Installation Guide* provides an illustration of card locations.

Output

`rept-stat-slk`

```
    rlghncxa03w 04-02-27 17:00:36 EST  EAGLE 31.3.0
    SLK      LSN       CLLI        PST          SST       AST
    1201,A   lsnsspn2  ----------- IS-NR        Avail     ----
    1201,B   lsnstpi   ----------- IS-NR        Avail     ----
    1202,A   lsnstpn   ----------- IS-NR        Avail     ----
    1202,B   lsnstpi   ----------- IS-NR        Avail     ----
    1203,A   lsnstpa   ----------- IS-NR        Avail     ----
    1203,B   lsnscpa   ----------- IS-NR        Avail     ----
    1205,A   lsnscpi   ----------- IS-NR        Avail     ----
    1205,B   lsnsspi1  ----------- IS-NR        Avail     ----
    1207,A   lsnstpa   ----------- IS-NR        Avail     ----
    1207,B   lsnsspa1  ----------- IS-NR        Avail     ----
    1211,A   lsnstpn   ----------- IS-NR        Avail     ----
    1211,B   lsnsspn1  ----------- IS-NR        Avail     ----
    Command Completed.
;
```

`rept-stat-slk:loc=1201:link=a`

```
    rlghncxa03w 04-02-04 13:06:25 EST  EAGLE 31.3.0
    SLK      LSN       CLLI        PST          SST       AST
    1201,A   lsnsspn2  ----------- OOS-MT       Unavail   ----
      ALARM STATUS       = *   0213 REPT-LKF: received SIOS
      UNAVAIL REASON     = PE NA
    Command Completed.
;
```

```
rept-stat-slk:stat=alminh
```

```
    rlghncxa03w 04-02-23 12:57:50 EST  EAGLE 31.3.0
    SLK      LSN       CLLI        PST          SST       AST
    1205,A   lsnscpi   ----------- IS-NR        Avail     ALMINH
    1211,A   lsnstpn   ----------- IS-NR        Avail     ALMINH
    Command Completed.
;
```

```
rept-stat-slk:loc=1203:link=a:l2stats=both
```

```
    rlghncxa03w 04-02-04 13:06:25 EST  EAGLE 31.3.0
    SLK      LSN       CLLI        PST            SST       AST
    1203,A lsnsspn2  ----------- OOS-MT-DSBLD   Unavail   ----
      ALARM STATUS    = **  0236 REPT-LKS:not aligned
      UNAVAIL REASON  = NA
    Event Type     Event                              Timestamp
    SSCOP State    Idle                               04-02-04 10:04:23.000
    SSCOP State    Outgoing Conn. Pending             04-02-04 10:04:23.000
    SSCOP State    Incoming Conn. Pending             04-02-04 10:05:31.100
    SSCOP State    Outgoing Disc. Pending             04-02-04 10:05:31.100
    SSCOP State    Outgoing Resync Pending            04-02-04 10:05:31.105
    SSCOP State    Incoming Resync Pending            04-02-04 10:05:31.105
    SSCOP State    Outgoing Recovery Pending          04-02-04 10:05:46.425
    SSCOP State    Recovery Response Pending          04-02-04 10:05:46.430
    SSCOP State    Incoming Recovery Pending          04-02-04 10:05:46.430
    SSCOP State    Data Transfer Ready                04-02-04 10:06:02.110
    SSCF  State    OOS Idle                           04-02-04 10:06:02.120
    SSCF  State    OOS ODP                            04-02-04 10:06:02.885
    SSCF  State    Alignment Idle                     04-02-04 10:06:53.625
    SSCF  State    Alignment OCP                      04-02-04 10:07:14.000
    SSCF  State    Alignment ODP                      04-02-04 10:07:14.000
    SSCF  State    In Service/Data Transfer Ready     04-02-04 10:08:01.760
    SSCF  State    Proving Data Transfer Ready        04-02-04 10:08:01.760
    SSCF  State    Aligned/Ready Data Transfer Ready  04-02-04 10:04:23.000
    MAAL  State    OOS                                04-02-04 10:04:23.000
    MAAL  State    Alignment                          04-02-04 10:05:31.100
    MAAL  State    Proving                            04-02-04 10:05:31.100
    MAAL  State    Aligned/Ready                      04-02-04 10:05:31.105
    MAAL  State    In Service                         04-02-04 10:05:31.105
    SSCOP Receive  BGN                                04-02-04 10:05:46.425
    SSCOP Receive  BGAK                               04-02-04 10:05:46.430
    SSCOP Receive  END                                04-02-04 10:05:46.430
    SSCOP Receive  ENDAK                              04-02-04 10:06:02.110
    SSCOP Receive  RS                                 04-02-04 10:06:02.120
    SSCOP Receive  RSAK                               04-02-04 10:06:02.885
    SSCOP Receive  BGREJ                              04-02-04 10:06:53.625
    SSCOP Receive  SD                                 04-02-04 10:07:14.000
    SSCOP Transmit ER                                 04-02-04 10:07:14.000
    SSCOP Transmit POLL                               04-02-04 10:08:01.760
    SSCOP Transmit STAT                               04-02-04 10:08:01.760
    SSCOP Transmit USTAT                              04-02-04 10:04:23.000
    SSCOP Transmit UD                                 04-02-04 10:04:23.000
    SSCOP Transmit MD                                 04-02-04 10:05:31.100
    SSCOP Transmit ERAK                               04-02-04 10:05:31.100
    SSCF  Receive  Out of Service                     04-02-04 10:05:31.105
    SSCF  Receive  Processor Outage                   04-02-04 10:05:31.105
    SSCF  Receive  In Service                         04-02-04 10:05:46.425
    SSCF  Receive  Normal                             04-02-04 10:05:46.430
    SSCF  Receive  Emergency                          04-02-04 10:05:46.430
    SSCF  Transmit Alignment Not Successful           04-02-04 10:06:02.110
```

```
    SSCF  Transmit Mgmt Initiated                     04-02-04 10:06:02.120
    SSCF  Transmit Protocol Error                     04-02-04 10:06:02.885
    SSCF  Transmit Proving Not Successful             04-02-04 10:06:53.625
    Special Event  LCD                                04-02-04 10:05:46.425
    Special Event  LCD Cleared                        04-02-04 10:05:46.430
    Special Event  LOF                                04-02-04 10:05:46.430
    Special Event  LOF Cleared                        04-02-04 10:06:02.110
    Special Event  LOS                                04-02-04 10:06:02.120
    Special Event  LOS Cleared                        04-02-04 10:06:02.885
    Special Event  Too Many Interrupts                04-02-04 10:06:53.625

    Service Event                                     Timestamp
    Timer_No_Credit expired                           04-02-04 05:40:10.160
    ERM link failure                                  04-02-04 10:02:02.125
    Timer_No_Response expired                         04-02-04 10:15:02.125
    COO received                                      04-02-04 10:22:02.125
    Stop Commanded                                    04-02-04 10:32:02.125
    LPO                                               04-02-04 10:42:02.125
    RPO                                               04-02-04 10:43:02.125
    Remote OOS                                        04-02-04 10:44:02.125
    Remote PE                                         04-02-04 10:45:02.125
    Remote Mgmt Initiated                             04-02-04 10:46:02.125
    Failed SLT                                        04-02-04 10:47:02.125
    LCD                                               04-02-04 10:48:02.125
    LOS                                               04-02-04 10:49:02.125
    LOF                                               04-02-04 10:52:02.125
    Too many interrupts                               04-02-04 10:53:02.125
    In Service                                        04-02-04 10:54:01.760
    Command Completed.
;
```

`rept-stat-slk:loc=1203:link=b:l2stats=brief`

```
    rlghncxa03w 04-02-23 13:06:25 EST  EAGLE 31.3.0
    SLK      LSN       CLLI        PST            SST       AST
    1203,B   lsnsspn2  ----------- IS-NR          Avail     ----
        ALARM STATUS       = No Alarms
        UNAVAIL REASON     = --

    Event Type    Event             Timestamp
    Transmit      SIOS              97-10-31 10:04:23.000
    State         Out of Service    97-10-31 10:04:23.000
    State         Initial Align     97-10-31 10:05:31.100
    State         Idle              97-10-31 10:05:31.100
    Transmit      SIO               97-10-31 10:05:31.105
    State         Not Aligned       97-10-31 10:05:31.105
    State         T2 Expired        97-10-31 10:05:46.425
    Command Completed.
;
```

This example shows the output for an E1 interface associated with a link:

`rept-stat-slk:loc=1201:link=a`

```
    rlghncxa03w 04-02-23 13:06:25 EST  EAGLE 31.3.0
    SLK      LSN       CLLI        PST          SST       AST
    1201,A   e5m6s4    ----------- OOS-MT       Unavail   -----
       ALARM STATUS       = No Alarms
       UNAVAIL REASON     = --
       E1 STATUS          = 1201, REPT-E1F:FAC-E1 Port 1 LOS failure
```

```
    Command Completed.
;
```

This example shows the output when the E1 interface is not associated with a link:

```
rept-stat-slk:loc=1201:link=a
```

```
    rlghncxa03w 04-02-23 13:06:25 EST  EAGLE 31.3.0
    SLK      LSN       CLLI        PST          SST       AST
    1201,A   e5m6s4    ----------- OOS-MT       Unavail   -----
       ALARM STATUS       = No Alarms
       UNAVAIL REASON     = --
       E1 status          = E1 association unknown
    Command Completed.
;
```

This example shows this output for a T1 interface associated with a link:

```
rept-stat-slk:loc=1201:link=a
```

```
    rlghncxa03w 04-02-23 13:06:25 EST  EAGLE 31.3.0
    SLK      LSN       CLLI        PST          SST       AST
    1201,A   e5m6s4    ----------- OOS-MT       Unavail   -----
       ALARM STATUS       = No Alarms
       UNAVAIL REASON     = --
       T1 STATUS          = 1201, REPT-E1F:FAC-T1 Port 1 LOS failure
    Command Completed.
;
```

Legend

- **SLK**—Card location and the signaling link
- **LSN**—Name of the linkset that contains the signaling link
- **CLLI**—CLLI code of the destination STP of the signaling link
- **PST**—Primary state of the signaling link. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the signaling link. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the signaling link. See *Possible Values for PST/SST/AST*.
- **ALARM STATUS**—Trouble text alarm message generated for the specified signaling link.
- **UNAVAIL REASON**—Reason the signaling link is unavailable. More than one unavailable reason may be listed:
  - **BSNR**—The signaling link received 2 of 3 invalid BSNs.
  - **CNGT**—The signaling link has a remote congestion time-out.
  - **COO**—A changeover order was received.
  - **FC**—The signaling link is unavailable because of false congestion restart.
  - **FE—**The signaling link is in far end loopback mode.
  - **FIBR**—The signaling link received 2 of 3 invalid FIBs.
  - **INTR—**Too many link interrupts were received.
  - **LB**—The signaling link has been blocked locally.
  - **LD**—The signaling link received incomplete data.
  - **LI**—The signaling link has been inhibited locally.

- **NA**—The signaling link is not aligned.
- **PF**—The signaling link failed the proving period.
- **RB**—The signaling link has been blocked remotely.
- **RD(xx.xxx)—**The signaling link is unavailable because of a restart delay to prevent signaling link oscillation. The number in parentheses indicates the amount of time, in seconds, remaining in the restart delay period. The link is restarted automatically after this amount of time has elapsed.
- **RL**—The signaling link is in remote near end loopback mode.
- **RMI**—The signaling link has been inhibited remotely.
- **SIE**—An unexpected SIE was received.
- **SIN**—An unexpected SIN was received.
- **SIO**—An unexpected SIO was received.
- **SIOS**—An unexpected SIOS was received.
- **SLTF**—Link test failed.
- **T1NR**—The level-2 T1 (not ready) timer expired.
- **T1R**—The level-2 T1 (ready) timer expired.
- **T2**—The level-2 T2 timer expired.
- **T3**—The level-2 T3 timer expired.
- **XDA**—The signaling link did not receive an acknowledgment in time.
- **XER**—The SUERM threshold was exceeded.—
- **--**—The card is ISOLATED or the links are available.

The following are reasons that the ATM high-speed signaling link is unavailable:

- **TNC**—Timer No Credit expired - The remote node has held the node in a no-credit state for too long. The far end office should be contacted to determine the cause of the link congestion.
- **TNR**—Timer No Response expired - The far end is taking too long to acknowledge the messages sent to it by the near end. The far end office should be contacted to determine the cause for the excessive delay in acknowledging PDUs.
- **LPO**—Local Processor Outage - Indicates a spontaneous or management-initiated processor outage. The user needs to determine whether the outage was spontaneous or management-initiated on the near end.
- **RPO**—Remote Processor Outage - The far end has sent PDUs causing processor outage. The far end office should be contacted to determine the reason for the processor outage.
- **ROOS**—Remote Out of Service - The far end has sent PDUs causing a link to become out of service. The far end office should be contacted to determine the reason for taking the link out of service.
- **RPE**—Remote Protocol Error - The far end has sent PDUs declaring a protocol error. The far end office should be contacted to determine the details about the protocol error.
- **RMIR**—Remote Management Initiated Release - The far end has sent PDUs releasing the link. The far end office should be contacted to determine the reason for releasing the link.
- **LCD**—Level 1 facility outage: Loss of Cell Delineation
- **LOF**—Level 1 facility outage: Loss of Frame
- **LOS**—Level 1 facility outage: Loss of Signal

EVENT TYPE

The type of event being logged:

RECEIVE

When a signal unit is received.

TRANSMIT

When a signal unit is transmitted.

STATE

When an internal SS7 Level 2 state changes or a special event occurs that would either end alignment or cause the link to fail

EVENT

The specific event being logged: (1) if a signal unit is being received or transmitted, the specific signal unit is displayed; (2) if the event being logged is a state change, the new state is displayed; (3) If neither (1) nor (2) is displayed, the link or alignment failure reason is displayed.

SERVICE EVENT

The service activity of the link; for example, In Service. Anything other than In Service is a description of a link failure.

TIMESTAMP

The time event processed by the system as follows:

- **YY-MM-DD hh:mm:ss.ttt**, where
- **YY**—The last 2 digits of the year (range 00–99)
- **MM**—The month (range 01–12)
- **DD**—The day of month (range 00–31)
- **hh**—The hour of day (range 00–59)
- **mm**—The minute of the hour (range 00–59
- **ss**—The seconds of the minute (range 00–59
- **ttt**—Milliseconds of the second (range 000–995 in increments of 5)

E1 STATUS

The status of the E1 interface associated with the link; the status includes the card location and the UAM text. If the E1 association is not provisioned, "E1 association unknown" is displayed. If the card is not type LIME1, no E1 output is displayed.

T1 STATUS

The status of the T1 interface associated with the link; the status includes the card location and the UAM text. If the card is not type LIMT1, no T1 output is displayed.

Related Commands

act-slk, *blk-slk*, *dact-slk*, *dlt-slk*, *ent-slk*, *inh-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

rept-stat-sys — Report Status System

Use this command to display a summary report of the status of the main system entities. Use this display to determine where the troubles are in the system. The display shows the number of these items that are in service (IS-NR) and how many are in another state (IS-ANR, OOS-MT, OOS-MT-DSBLD).

Parameters

This command has no parameters.

Example

`rept-stat-sys`

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

Notes

None

Output

The following example shows the output when no features are turned on in the system and only the cards in locations 1109-1110 and 1113-1118 are installed.

`rept-stat-sys`

```
tekelecstp 10-03-11 10:31:06 EST  EAGLE 42.0.0
MAINTENANCE STATUS REPORT
Maintenance Baseline established.
Routing Baseline established.
SCCP Baseline established.
ALARMS:      CRIT=    2    MAJR=   2   MINR=   0     INH=    0
OAM 1113     IS-NR         Active                    INH=    0
OAM 1115     IS-NR         Standby                   INH=    0
LIM     CARD IS-NR=   0    Other=        0           INH=    0
SCCP    CARD IS-NR=   0    Other=        0           INH=    0
GLS     CARD IS-NR=   0    Other=        0           INH=    0
SLAN    CARD IS-NR=   0    Other=        0           INH=    0
VXWSLAN CARD IS-NR=   0    Other=        0           INH=    0
SS7IPGW CARD IS-NR=   0    Other=        0           INH=    0
IPGWI   CARD IS-NR=   0    Other=        0           INH=    0
IPLIM   CARD IS-NR=   0    Other=        0           INH=    0
IPLIMI  CARD IS-NR=   0    Other=        0           INH=    0
IPSG    CARD IS-NR=   0    Other=        0           INH=    0
MUX     CARD IS-NR=   2    Other=        0           INH=    0
MCPM    CARD IS-NR=   0    Other=        0           INH=    0
EROUTE  CARD IS-NR=   0    Other=        0           INH=    0
CLOCK        IS-NR=   2    Other=        0           INH=    0
IMT          IS-NR=   2    Other=        0
SLK          IS-NR=   0    Other=        0           INH=    0
DLK          IS-NR=   0    Other=        0           INH=    0
LINK SET     IS-NR=   0    Other=        0           INH=    0
DSM IP LK    IS-NR=   0    Other=        0           INH=    0
MCPM IP LK   IS-NR=   0    Other=        0           INH=    0
APPLSOCK     IS-NR=   0    Other=        0           INH=    0
SCTP ASSOC   IS-NR=   0    Other=        0           INH=    0
```

```
       APPL SERVER  IS-NR=   0    Other=        0           INH=    0
       SS7 DPC      IS-NR=   0    Other=        0           INH=    0
       CLUST DPC    IS-NR=   0    Other=        0           INH=    0
       RTX          IS-NR=   0    Other=        0           INH=    0
       XLIST DPC    IS-NR=   0    Other=        0
       DPC  SS      Actv =   0    Other=        0
       SEAS SS      IS-NR=   0    Other=        2
       TERMINAL     IS-NR=  16    Other=        0           INH=    0
       MPS          IS-NR=   0    Other=        0
       RTD SS       IS-NR=   1    Other=        0
;
```

The following example shows the output when various features are turned on in the system. (Your output will not show all of these entries; some features are mutually exclusive in the system.)

Some entries appear as follows:

- When the Measurements Platform feature is not turned on and no MCPM cards are in the IS-NR state in the system, the MCPM and MCPM IP LK values are zero and the MEAS SS entry does not appear.
- When one or more MCPM cards have been installed and allowed, the MCPM CARD entry shows the number of MCPM cards that are in each state.
- When the Measurements Platform feature is turned on and the Measurements Platform collection option is enabled, the MEAS SS entry appears.
- When the Measurements Platform collection function is enabled, the MCPM IP LK entry shows the number of links that are functioning for the MCPM cards, and the MEAS SS entry appears.
- When the Origin-Based MTP Routing (MOBR) feature is not turned on, and/or no exception routes have been provisioned, the RTX value is zero.
- When the OA&M IP Security Enhancement feature is turned on, the SECURITY SS entry appears.
- When the Equipment Identity Register (EIR) feature is turned on, the EIR SS entry appears.
- When the INAP Number Portability (INP) feature is turned on, the INP SS entry appears.
- When the ANSI41 Analyzed Information Query (ANSI41 AIQ) feature is enabled, the AIQ SS entry appears.
- When the FCMODE is FCOPY for an *FC- Capable* GPL, the FC IP LK and FCS entries appear. E5-ENET or E5-ENET-B cards running the IPSG or IPGHC GPL are considered to be *FC- capable*. A card running the IPGHC GPL must be in the IS-NR State before the card can be considered *FC-capable*. This requirement does not apply to cards running the IPSG GPL.
- When the S13/S13' EIR feature is enabled and one or more DEIR cards have been provisioned and allowed, the DEIR CARD entry shows the number of DEIR cards that are in each state.
- When the SIP Number Portability feature is enabled and one or more SIP cards have been installed and allowed, the SIP CARD entry shows the number of SIP cards that are in each state.

`rept-stat-sys`

```
       rlghncxa03w 10-02-07 16:53:22 EST  EAGLE5 42.0.0
       MAINTENANCE STATUS REPORT
       Maintenance Baseline established.
       Routing Baseline established.
       SCCP Baseline established.
       SIP Baseline established.
       DEIR Baseline established
       ALARMS:      CRIT=      9    MAJR=    10   MINR=     3   INH=      2
       OAM 1113     IS-NR           Active                     INH=      0
       OAM 1115     IS-NR           Standby                    INH=      0
```

```
       LIM     CARD IS-NR=     3    Other=          0           INH=      0
       SCCP    CARD IS-NR=     3    Other=          0           INH=      0
       GLS     CARD IS-NR=     0    Other=          0           INH=      0
       SLAN    CARD IS-NR=     0    Other=          0           INH=      0
       VXWSLAN CARD IS-NR=     0    Other=          0           INH=      0
       IPSG    CARD IS-NR=     2    Other=          0           INH=      0
       SS7IPGW CARD IS-NR=     0    Other=          0           INH=      0
       IPGWI   CARD IS-NR=     0    Other=          0           INH=      0
       IPLIM   CARD IS-NR=     0    Other=          0           INH=      0
       IPLIMI  CARD IS-NR=     0    Other=          0           INH=      0
       HMUX    CARD IS-NR=     0    Other=          0           INH=      0
       DEIR    CARD IS-NR=     1    Other=          0           INH=      0
       HIPR         IS-NR=     2    Other=          0           INH=      0
       IMT          IS-NR=     2    Other=          0
       SLK          IS-NR=     0    Other=          6           INH=      0
       DLK          IS-NR=     0    Other=          0           INH=      0
       LINK SET     IS-NR=     0    Other=          4           INH=      0
       DSM IP LK    IS-NR=     0    Other=          0           INH=      0
       MCPM    CARD IS-NR=     0    Other=          0           INH=      0
       EROUTE  CARD IS-NR=     0    Other=          0           INH=      0
       CLOCK        IS-NR=     2    Other=          0           INH=      0
       HS CLOCK     IS-NR=     2    Other=          0           INH=      0
       MCPM IP LK   IS-NR=     2    Other=          0           INH=      0
       FC IP LK     IS-NR=     1    Other=          5           INH=      0
       APPLSOCK     IS-NR=     0    Other=          0           INH=      0
       SCTP ASSOC   IS-NR=     0    Other=          0           INH=      0
       APPL SERVER  IS-NR=     0    Other=          0           INH=      0
       SS7 DPC      IS-NR=     0    Other=          6           INH=      0
       CLUST DPC    IS-NR=     0    Other=          1           INH=      0
       RTX          IS-NR=     2    Other=          1           INH=      0
       XLIST DPC    IS-NR=     0    Other=          0
       DPC  SS      Actv =     0    Other=          0
       SEAS SS      IS-NR=     1    Other=          0
       TERMINAL     IS-NR=     2    Other=         14           INH=      0
       MPS          IS-NR=     2    Other=          0
       SECURITY SS  IS-NR=     1    Other=          0
       EIR SS       IS-NR=     1    Other=          0
       RTD SS       IS-NR=     0    Other=          1
       INP SS       IS-NR=     1    Other=          0
       VFLEX SS     IS-NR=     1    Other=          0
       ATINPQ SS    IS-NR=     1    Other=          0
       LNP SS       IS-NR=     1    Other=          0
       FCS          IS-NR=     1    Other=          0
       AIQ SS       IS-NR=     1    Other=          0
       SIP    CARD  IS-NR=     1    Other=          0
;
```

Legend

- **INH**—Number of devices within each device type that have their alarms inhibited
- **ALARMS**—Number of critical (**CRIT**), major (**MAJR**), and minor (**MINR**) alarms on the system when the command was executed and the count of alarm inhibited (**INH**) devices for cards, links, linksets, and terminals
- **OAM**—Status of each card that is running the OAM (1113 and 1115)
- **LIMCARD**—Status of the LIM cards
- **SCCP CARD**—Status of the SCCP subsystem cards
- **GLS CARD**—Status of the GLS subsystem cards
- **SLAN CARD**—Status of the STPLAN subsystem cards

- **VXWSLAN CARD**—Status of the VXW STPLAN subsystem cards
- **SS7IPGW CARD**—Status of the SS7IPGW cards
- **IPGWI CARD**—Status of the IPGWI cards
- **IPLIM CARD**—Status of the IPLIM cards
- **IPLIMI CARD**—Status of the IPLIMI cards
- **MUX CARD**—Combined status of the MUX cards
- **MCPM CARD**—Status of the MCPM cards
- **EROUTE CARD**—Status of the EROUTE cards
- **CLOCK**—Status of the system clocks
- **HS CLOCK**—Status of the high-speed clocks
- **IMT**—Status of the IMT system
- **SLK**—Status of the SS7 and IPGWI signaling links in the system
- **DLK**—Status of the TCP/IP data links in the system
- **LINK SET**—Status of the linksets in the system
- **DSM IP LK**—Status of the Service Module IP linksets
- **MCPM IP LK**—Status of the MCPM IP links
- **FC IP LK**—Status of the Fast Copy IP links
- **APPLSOCK**—Status of the application sockets
- **SCTP ASSOC**—Status of the SCTP associations
- **APPL SERVER**—Status of the Application Servers
- **SS7 DPC**—Summary information for provisioned DPCs that are not in clusters
- **CLUST DPC**—Summary information for provisioned cluster DPCs
- **RTX**—Summary information for provisioned exception routes only
- **XLIST DPC**—Summary information for X-LIST DPC entries only
- **DPC SS**—Summary information for the DPC subsystem
- **SCCP SS**—Status of the SCCP subsystem
- **SEAS SS**—Status of the SEAS subsystem
- **MEAS SS**—Status of the Measurements subsystem (for Measurements Platform)
- **MPS**—Summary information on the MPS
- **TERMINAL**—Status of the terminals
- **SECURITY SS**—Status of the EAGLE OA&M IP Security subsystem
- **EIR SS**—Status of the Equipment Identity Register subsystem
- **RTD**—Status of the Run Time Diagnostic subsystem
- **VFLEX SS**—Status of the V-Flex subsystem
- **ATINPQ SS**—Status of the ATI Number Portability Query subsystem
- **INP SS**—Status of the INAP Number Portability subsystem
- **LNP SS**—Status of the Local Number Portability subsystem
- **FCS**—Status of the Fast Copy subsystem
- **AIQ SS**—Status of the ANSI41 Analyzed Information Query subsystem
- **SIP CARD**— Status of the SIP Cards
- **DEIR CARD**— Status of the DEIR cards running DEIRHC GPL

Related Commands

rept-stat-alm, *rept-stat-card*, *rept-stat-clk*, *rept-stat-cluster*, *rept-stat-dstn*, *rept-stat-imt*, *rept-stat-ls*, *rept-stat-meas*, *rept-stat-mon*, *rept-stat-mps*, *rept-stat-seas*, *rept-stat-slk*, *rept-stat-trbl*, *rept-stat-xlist*

rept-stat-t1 Report Status T1

Use this command to display the T1 port status and signaling link status for cards with provisioned T1 ports.

Parameters

loc (optional)

Card address. The unique identifier of a specific LIMT1 card located in the STP.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

Information for all LIMT1 cards is reported.

t1port (optional)

T1 port number. This parameter displays information for a T1 port on the card in the specified card location.

Range:

1 - 8

Ports 3 through 8 can be specified only for HC-MIM cards

.

Example

```
rept-stat-t1
rept-stat-t1:loc=1203
rept-stat-t1:loc=1203:t1port=1
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

The loc parameter must be specified when the t1port parameter is specified.

The active TDM location cannot be specified in the loc parameter.

Card locations 1117 and 1118 and the MUX card locations (*xy*09 and *xy*10 where *x* is the frame and *y* is the shelf) cannot be specified in the loc parameter.

Notes

Specifying the command without any parameters displays T1 port status for all cards with provisioned T1 ports.

If the loc parameter is specified, status is displayed for all T1 ports provisioned on the card in the specified location.

If the loc and t1port parameters are specified, the T1 port status summary is displayed for all T1 ports provisioned on the card in the specified location, followed by the status of all signaling links assigned to the specified T1 port on the card.

Output

This example shows the output when no parameters are specified:

```
rept-stat-t1
```

```
    rlghncxa03w 05-01-04 07:01:08 EST  EAGLE5 33.0.0
    LOC    T1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     BRGD MSTR
    1203   2        IS-NR        Avail     BRGD SLAV
    1203   3        IS-NR        Avail     -----
    1203   7        OOS-MT       Unavail   -----
    1207   1        IS-NR        Avail     -----
    1207   2        IS-NR        Avail     -----
   Command Completed.
;
```

This example shows the output when the loc parameter is specified:

```
rept-stat-t1:loc=1203
```

```
    rlghncxa03w 05-01-04 07:01:08 EST  EAGLE5 33.0.0
    LOC    T1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     BRGD MSTR
    1203   2        IS-NR        Avail     BRGD SLAV
    1203   3        IS-NR        Avail     -----
    1203   7        OOS-MT       Unavail   -----
    Command Completed.
;
```

This example shows the output when the loc and t1port parameters are specified:

```
rept-stat-t1:loc=1203:t1port=1
```

```
    rlghncxa03w 05-01-04 07:01:08 EST  EAGLE5 33.0.0
    LOC    T1PORT   PST          SST       AST
    1203   1        IS-NR        Avail     BRGD MSTR
      ALARM STATUS       = No Alarms.
```

```
      UNAVAIL REASON     = --
      SLK    TS  PST          SST       AST
      A       1  IS-NR        Avail     ---
      A1      2  IS-NR        Avail     ---
    Command Completed.
;
```

```
rept-stat-t1:loc=1203:t1port=2
```

```
    rlghncxa03w 05-01-04 07:01:08 EST  EAGLE5 33.0.0
    LOC    T1PORT   PST          SST       AST
    1203   2        IS-NR        Avail     BRGD SLAV
      ALARM STATUS       = No Alarms.
      UNAVAIL REASON     = --
    Command Completed.
;
```

Legend

- **LOC**—Card location
- **T1PORT**—Number of the T1 port provisioned on the card in the specified location.
- **PST**—Primary state of the card. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the card. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the card. See *Possible Values for PST/SST/AST*. The values *PARENT* and *PAIRED* refer to odd and even adjacent ports on the card that are provisioned in channel bridging mode.
- **ALARM STATUS**—Either "No Alarms" or current alarm number and text
- **UNAVAIL REASON**—Reason for the T1 port being unavailable
- **SLK**—Signaling link assigned to the T1 port
- **TS**—Timeslot assigned to the signaling link
- **PST**—Primary state of the signaling link. See *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the signaling link. See *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the signaling link. See *Possible Values for PST/SST/AST*.

Related Commands

None.

rept-stat-trbl

Report Status Trouble

Use this command to display a summary report of all the device trouble notifications that are logged currently in the OAM's RAM storage area.

Parameters

display (optional)

Display type of alarms to be reported.

Range:

act

Display only active alarms

all

Display all alarms with no timestamps

inhb

Display only inhibited alarms

timestamp

Display all alarms with the date and time when the alarm was logged. Timestamps appear in the output only when the display=timestamp parameter is specified.

Default:

all

level (optional)

The alarm level of the alarms to be displayed

Range:

crit

majr

minr

Default:

All alarms are displayed

Example

```
rept-stat-trbl
rept-stat-trbl:level=majr
rept-stat-trbl:display=inhb
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

Notes

None

Output

This example lists all devices that could appear. This example is to be used as a sample only: all devices and alarms cannot coexist in the system.

`rept-stat-trbl`

```
tekelecstp 13-03-22 10:31:06 EST  EAGLE 46.1.0
    SEQN UAM  AL DEVICE    ELEMENT       TROUBLE TEXT
    0002.0143  * CARD 1113 OAM           System release GPL(s) not approved
    0011.0176  * SECULOG 1116            Stdby security log – upload required
    0002.0143  * CARD 1113 OAM           System release GPL(s) not approved
    0011.0176  * SECULOG 1116            Stdby security log – upload required
    2353.0022  * CARD 1107 MCP          Clock B for card failed, Clock A normal

    3587.0048  * TERMINAL    1           Terminal failed
    0007.0110  * IMT SYSTEM              Failure detected on one IMT bus
    2343.0002  * GPL SYSTEM BPDCM        Card is not running approved GPL
    4321.0321  * XLIST                   X-LIST occupancy threshold exceeded
    0045.0348  * SEAS SYSTEM             SEAS is at min service limit
    0011.0176  * SECULOG 1116            Stdby security log -- upload required
    4121.0398  * INP SYSTEM             Local Subsystem normal,card(s) abnormal

    2354.0516  * MEAS SYSTEM             Degraded Mode - 1 card failed
    0046.0155  * DLK 1104,A1             STPLAN connection unavailable
    0050 1114 *  HS CLOCK SYSTEM         Clock selection mismatch
    1088.0539  * DLK 1106,A1             Ethernet Interface Down
    1089.0579  * CARD 1106               FC Network Unavailable
    3700.0536  * IP7 assoc1234567890     IP Connection Excess Retransmits
    0021.0318 ** LSN lsn1                REPT-LKSTO: link set prohibited
    0022.0318 ** LSN lsn2                REPT-LKSTO: link set prohibited
    0023.0318 ** LSN lsn3                REPT-LKSTO: link set prohibited
    0024.0236 ** SLK 1315,A   ls11234567 REPT-LKF: not aligned
    0025.0236 ** SLK 1316,A   ls11345678 REPT-LKF: not aligned
    0010.0318 ** LSN lsn4                REPT-LKSTO: link set prohibited
    0021.0318 ** LSN lsn1                REPT-LKSTO: link set prohibited
    0022.0318 ** LSN lsn2                REPT-LKSTO: link set prohibited
    0023.0318 ** LSN lsn3                REPT-LKSTO: link set prohibited
    0024.0236 ** SLK 1315,A   ls11234567 REPT-LKF: not aligned
    0025.0236 ** SLK 1316,A   ls11345678 REPT-LKF: not aligned
    3540.0203 ** SLK 1201,A   lsn1       REPT-LKF: lost data
    3541.0203 ** SLK 1201,B   lsn4       REPT-LKF: lost data
    3542.0203 ** SLK 1202,A   lsn2       REPT-LKF: lost data
    3543.0203 ** SLK 1202,B   lsn4       REPT-LKF: lost data
    3544.0202 ** SLK 1203,A   lsn3      REPT-LKF: HWP – too many link interrupts

    3545.0202 ** SLK 1203,B   lsn4      REPT-LKF: HWP – too many link interrupts

    3589.0013 ** CARD 1103 SS7ANSI       Card is isolated from the system
    2358.0013 ** CARD 1111 MCP           Card is isolated from the system
    3590.0013 ** CARD 1115 OAM           Card is isolated from the system
    3590.0514 ** CARD 1115 EOAM          Standby MASP is inhibited
    0006.0108 ** IMT BUS A               Major IMT failure detected
                 Card 1105, 1113, 1115
    0012.0390 ** CARD 1109 HMUX          Illegal Address Error
    3591.0208 ** SLK 1101,A   ls1        REPT-LKF: APF - lvl-2 T2 expired
    3592.0208 ** SLK 1101,B   ls2        REPT-LKF: APF - lvl-2 T2 expired
    3593.0202 ** SLK 1102,B2  lsname489+ REPT-LKF: HWP -too many link interrupts

    3594.0236 ** SLK 1103,A   ls3        REPT-LKF: not aligned
    3595.0236 ** SLK 1103,B   ls4        REPT-LKF: not aligned
    3596.0084 ** DLK 1111,A   MCP        IP Connection Unavailable
    0024.0236 ** SLK 1315,A   ls11234567 REPT-LKF: not aligned
    0025.0236 ** SLK 1316,A   ls11345678 REPT-LKF: not aligned
    0943.0318 ** LSN ls1                 REPT-LKSTO: link set prohibited
    0945.0318 ** LSN ls2                 REPT-LKSTO: link set prohibited
    0948.0318 ** LSN ls4                 REPT-LKSTO: link set prohibited
    1234.0082 ** FUSE PANEL 11xx         Alarm in Fuse Panel
    0134.0084 ** IP7 LONGSOCKETNAME1     IP Connection Unavailable
```

```
    3537.0084 ** DLK 1215,A  MCP         IP Connection Unavailable
    3537.0084 ** DSM 1315,A              IP Connection Unavailable
    5648.0382 ** E1PORT 1201,2           REPT-E1F:FAC-E1   LOF failure
    0047.0392 ** SECURITY SYSTEM 1211    OA&M IP Security feature status is OFF

    1235 0114 ** IP TPS SYSTEM           System IP TPS threshold exceeded
    3684.0013 ** CARD 1305 SS7IPGW       Card is isolated from the system
    3688.0236 ** SLK 1203,A   lslg2      REPT-LKF: not aligned
    3692.0318 ** LSN e5e6                REPT-LKSTO: link set prohibited
    1090.0576 ** FCS                     ALL FC Network Unavailable
    3697.0539 ** ENET 1305,A             Ethernet Interface Down
    3698.0539 ** ENET 1305,B             Ethernet Interface Down
    3699.0539 ** ENET 1307,B             Ethernet Interface Down
    0917.0537 ** ENET 1112,B             Ethernet error threshold exceeded
    0189.0084 ** DLK 1104,A   EROUTE     IP Connection Unavailable
    0150.0491 ** DCONN con1              Connection TPS exceed
    0003.0313 *C DPC  s-010-010-003      DPC is prohibited
    0004.0313 *C DPC    010-010-004      DPC is prohibited
    0005.0313 *C DPC ps-010-010-005      DPC is prohibited
    0006.0313 *C DPC  s-252-010-003      DPC is prohibited
    0008.0313 *C DPC    252-010-004      DPC is prohibited
    0009.0313 *C DPC    252-011-*        DPC is prohibited
    0019.0236 *C T1PORT 1301,1           REPT-T1F:FAC-T1   LOS failure
    0028.0313 *C DPC    252-010-001      DPC is prohibited
    0029.0308 *C SYSTEM                  Node isolated due to SLK failures
    0036.0455 *C EIR SYSTEM              EIR Subsystem is not available
    3102.0435 *C LNP SYSTEM              LNP Subsystem is disabled
    0003.0313 *C DPC  s-010-010-003      DPC is prohibited
    0004.0313 *C DPC    010-010-004      DPC is prohibited
    0005.0313 *C DPC ps-010-010-005      DPC is prohibited
    0006.0313 *C DPC  s-252-010-003      DPC is prohibited
    0008.0313 *C DPC    252-010-004      DPC is prohibited
    0009.0313 *C DPC    252-011-*        DPC is prohibited
    0019.0236 *C T1PORT 1301,1           REPT-T1F:FAC-T1   LOS failure
    0028.0313 *C DPC    252-010-001      DPC is prohibited
    0029.0308 *C SYSTEM                  Node isolated due to SLK failures
    0036.0455 *C EIR SYSTEM              EIR Subsystem is not available
    3102.0435 *C LNP SYSTEM              LNP Subsystem is disabled
    0003.0313 *C DPC  s-010-010-003      DPC is prohibited
    0004.0313 *C DPC    010-010-004      DPC is prohibited
    0005.0313 *C DPC ps-010-010-005      DPC is prohibited
    0028.0313 *C DPC    252-010-001      DPC is prohibited
    0006.0313 *C DPC  s-252-010-003      DPC is prohibited
    0008.0313 *C DPC    252-010-004      DPC is prohibited
    0009.0313 *C DPC    252-011-*        DPC is prohibited
    2120.0058 *C CDT  1                  Critical customer trouble detected
    0029.0308 *C SYSTEM                  Node isolated due to SLK failures
    0040.0128 *C CLOCK SYSTEM            All clocks have failed
    2109.0331 *C SCCP SYSTEM             SCCP is not available
    2110.0292 *C GLS SYSTEM              GLS is not available
    1234.0153 *C SLAN SYSTEM             STPLAN not available
    0009.0041 *C LSMS Connection  A1     LNP DB Maintenance Required
    0056.0356 *C LSMS SYSTEM             LSMS unavailable
    0041.0197 *C CLOCK SYSTEM            All High Speed Clocks have failed
    0056.0356 *C LSMS SYSTEM             LSMS unavailable
    0041.0197 *C CLOCK SYSTEM            All High Speed Clocks have failed
    3102.0435 *C LNP SYSTEM              LNP Subsystem is disabled
    3539.0181 *C NDC SYSTEM              NDC Subsystem is not available
    0036.0455 *C EIR SYSTEM              EIR Subsystem is not available
    0019.0236 *C T1PORT 1301,1           REPT-T1F:FAC-T1   LOS failure
    4521.0370 *C MPS A                   Critical Platform Failure(s)
    0045.0469 *C EROUTE SYSTEM           All STC cards Unavailable
    0036.0455 *C EIR SYSTEM              EIR Subsystem is not available
    0915.0541 *C RTD SYSTEM              MSU cksum error threshold exceeded
```

```
    0002.0520 *C                          Frame power usage reached LVL3
    0056.0528 *C GFLEX SERVICE            Service is not available
    0056.0528 *C GPORT SERVICE            Service is not available
    0056.0528 *C MNP SERVICE              Service is not available
    0044.0534 *C RTX    001-101-001       RTX is prohibited
    0916.0565 *C ATINPQ SYSTEM            ATINPQ Subsystem is not available
    0150.0483 *C DEIR SYSTEM              DEIR System is not available
    0160.0120 *C ENUM SYSTEM              ENUM System is not available

    Command Completed.
;
```

`rept-stat-trbl:display=act:level=majr`

```
    rlghncxa03w 02-03-07 09:50:17 EST  EAGLE 30.0.0
    Searching devices for alarms...
;
    rlghncxa03w 02-03-07 09:50:17 EST  EAGLE 30.0.0
    SEQN UAM  AL DEVICE    ELEMENT       TROUBLE TEXT
    3540.0203 ** SLK 1201,A  lsn1        REPT-LKF: lost data
    3541.0203 ** SLK 1201,B  lsn4        REPT-LKF: lost data
    3542.0203 ** SLK 1202,A  lsn2        REPT-LKF: lost data
    3543.0203 ** SLK 1202,B  lsn4        REPT-LKF: lost data
    3544.0202 ** SLK 1203,A  lsn3       REPT-LKF: HWP -too many link interrupts

    3545.0202 ** SLK 1203,A1 lsn4       REPT-LKF: HWP -too many link interrupts

    3545.0202 ** SLK 1203,B2 lsname489+  REPT-LKF: HWP -too many link interrupts

    0022.0318 ** LSN lsn2                REPT-LKSTO: link set prohibited
    0023.0318 ** LSN lsn3                REPT-LKSTO: link set prohibited
    0010.0318 ** LSN lsn4                REPT-LKSTO: link set prohibited
    Command Completed.
;
```

`rept-stat-trbl:display=inhb:level=majr`

```
rlghncxa03w 02-03-07 09:50:17 EST  EAGLE 30.0.0
    Searching devices for alarms...
;
    rlghncxa03w 02-03-07 09:50:17 EST  EAGLE 30.0.0
    SEQN UAM  AL DEVICE    ELEMENT       TROUBLE TEXT
    0021.0318I** LSN lsn1                REPT-LKSTO: link set prohibited
   Command Completed.
;
```

This example shows output when the display=timestamp parameter is specified.

`rept-stat-trbl:display=timestamp`

```
    rlghncxa03w 04-04-07 09:50:17 EST  EAGLE 31.6.0
    Searching devices for alarms...
;

    tekelecstp 04-04-07 09:50:17 EST  EAGLE 31.6.0
    SEQN UAM  AL DEVICE    ELEMENT       TROUBLE TEXT
    0003.0048  * TERMINAL    1           Terminal failed
                 04-1-27  15:19:25
    0004.0048  * TERMINAL    2           Terminal failed
                 04-1-27  15:19:25
```

```
    0005.0048  * TERMINAL    4           Terminal failed
                 04-1-27  15:19:25
    0006.0002  * GPL SYSTEM EOAM         Card is not running approved GPL
                 04-1-27  15:19:25
    0007.0176  * SECULOG 1116            Stdby security log -- upload required
                 04-1-27  15:19:25
    0008.0013 ** CARD 1103 VSCCP         Card is isolated from the system
                 04-15-27  15:19:25
    0009.0438 *C SYSTEM                  Degraded Mode, Invalid OAM HW config
                 04-1-27  15:19:27
    0010.0331 *C SCCP SYSTEM             SCCP is not available
                 04-1-27  15:19:25
    Command Completed.
;
```

Legend

In the AL column:

- *—Minor Alarm
- **—Major Alarm
- ***C**—Critical Alarm
- **I**—Inhibited Alarm

Related Commands

act-alm-trns, *dact-alm-trns*, *rept-stat-alm*, *rept-stat-clk*, *rls-alm*, *rtrv-obit*, *rtrv-trbl*

rept-stat-trm — Report Status Terminal

Use this command to display the status of the terminal ports. The device primary, secondary, and associated state information is displayed along with the terminal identification number.

Parameters

trm (optional)

The ID of the terminal port that is to be reported.

Range:

1 - 40

Default:

Display status of all terminal ports

Example

```
rept-stat-trm
rept-stat-trm:trm=5
rept-stat-trm:trm=17
```

Dependencies

No other `rept-stat-xxx` command can be in progress when this command is entered.

Notes

None

Output

This example shows output when the IP User Interface is not turned on:

`rept-stat-trm`

```
    tekelecstp 03-03-31 13:02:16 EST  EAGLE 30.0.0
    TRM   PST           SST           AST
    1     IS-NR         Active        -----
    2     IS-NR         Active        -----
    3     IS-NR         Active        -----
    4     IS-NR         Active        -----
    5     IS-NR         Active        -----
    6     IS-NR         Active        -----
    7     IS-NR         Active        -----
    8     IS-NR         Active        -----
    9     IS-NR         Active        -----
    10    IS-NR         Active        -----
    11    IS-NR         Active        -----
    12    IS-NR         Active        -----
    13    IS-NR         Active        -----
    14    IS-NR         Active        -----
    15    IS-NR         Active        -----
    16    IS-NR         Active        -----
    Command Completed.
;
```

This example shows output when the IP User Interface is turned on and 3 IPSM cards are in the system:

`rept-stat-trm`

```
    rlghncxa03w 04-01-07 09:50:17 EST  EAGLE 31.3.0
    TRM  PST           SST           AST
    1     IS-NR         Active        -----
    2     IS-NR         Active        -----
    3     IS-NR         Active        ALMINH
    4     IS-NR         Active        -----
    5     OOS-MT-DSBLD  Manual        -----
    6     IS-NR         Active        -----
    7     IS-NR         Active        -----
    8     IS-NR         Active        -----
    9     IS-NR         Active        -----
    10    IS-NR         Active        -----
    11    IS-NR         Active        ALMINH
    12    IS-NR         Active        -----
    13    IS-NR         Active        -----
    14    OOS-MT        Fault         -----
```

```
    15    IS-NR         Active        -----
    16    IS-NR         Active        -----
    17    IS-NR         Active        -----
    18    IS-NR         Active        -----
    19    IS-NR         Active        -----
    20    OOS-MT-DSBLD  Manual        -----
    21    IS-NR         Idle          -----
    22    IS-NR         Idle          -----
    23    IS-NR         Idle          -----
    24    IS-NR         Idle          -----
    25    IS-NR         Active        -----
    26    IS-NR         Active        -----
    27    IS-NR         Active        -----
    28    IS-NR         Active        -----
    29    IS-NR         Active        -----
    30    IS-NR         Active        -----
    31    IS-NR         Active        -----
    32    IS-NR         Active        -----
    33    IS-NR         Active        -----
    34    IS-NR         Active        -----
    35    IS-NR         Active        -----
    36    IS-NR         Active        -----
    37    IS-NR         Active        -----
    38    IS-NR         Active        -----
    39    IS-NR         Active        -----
    40    IS-NR         Active        -----
    Command Completed.
;
```

```
rept-stat-trm:trm=5
```

```
    rlghncxa03w 04-01-07 09:50:17 EST  EAGLE 31.3.0
    TRM  PST           SST           AST
    5     IS-NR         Active        -----
    Command Completed.
;
```

Legend

- **TRM**—ID of the terminal port
- **PST**—Primary state of the terminal ports. Possible values are described in *Possible Values for PST/SST/AST*.
- **SST**—Secondary state of the terminal ports. Possible values are described in *Possible Values for PST/SST/AST*.
- **AST**—Associated state of the terminal ports. Possible values are described in *Possible Values for PST/SST/AST*.

Related Commands

act-echo, *alw-trm*, *chg-trm*, *dact-echo*, *inh-trm*, *rmv-trm*, *rst-trm*, *rtrv-trm*

rept-stat-tstslk — Report Signaling Link Test Status

Use this command to generate a report of the status of the MTP signaling links currently under test.

Parameters

link (optional)

SS7 signaling links. The SS7 signaling link that is being tested.

Synonym:

port

Range:

a, b, a1 - a3, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

loopback (optional)

Loopback test type.

Range:

sltc

lxvr

oam

line

payload

Example

```
rept-stat-tstslk
rept-stat-tstslk:loc=1201
rept-stat-tstslk:loc=1203:link=a
rept-stat-tstslk:loopback=lxvr
```

Dependencies

The card location specified in the loc parameter must be equipped.

The signaling link specified in the link parameter must be equipped.

If the link parameter is specified, the loc parameter must be specified.

The signaling link specified in the link parameter must be an SS7 signaling link.

This command cannot be entered for E5-ENET or E5-ENET-B cards that are running the SS7IPGW, IPGWI, or IPSG application, or that have SS7IPGW, IPGWI, or IPSG-M3UA links.

This command cannot be entered for cards with IPGWI signaling links.

The card location specified in the loc parameter cannot be reserved by the system.

This command cannot be entered during upgrade.

Notes

None

Output

If no parameters are specified, all links in test are displayed.

If only the loc parameter is specified, all links in test on the specified card are displayed.

If the loc and link parameters are specified, the specified link on the specified card is displayed.

If the loopback parameter is specified, all links in the specified type of loopback test are displayed.

`rept-stat-tstslk`

```
    tekelecstp 04-01-07 10:05:28 EST  EAGLE 31.3.0
    SLK        LOOPBACK   MAX-TIME   TEST-TIME
    1102,A1     SLTC      01:00:00   00:04:01
    1201,A      OAM       02:00:00   01:04:11
    1203,A      LXVR      00:50:00   00:22:21
    1203,B      LXVR      24:00:00   20:04:01
    1208,A      PAYLOAD   01:10:00   01:05:22
    1211,A      LINE      21:30:00   00:14:01
;
```

Legend

- **SLK**—Card and signaling link that are being tested.
- **LOOPBACK**—Type of loopback test being run.
- **MAX-TIME**—Maximum length of time for the test to run, as specified in the `tst-slk` command time parameter.
- **TEST-TIME**—The length of time that the test has been running when this command was entered.

Related Commands

tst-slk

rept-stat-user — Report Status User

Use this command to show which users are logged into the system. The command shows user names, terminal identification numbers, the time that the last valid command was issued, and the current state of the last command entered.

Parameters

This command has no parameters.

Example

`rept-stat-user`

Dependencies

None

Notes

None

Output

`rept-stat-user`

```
e5oam 09-04-03 17:25:57 MST  EAGLE 41.0.0
REPT STAT USER COMPLD
USER ID          TERM #  IDLE SINCE         COMMAND             STATE
eagle               3    02-01-03 17:19:04  rept-stat-applsock  IDLE
eagle               6    02-01-03 17:25:57  rept-stat-user      PROCESSING
REPORT COMPLETED
```

Legend

- **USER ID**—The user ID of the users logged onto the system.
- **TERM #**—The terminal port to which the user's terminal is connected.
- **IDLE SINCE**—The date and time of day that the user last entered a command.
- **COMMAND**—The last command the user entered.
- **STATE**—The state of the command the user last entered.

Related Commands

act-user, *chg-pid*, *chg-user*, *dact-user*, *dlt-user*, *ent-user*, *login*, *logout*, *rtrv-secu-user*, *rtrv-user*

rept-stat-xlist

Report Status X-List Storage Area Statistics

Use this command to report statistics related to the storage of x-list entries. X-list entries reside in the routing table and are dynamically created for individual members of clusters whenever one or more routes to that cluster member become more restrictive than the corresponding routes to the cluster.

The following information is reported:

- The number of routing table positions reserved for x-list entries
- The current number of x-list entries
- The percentage of space in the x-list reserved area currently in use
- The percentage of x-list space that must be in use before an alarm is issued

Parameters

This command has no parameters.

Example

```
rept-stat-xlist
```

Dependencies

The Cluster Routing and Management Diversity (CRMD) feature must be turned on before using this command.

Notes

The statistics reported by this command are those gathered during periodic polling by the maintenance subsystem. They might differ slightly from the instantaneous values at the time the command was issued.

The following rules are used to compute the *Current X-LIST occupancy* percentage value that is displayed in the output report:

- The percentage value that is displayed is computed as follows:

  [(current x-list entries) / (allocated x-list space)] * 100

- Non-integer percentages will be rounded up to the next highest integer (for example, 23.5% becomes 24%), with the exception of the situation described in the next rule.
- 100% is not displayed until the current *X-LIST* entries value exactly equals the allocated X-LIST space (for example, 99.1% is not rounded up to 100%).

Output

```
rept-stat-xlist
```

```
   rlghncxa03w 04-02-18 03:32:42 EST   EAGLE 31.3.0
   Allocated X-LIST space     = 500
   Current X-LIST entries     = 156
   Current X-LIST occupancy   =  31 %(see “Notes”)
   X-LIST occupancy threshold =  80 %
;
```

Related Commands

chg-stpopts, *rept-stat-cluster*, *rtrv-stpopts*

rls-alm

Release Alarm

Use this command to silence audible alarms. Entering this command also causes the alarm status on terminals to stop blinking (though they continue showing an alarm condition).

Parameters

lvl (optional)

The alarm level.

Range:

crit

majr

minr

Default:

All alarms are cleared

Example

```
rls-alm
```

```
rls-alm:lvl = crit
```

Dependencies

No other action command can be in progress when this command is entered.

Notes

This command has no effect on visual alarm indicators on the fuse and alarm panel (FAP) or on the cabinet side panel.

Any alarms that occur after the execution of this command activate audible alarms again.

Output

`rls-alm`

```
    rlghncxa03w 04-01-07 09:27:24 EST  EAGLE 31.3.0
    rls-alm
    Command entered at terminal #8.
;
```

Related Commands

act-alm-trns, *dact-alm-trns*, *rept-stat-alm*, *rept-stat-clk*, *rept-stat-trbl*, *rtrv-obit*, *rtrv-trbl*

rmv-card

Remove Card

Use this command to change the state of the card to Out of Service - Maintenance Disabled (OOS-MT-DSBLD), enabling a technician to test a LIM or E5-TSM card or physically remove it from the shelf.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Refer to *Installation Guide* for card location information.

force (optional)

This parameter is required if the card is the last GLS or SCCP card.

Range:

yes

no

Default:

no

Example

`rmv-card:loc=1101`

`rmv-card:loc=1201:force=yes`

Dependencies

The following card locations are not valid for this command: 1113, 1114, 1115, 1116, 1117, 1118, and all *xy*09 and *xy*10 locations (where *x* is the frame and *y* is the shelf).

The shelf and card must be equipped.

If the card is a LIM, all signaling links assigned to the card must be placed out of service before the command can be entered.

The force parameter is required to force the last GLS (if the Integrated GLS feature is not turned ON) or SCCP card out of service.

If the card has active TCP/IP links, all TCP/IP data links assigned to it must be placed out of service.

Notes

The function of this command is the same as the `inh-card` command.

When this command is executed, the card boots and enters the OOS-MT-DSBLD state. It has no affect if the card is already OOS-MT-DSBLD.

The command is rejected if you attempt to inhibit a LIM that has active signaling links. The links must be cancelled, using the `dact-slk` command, before the command is accepted.

Inhibiting a card running the VSCCP application affects GTT service. SCCP messages requiring global title translation are not routed, and an error message is returned to the originator.

Inhibiting an E5-TSM running the GLS application has no immediate affect on the system. These cards are used only when loading gateway screening to the LIMs.

The command is rejected if you attempt to inhibit a card that has active TCP/IP data links. The TCP/IP data links must be cancelled, using the `canc-dlk` command, before the command is accepted.

Output

`rmv-card:loc=1101`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Card has been inhibited.
;
```

Related Commands

dlt-card, *ent-card*, *init-card*, *rept-stat-card*, *rst-card*, *rtrv-card*

rmv-imt

Remove IMT

The interprocessor message transport bus (IMT bus) is the main communications artery between all subsystems in the system. Use this command to remove the IMT bus from service.

Caution: Use this command only when directed by the Customer Care Center.

Parameters

bus (mandatory)

The IMT bus to be inhibited.

Range:

a

b

Example

```
rmv-imt:bus=a
```

Dependencies

The alternate IMT bus must be in-service normal (IS-NR) in order for the specified bus to be inhibited.

This command cannot be entered during an IMT Fault Isolation Test.

Notes

Cards that are not connected to the other IMT bus will reinitialize.

All traffic is rerouted to the other IMT bus.

The function of this command is the same as the `inh-imt` command.

Output

`rmv-imt:bus=a`

```
rlghncxa03w 04-01-07 09:22:31 EST EAGLE 31.3.0
* 0014.0203 * SLK 1205,A nc00027 slk not aligned

rlghncxa03w 04-01-07 09:22:31 EST EAGLE 31.3.0
Inhibit IMT Bus A command issued

rlghncxa03w 04-01-07 09:22:31 EST EAGLE 31.3.0
* 00120.1203 * SLK 1205,B nc00027 slk not aligned

rlghncxa21w 04-01-07 09:22:31 EST EAGLE 31.3.0
0016.0096 CARD 1205 SS7ANSI card has been reloaded

rlghncxa21w 04-01-07 09:22:31 EST EAGLE 31.3.0
0017.0236 SLK 1205,A nc00027 slk is attempting to align
```

```
    rlghncxa21w 04-01-07 09:22:31 EST EAGLE 31.3.0
    0018.0236 SLK 1205,B nc00027 slk is attempting to align

    rlghncxa21w 04-01-07 09:22:32 est EAGLE 31.3.0
    0019.0098 imt bus a imt inhibited

    rlghncxa21w 04-01-07 09:22:32 est EAGLE 31.3.0
    * 0020.0107 * imt bus a minor imt failure detected

    rlghncxa21w 04-01-07 09:22:32 EST EAGLE 31.3.0
    ** 0021.0108 ** IMT BUS A major imt failure detected

    rlghncxa21w 04-01-07 09:22:33 EST EAGLE 31.3.0
    0022.0026 CARD 1205 SS7ANSI clocks a and b for card normal
;
```

Related Commands

clr-imt-stats, *conn-imt*, *disc-imt*, *rept-imt-lvl1*, *rept-imt-lvl2*, *rept-stat-imt*, *rst-imt*

rmv-trm

Remove Terminal

Use this command to set the primary state of a serial port to OOS-MT-DSBLD (Out-of-Service-Maintenance-Disabled), and to set the secondary state to MANUAL. The serial port is not available to perform service functions. There is no outgoing traffic from the serial port; all incoming traffic is ignored.

Parameters

trm (mandatory)

The ID of the serial port to be inhibited.

Range:

1 - 40

force (optional)

This parameter forces the removal of the terminal, even if it is the last in-service SEAS terminal available.

Range:

yes

no

Default:

no

Example

```
rmv-trm:port=5
```

```
rmv-trm:trm=1:force=yes
```

Dependencies

No other action command can be in progress when this command is entered.

The IP User Interface feature must be enabled before terminal ports 17 through 40 can be specified as values for the trm parameter.

The force=yes parameter must be specified to inhibit the last in-service SEAS terminal.

Notes

When removing a terminal that has already been removed, a warning message is echoed to the scroll area but no action is taken.

Output

`rmv-trm`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Inhibit message sent to terminal
;
```

`rmv-trm:trm=17:force=yes`

```
    tekelecstp 07-01-11 13:42:16 EST  EAGLE 37.5.0
    Inhibit message sent to terminal
;
```

Related Commands

act-echo, *alw-trm*, *canc-echo*, *chg-trm*, *dact-echo*, *inh-trm*, *rept-stat-trm*, *rst-trm*, *rtrv-trm*

rst-card — Reset Card

Use this command to change the card from OOS-MT-DSBLD (Out-of-Service-Maintenance-Disabled) to IS-NR (In-Service-Normal) if the loading is successful. If the loading fails, the card status is OOS-MT (Out-of-Service-Maintenance).

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 -

4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

code (optional)

GPL type to be loaded.

Range:

appr

approved GPL

trial

trial GPL

utility

utility GPL, used primarily by the factory for loading special GPLs for testing purposes

Default:

No GPL type is given.

Example

```
rst-card:loc=2301:code=trial
rst-card:loc=1101:data=persist
```

Dependencies

The following card locations are not valid for this command: 1113, 1114, 1115, 1116, 1117, 1118, and all *xy*09 and *xy*10 locations (where *x* is the frame and*y* is the shelf).

The shelf and card must be equipped.

If the card is a LIM, it must have a signaling link assigned to it before it can be allowed.

No other action command can be in progress when this command is entered.

The LNP feature must be turned on before the data parameter can be specified.

Notes

The function of this command is the same as the `alw-card` command.

Installation Guide provides an illustration of card locations.

The system previously supported the data parameter for reloading GTT data. The system does not support persistent GTT data loading, and the data parameter is now used in support of the warm restart feature.

When the OA&M IP Security feature is turned on, and an IPSM card is inserted and initialized for the first time or is removed. inserted, and initialized again, the "SSH Host Keys Regenerated" UIM is displayed, The UIM shows the generated SSH Host Key fingerprint that must be provided at the secure

client in order for secure information transfer to occur. The SSH Host Key fingerprint is changed whenever power is lost and restored to an IPSM card.

```
    rlghncxa03 03-07-11 07:05:00 EST  EAGLE 30.2.0
    0021.1493    CARD 1111     INFO    SSH Host Keys Regenerated
    DSA Server Host Key FTRA-formatted Fingerprint=
    84 7c 92 8b c 7c ds 19 1c 6 4b de 5c 8f c5 4d
    Report Date:03-07-11  Time:22:27:36
```

When the OA&M IP Security feature is turned on, and an IPSM card is restarted with this command, the "SSH Host Keys Loaded" UIM is displayed. The UIM shows the current SSH Host Key fingerprint. The SSH Host Key fingerprint is not changed if the IPSM card does not lose power.

```
    rlghncxa03 03-07-11 07:05:00 EST  EAGLE 30.2.0
    0021.1493    CARD 1111     INFO    SSH Host Keys Loaded
    DSA Server Host Key FTRA-formatted Fingerprint=
    84 7c 92 8b c 7c ds 19 1c 6 4b de 5c 8f c5 4d
    Report Date:03-07-11  Time:22:27:36
```

Output

`rst-card:loc=2301:code=trial`

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Card has been allowed.
;
```

Related Commands

dlt-card, *ent-card*, *init-card*, *rept-stat-card*, *rmv-card*, *rtrv-card*

rst-dstn

Reset Destination Circular Routing Status

Use this command to request that the circular routing status for the specified destination be reset (turned OFF). The destination that is specified can be a full point code (FPC), a cluster point code (for example, *ni-nc-**), or an x-list point code. The system clears the circular routing status for the specified destination and then clears any outstanding circular routing alarm for the destination.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dpc (mandatory)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (mandatory)

dpci (mandatory)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (mandatory)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (*members*) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (mandatory)

24-bit ITU national point code with subfields main *signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (mandatory)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

force (optional)

This parameter specifies whether to reset all dynamic data for the specified route in the Route table to the initial values.

Range:

yes

reset the data

no

do not reset the data

Default:

no

Example

```
rst-dstn:dpc=1-2-*

rst-dstn:dpc=20-2-5

rst-dstn:dpc=p-20-2-5

rst-dstn:dpc=20-2-5:force=yes

rst-dstn:dpcn16=125-2-10
```

Dependencies

The specified DPC must be either provisioned or an x-list entry.

The destination address must be a full point code or a cluster point code specified as *ni-nc-**. A DPC as *ni-nc-*** or *ni-nc-**** cannot be specified.

Notes

None.

Output

`rst-dstn:dpc=20-2-5:force=yes`

```
    rlghncxa03w 09-03-29 16:40:40 EST  EAGLE 41.0.0
    Destination reset command sent to SNM (scroll area)

    rlghncxa03w 09-03-29 16:40:40 EST  EAGLE 41.0.0
    Command Completed.
;
```

`rst-dstn:dpcn16=1-14-0`

```
    tekelecstp 02-01-13 00:58:40 MST  UNKNOWN 45.1.0-64.69.1
    rst-dstn:dpcn16=1-14-0
    Command entered at terminal #17.
;

Command Accepted - Processing
    tekelecstp 02-01-13 00:58:40 MST  UNKNOWN 45.1.0-64.69.1
    Info: DPC is not in circular routing state.
    Reset destination command sent to all MTP cards.
;
    tekelecstp 02-01-13 00:58:40 MST  UNKNOWN 45.1.0-64.69.1
    Command Completed.
;
Command Executed
```

Related Commands

chg-stpopts, *rept-stat-cluster*, *rept-stat-dstn*, *rtrv-stpopts*

rst-imt

Reset IMT

The interprocessor message transport bus (IMT bus) is the main communications artery between all subsystems in the system. Use this command to change the state of the specified IMT bus from OOS-MT-DSBLD (out of service maintenance disabled) to IS-NR (in service normal), if the command is successful. If the command fails, the status is IS-ANR (in service abnormal).

Parameters

bus (mandatory)

The IMT bus to be returned to service.

Range:

a

b

Example

```
rst-imt:bus=a
```

Dependencies

None

Notes

The function of this command is the same as the `alw-imt` command.

This command returns an inhibited IMT bus to service.

Output

`rst-imt:bus=a`

```
    rlghncxa03w 04-01-07 11:02:30 EST  EAGLE 31.3.0
    Allow IMT Bus A command issued.

    rlghncxa03w 04-01-07 11:02:30 EST  EAGLE 31.3.0
    0100.0097    IMT   BUS A         IMT allowed
;
```

Related Commands

clr-imt-stats, *conn-imt*, *disc-imt*, *rept-imt-lvl1*, *rept-imt-lvl2*, *rept-stat-imt*, *rmv-imt*

rst-trm

Reset Terminal

Use this command to return the specified serial port to the state IS-NR (in-service-normal) from the state OOS-MT-DSBLD (Out-of-Service-Maintenance-Disabled) if the command is successful. If the command is not successful, the terminal's state is OOS-MT (Out-of-Service-Maintenance).

Parameters

trm (mandatory)

ID of the serial port to be put into service.

Range:

1 - 40

Example

```
rst-trm:trm=5
```

Dependencies

No other action command can be in progress when this command is entered.

The IP User Interface feature must be enabled before terminal ports 17 through 40 can be specified in the trm parameter.

The terminal specified by the trm parameter must be equipped.

Anyone logged in to the terminal specified by this command is logged off when this command is executed. For the user to continue working on the specified terminal, the user must log on to that terminal again.

An IPSM card must be provisioned for the specified SEAS terminal before this command can be entered.

The SEAS Over IP feature must be turned on before this command can be entered for a SEAS terminal.

If the SEAS terminal is auto-inhibited, then this command cannot be entered.

The terminal specified by the trm parameter cannot be configured as type=none (see the `chg-trm` command).

Notes

The function of this command is the same as the `alw-trm` command.

When you attempt to return to service a terminal already in service, a warning message is echoed to the scroll area but no action is taken.

Output

```
rst-trm:trm=12
```

```
    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    Allow message sent to terminal

    rlghncxa03w 04-01-07 11:11:28 EST  EAGLE 31.3.0
    1062.0046      TERMINAL     12         Terminal Enabled
;
```

Related Commands

act-echo, *alw-trm*, *canc-echo*, *chg-trm*, *dact-echo*, *inh-trm*, *rept-stat-trm*, *rmv-trm*, *rtrv-trm*

rtrv-acg-mic

Display ACG Manually Initiated Control

Use this command to display the values of ACG controls assigned to certain queries. The control can apply to all queries or to specific query services and called party digits.

Parameters

dgts (optional)

Digits

Range:

3 digits, 6 - 10 digits

Valid values are *000-999, 000000-9999999999*

serv (optional)

Query service

Range:

ain

in

type (optional)

Type of control

Range:

all

sd

Example

Display all MICs:

```
rtrv-acg-mic
```

Display the MIC(s) that apply to particular services and digits:

```
rtrv-acg-mic:type=sd
```

Display the MIC(s) that apply to AIN queries:

```
rtrv-acg-mic:serv=ain
```

Display the MIC(s) that apply to IN queries for 919-460-xxxx:

```
rtrv-acg-mic:serv=in:dgts=919460
```

Dependencies

If the type=all parameter is specified, then the serv and dgts parameters cannot be specified.

The dgts parameter value must be specified as 3 digits or 6-10 digits.

The LNP feature must be turned on before this command can be entered.

Notes

None

Output

```
rtrv-acg-mic:type=sd
```

```
    rlghncxa03w 04-01-28 08:50:12 EST  EAGLE 31.3.0
    TYPE=ALL
    ND  INTVL  AINTVL  DRTN
    6   4      7       8
    TYPE=SD
    DGTS         SERV  INTVL  AINTVL  DRTN
    704461       AIN   -      8       7
    919460       IN    6      -       7
    9194602132   AIN   -      7       8
    9194602132   IN    4      -       8
    919461       IN    6      -       7

    ACG MIC table is (11 of 256) 4% full of type SD
    RTRV-ACG-MIC: MASP A - COMPLTD
;
```

This example shows how the memory space accounting command completion response is used for type=all:

```
rtrv-acg-mic:type=all
```

```
    rlghncxa03w 04-01-28 08:50:12 EST  EAGLE 31.3.0
    TYPE=ALL
    ND  INTVL  AINTVL  DRTN
```

```
    6   4      7       8
    TYPE=SD
    DGTS          SERV  INTVL  AINTVL  DRTN
    919460         IN   6      -       7
    9194602132     IN   4      -       8

    ACG MIC table is (5 of 256) 2% full of type SD
    RTRV-ACG-MIC: MASP A - COMPLTD
;
```

Legend

- **AINTVL**—New AIN interval index
- **DGTS**—Digits
- **DRTN**—New duration index
- **INTVL**—New IN interval index
- **ND**—New number of digits
- **SERV**—Query service

Related Commands

chg-acg-mic, *dlt-acg-mic*, *ent-acg-mic*, *rept-stat-lnp*

rtrv-acg-noc

Display ACG Node Overload Control

Use this command to display the definitions of node overload levels. The definition is comprised of the threshold LNP query rates for node overload levels and the values for the Automatic Call Gappings (ACG) to be sent when at the overload level.

Parameters

lvl (optional)

Overload level

Range:

1 - 10

Example

```
rtrv-acg-noc
```

```
rtrv-acg-noc:lvl=3
```

Dependencies

The LNP feature must be turned on before this command can be entered.

Notes

None

Output

This example displays all defined overload levels:

`rtrv-acg-noc`

```
    rlghncxa03w 04-01-28 08:50:12 EST  EAGLE 31.3.0
    LVL  QR          AND  IND  INTVL  DRTN
    3    600000      10   6    3      6
    4    750000      6    6    5      7
    10   2147483647  10   10   15     13
    RTRV-ACG-NOC: MASP A - COMPLTD
;
```

This example displays overload level 3:

`rtrv-acg-noc:lvl=3`

```
    rlghncxa03w 04-01-28 08:50:12 EST  EAGLE 31.3.0
    LVL  QR          AND  IND  INTVL  DRTN
    3    600000      10   10   3      6
    RTRV-ACG-NOC: MASP A - COMPLTD
;
```

Legend

- **LVL**—Overload level
- **QR**—Query rate
- **AND**—AIN number of digits
- **IND**—IN number of digits
- **INTVL**—Interval index
- **DRTN**—Duration index

Related Commands

chg-acg-noc, *dlt-acg-noc*, *ent-acg-noc*, *rept-stat-lnp*

rtrv-ainpopts — Retrieve AINP Options

Use this command to retrieve AINP-specific options.

Parameters

This command has no parameters.

Example

```
rtrv-ainpopts
```

Dependencies

None.

Output

If the RNAI or RNAIV option is not provisioned, then the RNAI mnemonic default value is displayed. If the RNAI or RNAIV option is provisioned, then the RNAI mnemonic string for the option is displayed.

If the RNP or RNPV option is not provisioned, then the RNP mnemonic default value is displayed. If the RNP or RNPV option is provisioned, and the RNPV option can be set using RNP, then the RNP mnemonic string for the option is displayed. If the RNPV option cannot be provisioned using RNP, then the RNPV numerical value is displayed.

Each DIALPFX and DIALNAI option is displayed with its associated DLTPFX and SNAI option, respectively.

If the NEC option is not provisioned, then the default is displayed.

This example shows output with default AINP options.

```
rtrv-ainpopts
```

```
    rlghncxa03w 9-06-17 15:35:05 EST  EAGLE 41.1.0
    AINP OPTIONS
    -----------------------
    NEC         = NONE
    RNAI        = FRMSG
    RNP         = E164
    RFMT        = RNDN
    SPRESTYPE   = RRWODGTS
    SPORTTYPE   = NONE
    DEFRN       = NONE

    DIALPFX            DLTPFX
    ---------------    ---

    DIALNAI            SNAI
    ---                ----
;
```

This example shows output with some AINP options provisioned.

```
rtrv-ainpopts
```

```
    rlghncxa03w 09-06-17 15:35:05 EST  EAGLE 41.1.0
    AINP OPTIONS
    -----------------------
    NEC         = ABC1D
```

```
    RNAI        = NATL
    RNP         = E212
    RFMT        = CCRNDN
    SPRESTYPE   = RRWDGTS
    SPORTTYPE   = IS41
    DEFRN       = ABC1

    DIALPFX             DLTPFX
    ---------------     ---

    DIALNAI             SNAI
    ---                 ----
    1                   INTL
;
```

Legend

- **DEFRN**—Default Routing Number
- **DIALNAI**—Dialed Party Number Nature of Address Indicator
- **DIALPFX**—Dialed Party Number Prefix
- **DLTPFX**—Delete Prefix
- **NEC**—National Escape Code
- **RFMT**—Routing Address Format
- **RNAI**—Nature of Address Indicator for the Destination Routing Address
- **RNAIV**—Nature of Address Indicator Numeric Value for the Destination Routing Address
- **RNP**—Numbering Plan for the Destination Routing Address
- **RNPV**—Numbering Plan Numeric Value for the Destination Routing Address
- **SNAI**—Service Nature of Address Indicator
- **SPORTTYPE**—Service Portability Type
- **SPRESTYPE**—AINP option to send a "Return Results with digits" message or a "Return Results without digits" message when NPREQ messages are received for AINP services, the DN digits match, and the HLR ID is present

Related Commands

chg-ainpopts

rtrv-aiqopts

Retrieve AIQ Options

Use this command to retrieve AIQ specific options.

Parameters

This command has no parameters.

Example

```
rtrv-aiqopts
```

Dependencies

None

Output

If the pfx=none parameter is specified, then the corresponding TriggerType value is not displayed in the output.

This example shows output with default AIQ options.

`rtrv-aiqopts`

```
    tekelecstp 09-12-03 07:53:46 EST  EAGLE 42.0.0

    AIQ OPTIONS
    ---------------------
    DIGMINLEN    = 1
    DIGMAXLEN    = 32
    RESPAR       = rtdigits
    RESFMT       = pfxdn
    TCAPERR      = 138 (UnrecognizedParameterValue)

    TRIGTYPE        PFX
    -----------     --------------------
;
```

This example shows output with some AIQ options provisioned.

`rtrv-aiqopts`

```
    tekelecstp 09-12-03 11:53:46 EST  EAGLE 42.0.0

    AIQ OPTIONS
    ---------------------
    DIGMINLEN    = 2
    DIGMAXLEN    = 10
    RESPAR       = digits
    RESFMT       = pfx
    TCAPERR      = 138 (UnrecognizedParameterValue)

    TRIGTYPE        PFX
    -----------     --------------------
    3               12434
    5               789
    7               534553512456784686531
;
```

Legend

- **TRIGTYPE**—TriggerType Value
- **PFX**—Digit string associated with TriggerType
- **IGMINLEN**—Minimum Length of Digit String
- **DIGMAXLEN**—Maximum Length of Digit String

- **RESPAR**—Response Digits
- **RESFMT**—Response Format
- **TCAPERR**—TCAP Error Code.

Related Commands

None.

rtrv-appl-rtkey

Retrieve Application Route Key Table

Use this command to retrieve information from the Routing Key table. A routing key entry associates a routing key with up to 16 socket names with a limit of 2500 routing keys per system (if E5-ENET or E5-ENET-B cards exist).

- DPC, SI, SSN routing keys, which are used to route SCCP messages
- DPC, SI routing keys, which are used to route non-SCCP and non-ISUP messages
- DPC, SI, CIC routing keys, which are used to route ISUP messages

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

asname (optional)

Application Server (AS) name assigned to this routing key.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

cice (optional)

The end range of circuit identification codes assigned to the routing key.

Range:

0 - 4294967295

See *Table 57: Valid CIC Ranges for SI and MSU Types* for valid CIC values for specified SI and MSU types.

cics (optional)

The start range of circuit identification codes assigned to the routing key.

Range:

0 - 4294967295

See *Table 57: Valid CIC Ranges for SI and MSU Types* for valid CIC values for specified SI and MSU types.

display (optional)

The type of output to display.

Note: Output includes the type of card, the data collection being audited, and a message indicating the overall status. This parameter applies only to STP databases.

Range:

all

The KEY and the ATTRIBUTE sections of the routing key are displayed

brief

Only the KEY section of the routing key is displayed

Default:

brief

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national destination point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

num (optional)

The number of entries to display.

Range:

1 - 10000

Default:

50

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Originating point code.

opci (optional)

ITU international originating point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*)

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*,*m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national originating point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

rcontext (optional)

Routing Context. The routing key with the specified routing context.

Range:

0 - 4294967295

si (optional)

Service indicator.

Range:

0 - 15

The following equivalent text values can be specified:

Number = Text—Description

0=snm
Signaling network management messages

1=regtest
Signaling network testing and maintenance regular

2=spltest
Signaling network testing and maintenance special

3=sccp
SCCP

4=tup
Telephone user part

5=isup
ISDN user part

13=qbicc

ssn (optional)

Subsystem number.

Range:

0 - 255

type (optional)

The type of routing key.

Range:

all

full

partial

default

Default:

all

Example

```
rtrv-appl-rtkey
rtrv-appl-rtkey:dpc=123-234-255:si=3
rtrv-appl-rtkey:dpc=123-234-255
rtrv-appl-rtkey:cics=1:cice=1000:num=3
```

```
rtrv-appl-rtkey:cice=19
rtrv-appl-rtkey:opc=122-124-125
rtrv-appl-rtkey:type=partial
rtrv-appl-rtkey:display=all
rtrv-appl-rtkey:rcontext=7
rtrv-appl-rtkey:dpcn16=121-10-15
```

Dependencies

The ssn parameter must be specified and is valid only when the si=3 (*sccp*) parameter is specified.

The value specified for the cics parameter must be less than or equal to the value specified for the cice parameter.

A circuit identification code range (cics to cice) that overlaps an existing routing key cannot be specified.

The ssn parameter cannot be specified when opc, cics, and cice parameters are specified. See *Table 6: Valid Parameter Combinations for chg-appl-rtkey Routing Key Types* for valid parameter combinations.

When the DPC is ANSI and the si=4 parameter is specified, a DPC/SI routing key must be specified (TUP is used only in an ITU network).

The opc, cics, and cice parameters can be specified with the si parameter only if the si parameter has a value of 4, 5, or 13 (or *tup*, *isup*, or *qbicc*).

Table 57: Valid CIC Ranges for SI and MSU Types shows valid CIC values for SI types 4, 5, and 13.

The following types of partial routing keys are supported:

- The following types of partial routing keys are supported:
- DPC/SI/OPC (ignore CIC) can be used as a partial match key for CIC- based traffic.
- DPC/SI (ignore all other fields) can be used as a partial match key for CIC- based traffic or SCCP traffic.
- DPC only (ignore all other fields) can be used as a partial match for any type of traffic.
- SI only (ignore all other fields) can be used as a partial match for any type of traffic.

If the type=default parameter is specified, then the dpc, si, ssn, opc, cics, and cice parameters cannot be specified.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Static routing keys are stored on disk and a copy of the table is loaded to each SS7IPGW card.

Group codes are required for ITU-N point codes (DPCN/OPCN) when the Duplicate Point Code feature is turned on.

The display=all parameter must be specified to display the assigned routing context value for the routing key.

In this command, the point codes support only the spare point code subtype prefix (s-).

Output

`rtrv-appl-rtkey`

```
    rlghncxa03w 08-04-11 13:17:09 EST  EAGLE 38.0.0

    RCONTEXT        DPC       SI  ADPTR   ASNAME          TYPE
    ----------    008-008-008  *  M3UA    as5             PARTIAL
    ----------    002-002-002 10  M3UA    as2             FULL
    ----------    001-001-001  *  M3UA    as11            PARTIAL
    ----------    001-001-001 10  M3UA    as11            FULL
    ----------    001-001-001  3  M3UA    as12            FULL
    ----------    002-002-002  9  M3UA    as14            FULL
    10            002-002-002  *  M3UA    as8             PARTIAL

    RCONTEXT        DPCI      SI  ADPTR   ASNAME          TYPE
    ----------    7-007-7      *  M3UA    as14            PARTIAL
    ----------    7-007-7      4  M3UA    as15            FULL

    RCONTEXT        DPC       SI  ADPTR   ASNAME          TYPE
    ----------    ********** **  M3UA    as1             DEFAULT
    ----------    ********** 10  M3UA    as12            PARTIAL

    Route Key table is (11 of 1000) 1% full
    Route Key Socket Association table is (11 of 16000) 1% full

    END OF LOG REPORT
;
```

`rtrv-appl-rtkey:asname=as11`

```
    rlghncxa03w 08-04-11 14:05:46 EST  EAGLE 38.0.0

    RCONTEXT        DPC       SI  ADPTR   ASNAME          TYPE
    ----------    001-001-001  *  M3UA    as11            PARTIAL
    ----------    001-001-001 10  M3UA    as11            FULL

    Route Key table is (10 of 1000) 1% full
    Route Key Socket Association table is (10 of 16000) 1% full

    END OF LOG REPORT
;
```

This example shows a routing key with routing context that is assigned to an SUA Application Server and a routing key with routing context that is assigned to an M3UA Application Server.

`rtrv-appl-rtkey:display=all`

```
    rlghncxa03w 08-04-11 14:13:46 EST  EAGLE 38.0.0

    RCONTEXT        DPC       SI SSN      OPC       CICS       CICE
    ----------    008-008-008 ** *** ************** ********** **********

        ADPTR   TYPE      ASNAME
        M3UA    PARTIAL   as5

        ANAMES
        assoc5
```

```
    RCONTEXT        DPC       SI SSN      OPC       CICS       CICE
    20            002-002-002  3 *** -------------- ---------- ----------

        ADPTR   TYPE      ASNAME
        SUA     PARTIAL   as8

        ANAMES
        assoc8

    Route Key table is (2 of 1000) 1% full
    Route Key Socket Association table is (2 of 16000) 1% full

    END OF LOG REPORT
;
```

This example shows output when the 2500 Routing Keys feature is enabled. The maximum number of routing keys allowed in the system is 2500. The maximum number of entries in the Static Route Key Socket Association table is 40,000.

`rtrv-appl-rtkey`

```
    rlghncxa03w 08-04-11 14:03:05 EST  EAGLE 38.0.0

    RCONTEXT        DPC       SI  ADPTR   ASNAME           TYPE
    ----------    008-008-008  *  M3UA    as5              PARTIAL
    ----------    002-002-002 10  M3UA    as2              FULL
    ----------    001-001-001  *  M3UA    as11             PARTIAL
    ----------    001-001-001 10  M3UA    as11             FULL
    ----------    001-001-001  3  M3UA    as12             FULL
    ----------    002-002-002  9  M3UA    as14             FULL

    RCONTEXT        DPCI      SI  ADPTR   ASNAME           TYPE
    ----------    7-007-7      *  M3UA    as14             PARTIAL
    ----------    7-007-7      4  M3UA    as15             FULL

    RCONTEXT        DPC       SI  ADPTR   ASNAME           TYPE
    ----------    ********** **  M3UA    as1              DEFAULT
    ----------    ********** 10  M3UA    as12             PARTIAL

    Route Key table is (10 of 2500) 1% full
    Route Key Socket Association table is (10 of 40000) 1% full

    END OF LOG REPORT
;
```

`rtrv-appl-rtkey`

```
    rlghncxa03w 08-04-11 13:17:09 EST  EAGLE 38.0.0

    RCONTEXT        DPC       SI  ADPTR   ASNAME           TYPE
    ----------    008-008-008  *  M3UA    as5              PARTIAL
    ----------    002-002-002 10  M3UA    as2              FULL
    ----------    001-001-001  *  M3UA    as11             PARTIAL
    ----------    001-001-001 10  M3UA    as11             FULL
    ----------    001-001-001  3  M3UA    as12             FULL
    ----------    002-002-002  9  M3UA    as14             FULL
    10            002-002-002  *  M3UA    as8              PARTIAL

    RCONTEXT        DPCI      SI  ADPTR   ASNAME           TYPE
```

```
    ----------    7-007-7      *  M3UA    as14            PARTIAL
    ----------    7-007-7      4  M3UA    as15            FULL

    RCONTEXT        DPC       SI  ADPTR   ASNAME          TYPE
    ----------    ********** **  M3UA    as1             DEFAULT
    ----------    ********** 10  M3UA    as12            PARTIAL

    RCONTEXT        DPCN16    SI  ADPTR   ASNAME          TYPE
    ----------    121-007-10   *  M3UA    as14            PARTIAL
    ----------    121-007-11   4  M3UA    as15            FULL


    Route Key table is (11 of 1000) 1% full
    Route Key Socket Association table is (11 of 16000) 1% full

    END OF LOG REPORT
;
```

Related Commands

chg-appl-rtkey, *dlt-appl-rtkey*, *ent-appl-rtkey*

rtrv-as

Retrieve Application Server

Use this command to retrieve the characteristics of one or all Application Servers from the AS table.

Parameters

aname (optional)

Name of the association.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

Default:

Retrieve all

asname (optional)

Name of the Application Server.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

Example

```
rtrv-as
```

```
rtrv-as:aname=as1
```

Dependencies

None

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

`rtrv-as`

```
    rlghncxa03w 05-06-05 08:40:18 EST  EAGLE5 34.0.0
    AS Name           Mode        Tr ms   Association Names
    m3ua_as1          LOADSHARE   2000    m3ua_assoc1
                                          m3ua_assoc1
    sua_as1           OVERRIDE    200     sua_assoc1
                                          sua_assoc2
    AS Table is (2 of 250) 1% full
;
```

Related Commands

chg-as, *dlt-as*, *ent-as*, *rept-stat-as*

rtrv-assoc — Retrieve Association

Use this command to retrieve the configuration data from the IP Socket/Association (IPAPSOCK) table.

Parameters

adapter (optional)

The adapter layer for this association.

Range:

diam

m2pa

m3ua

sua

Default:

Retrieve all

alhost (optional)

Alternate local host name as defined in the IP Host table.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz,

Any string of characters beginning with a letter and comprising up to 60 characters in length. Valid characters are *a–z, A–Z, 0–9*, - (dash), . (period)

Default:

Retrieve all

aname (optional)

Name assigned to this association (in IPAPSOCK table).

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

Default:

Retrieve all

display (optional)

An optional display parameter can be specified in order to display either all or brief reports for associations. The default mode is "brief" if this parameter is not entered at the command line.

Range:

brief

all

lhost (optional)

The local host name as defined in the IP Host table.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz,

Any string of characters beginning with a letter and comprising up to 60 characters in length. Valid characters are *a–z, A–Z, 0–9*, - (dash), . (period).

Default:

Retrieve all

link (optional)

The signaling link for this association.

Range:

a, b, a1-a31, b1-b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

loc (optional)

Card location that is stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

rhost (optional)

Name of Remote Host as defined in the IP Host table.

Range:

zzzz

```
rtrv-assoc:aname=swbel32
rtrv-assoc:lhost=gw105.nc.tekelec.com:adapter=sua
rtrv-assoc:rhosttype=alternate:display=all
rtrv-assoc:lhost=gw105.nc.tekelec.com:adapter=diam
```

Dependencies

A valid value must be specified for the host parameter. If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

The IPAPSOCK table is used to associate the Local Host/Local Port to a Remote Host/Remote Port.

When the command is entered with the aname, lhost, or alhost parameters, the output displays SCTP buffer usage information (used and total buffer space on the card).

Heartbeat timer value is in milliseconds.

Output

AS names are displayed for IPGWx-M3UA and SUA linksets.

LS names are displayed for IPSG linksets.

This example shows buffer usage (used and total buffer space) and card location information:

`rtrv-assoc:aname=ipsgm3ua05`

```
eagle10212 10-02-10 17:21:29 EST  EAGLE 46.0.0

ANAME ipsgm3ua05
      LOC      1305          IPLNK PORT A           LINK     A
      ADAPTER  M3UA          VER        M3UA RFC
      LHOST    e1021201.1305a
      ALHOST   ---
      RHOST    e1021301.1305a
      ARHOST   ---
      LPORT    2005          RPORT      2005
      ISTRMS   2             OSTRMS     2           BUFSIZE  200
      RMODE    LIN           RMIN       120         RMAX     800
      RTIMES   10            CWMIN      3000        UAPS     10
      OPEN     NO            ALW        NO          RTXTHR   0
      RHOSTVAL RELAXED       HBTIMER    500

      LSN
      ls1305a

IP Appl Sock/Assoc table is (7 of 4000) 1% full
Assoc Buffer Space Used (320 KB of 3200 KB) on LOC = 1307
```

```
;
```

This example shows buffer usage (used and total buffer space) and card location information:

`rtrv-assoc:lhost=e1021201.1311a`

```
    eagle10212 10-02-10 17:21:29 EST  EAGLE 46.0.0

        ANAME ipl1311a
          LOC      1311          IPLNK PORT A           LINK     A
          ADAPTER  M2PA          VER        M2PA RFC
          LHOST    e1021201.1311a
          ALHOST   ---
          RHOST    e1021301.1311a
          ARHOST   ---
          LPORT    1311          RPORT      1311
          ISTRMS   2             OSTRMS     2           BUFSIZE  200
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     1
          OPEN     YES           ALW        YES         RTXTHR   0
          RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1

    IP Appl Sock/Assoc table is (10 of 4000) 1% full
    Assoc Buffer Space Used (400 KB of 1600 KB) on LOC = 1311

;
```

`rtrv-assoc:display=brief or rtrv-assoc`

```
                  CARD  IPLNK
    ANAME         LOC   PORT  LINK ADAPTER LPORT RPORT OPEN ALW
    a23456789012345 1305  A     A    M3UA    20000 30000 YES  YES
    b23456789012345 1305  B     A    M3UA    20001 30001 NO   NO
    c23456789012345 1307  A     A    SUA     20002 30002 YES  YES
    d23456789012345 1307  B     A    M3UA    20003 30003 NO   NO
    e23456789012345 1315  A     A    SUA     20004 30004 YES  YES
    f23456789012345 1315  A,B   A    M3UA    20005 30005 YES  YES
    g23456789012345 1317  B,A   A    SUA     20006 30006 YES  YES
    m2pa1105b3      1105  A     B3   M2PA    31105 31105 YES  YES
    m2pa1107a0      1107  A     --   M2PA    1107  1107  NO   NO
    m2pa1107a1      1107  A     --   M2PA    11107 11107 NO   NO
    m3ua1211a0      1211  A     A    M3UA    1211  1213  YES  YES
    m3ua1211a1      1211  A     **   M3UA    11211 11213 YES  YES
    m3ua1211a2      1211  A     B1   M3UA    21211 21213 YES  YES
    m3ua1211a3      1211  A     A3   M3UA    31211 31213 YES  YES
    m3ua1213a0      1213  A     A    M3UA    1213  1211  YES  YES
    m3ua1213a1      1213  A     A1   M3UA    11213 11211 YES  YES
    m3ua1213a2      1213  A     A2   M3UA    21213 21211 YES  YES
    m3ua1213a3      1213  A     A3   M3UA    31213 31211 YES  YES
    ipg1215a01      1215  A     **   M3UA    11215 1111  YES  YES
    ipg1215a02      1215  A     **   M3UA    11215 1112  YES  YES
    ipg1215a03      1215  A     --   M3UA    11215 1113  NO   NO
    ipg1215a04      1215  A     --   M3UA    11215 1114  NO   NO
    ipg1215a05      1215  A     --   M3UA    11215 1115  NO   NO
    ipg1215a06      1215  A     --   M3UA    11215 1116  NO   NO

    IP Appl Sock/Assoc table is (24 of 4000) 1% full

;
```

```
rtrv-assoc:adapter=m2pa
```

```
eagle10212 10-02-10 11:54:01 EST  EAGLE 46.0.0
                CARD  IPLNK
ANAME           LOC   PORT  LINK ADAPTER LPORT RPORT OPEN ALW
ipl1301a        1301  A     A    M2PA    1301  1301  YES  YES
ipl1301b        1301  A     B    M2PA    1302  1302  YES  YES
sgm2pa1         1305  A     A15  M2PA    1305  1305  NO   NO
sgm2pa7         1303  A     A15  M2PA    1306  1306  YES  YES
ipl1311a        1311  A     A    M2PA    1311  1311  YES  YES
ipl1313a        1313  A     A    M2PA    1313  1313  YES  YES

IP Appl Sock/Assoc (  11 of 4000) 1%
```

This example shows command output for all configured associations:

```
rtrv-assoc:display=all
```

```
eagle10212 10-02-02 17:00:42 EST  EAGLE 46.0.0
ANAME ipl1301a
      LOC      1301          IPLNK PORT A           LINK     A
      ADAPTER  M2PA          VER        M2PA RFC
      LHOST    e1021201.1301a
      ALHOST   ---
      RHOST    e1021301.1301a
      ARHOST   ---
      LPORT    1301          RPORT      1301
      ISTRMS   2             OSTRMS     2           BUFSIZE  200
      RMODE    LIN           RMIN       120         RMAX     800
      RTIMES   10            CWMIN      3000        UAPS     10
      OPEN     YES           ALW        YES         RTXTHR   0
      RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1

ANAME ipl1301b
      LOC      1301          IPLNK PORT A           LINK     B
      ADAPTER  M2PA          VER        M2PA RFC
      LHOST    e1021201.1301a
      ALHOST   ---
      RHOST    e1021301.1301a
      ARHOST   ---
      LPORT    1302          RPORT      1302
      ISTRMS   2             OSTRMS     2           BUFSIZE  200
      RMODE    LIN           RMIN       120         RMAX     800
      RTIMES   10            CWMIN      3000        UAPS     10
      OPEN     YES           ALW        YES         RTXTHR   0
      RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1


ANAME sg1303a
      LOC      1303          IPLNK PORT A           LINK     A
      ADAPTER  M3UA          VER        M3UA RFC
      LHOST    e1021201.1303a
      ALHOST   ---
      RHOST    e1021301.1303a
      ARHOST   ---
      LPORT    2003          RPORT      2003
      ISTRMS   2             OSTRMS     2           BUFSIZE  200
      RMODE    LIN           RMIN       120         RMAX     800
      RTIMES   10            CWMIN      3000        UAPS     10
      OPEN     YES           ALW        YES         RTXTHR   0
      RHOSTVAL RELAXED       HBTIMER    500
```

```
ANAME sg1305a
      LOC      1305          IPLNK PORT A           LINK     A
      ADAPTER  M3UA          VER        M3UA RFC
      LHOST    e1021201.1305a
      ALHOST   ---
      RHOST    e1021301.1305a
      ARHOST   ---
      LPORT    2005          RPORT      2005
      ISTRMS   2             OSTRMS     2           BUFSIZE  200
      RMODE    LIN           RMIN       120         RMAX     800
      RTIMES   10            CWMIN      3000        UAPS     10
      OPEN     YES           ALW        YES         RTXTHR   0
      RHOSTVAL RELAXED       HBTIMER    500

ANAME sg1305i
      LOC      1305          IPLNK PORT A           LINK     B
      ADAPTER  M3UA          VER        M3UA RFC
      LHOST    e1021201.1305a
      ALHOST   ---
      RHOST    e1021301.1305a
      ARHOST   ---
      LPORT    2006          RPORT      2006
      ISTRMS   2             OSTRMS     2           BUFSIZE  200
      RMODE    LIN           RMIN       120         RMAX     800
      RTIMES   10            CWMIN      3000        UAPS     10
      OPEN     NO            ALW        YES         RTXTHR   0
      RHOSTVAL RELAXED       HBTIMER    500

ANAME ipg1307a1
      LOC      1307          IPLNK PORT A           LINK     A
      ADAPTER  M3UA          VER        M3UA RFC
      LHOST    e1021201.1307a
      ALHOST   ---
      RHOST    e1021301.1307a
      ARHOST   ---
      LPORT    4001          RPORT      4001
      ISTRMS   2             OSTRMS     2           BUFSIZE  16
      RMODE    LIN           RMIN       120         RMAX     800
      RTIMES   10            CWMIN      3000        UAPS     10
      OPEN     YES           ALW        YES         RTXTHR   0
      RHOSTVAL RELAXED       HBTIMER    500

ANAME ipl1311a
      LOC      1311          IPLNK PORT A           LINK     A
      ADAPTER  M2PA          VER        M2PA RFC
      LHOST    e1021201.1311a
      ALHOST   ---
      RHOST    e1021301.1311a
      ARHOST   ---
      LPORT    1311          RPORT      1311
      ISTRMS   2             OSTRMS     2           BUFSIZE  200
      RMODE    LIN           RMIN       120         RMAX     800
      RTIMES   10            CWMIN      3000        UAPS     10
      OPEN     NO            ALW        YES         RTXTHR   0
      RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1

ANAME ipl1313a
      LOC      1313          IPLNK PORT A           LINK     A
      ADAPTER  M2PA          VER        M2PA RFC
      LHOST    e1021201.1313a
      ALHOST   ---
      RHOST    e1021301.1313a
      ARHOST   ---
```

```
          LPORT    1313          RPORT      1313
          ISTRMS   2             OSTRMS     2           BUFSIZE  200
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     3
          OPEN     NO            ALW        YES         RTXTHR   0
          RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1

    ANAME ipg1315a1
          LOC      1315          IPLNK PORT A           LINK     A
          ADAPTER  M3UA          VER        M3UA RFC
          LHOST    e1021201.1315a
          ALHOST   ---
          RHOST    e1021301.1315a
          ARHOST   ---
          LPORT    1315          RPORT      1315
          ISTRMS   2             OSTRMS     2           BUFSIZE  16
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     10
          OPEN     NO            ALW        NO          RTXTHR   0
          RHOSTVAL RELAXED       HBTIMER    500

    ANAME ipg1317a1
          LOC      1317          IPLNK PORT A           LINK     A
          ADAPTER  M3UA          VER        M3UA RFC
          LHOST    e1021201.1317a
          ALHOST   ---
          RHOST    e1021301.1317a
          ARHOST   ---
          LPORT    1317          RPORT      1317
          ISTRMS   2             OSTRMS     2           BUFSIZE  200
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     10
          OPEN     YES           ALW        YES         RTXTHR   0
          RHOSTVAL RELAXED       HBTIMER    500

    ANAME sg1305m
          LOC      1303          IPLNK PORT A           LINK     A1
          ADAPTER  M2PA          VER        M2PA RFC
          LHOST    e1021201.1303a
          ALHOST   ---
          RHOST    e1021301.1303a
          ARHOST   ---
          LPORT    1305          RPORT      1305
          ISTRMS   2             OSTRMS     2           BUFSIZE  200
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     10
          OPEN     YES           ALW        YES         RTXTHR   0
          RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1

    IP Appl Sock/Assoc table is (11 of 4000) 1% full
;
```

`rtrv-assoc:aname=sg1305a`

```
    eagle10212 09-03-10 17:00:42 EST  EAGLE 46.0.0

    ANAME sg1305a
          LOC      1305          IPLNK PORT A           LINK     A
          ADAPTER  M3UA          VER        M3UA RFC
          LHOST    e1021201.1305a
          ALHOST   ---
          RHOST    e1021301.1305a
```

```
          ARHOST   ---
          LPORT    2005          RPORT      2005
          ISTRMS   2             OSTRMS     2           BUFSIZE  200
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     10
          OPEN     YES           ALW        YES         RTXTHR   0
          RHOSTVAL RELAXED       HBTIMER    500

          LSN;

          ls1305a

    IP Appl Sock/Assoc table is (13 of 4000) 1% full
    Assoc Buffer Space Used (600 KB of 3200 KB) on LOC = 1305
;
```

This example shows all associations with both primary and alternate remote host values configured:

`rtrv-assoc:rhosttype=alternate:display=all`

```
    ipsig 10-02-10 17:58:37 GMT  EAGLE 46.0.0

    ANAME assoc12
          LOC      1111          IPLNK PORT A,B         LINK     A
          ADAPTER  M2PA          VER        M2PA RFC
          LHOST    aricent11.com
          ALHOST   aricent12.com
          RHOST    tekelec11.com
          ARHOST   tekelec12.com
          LPORT    10003         RPORT      10001
          ISTRMS   2             OSTRMS     2           BUFSIZE  200
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     10
          OPEN     NO            ALW        YES         RTXTHR   65535
          RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1

    ANAME assoc22
          LOC      1201          IPLNK PORT A,B         LINK     A
          ADAPTER  M2PA          VER        M2PA RFC
          LHOST    aricent21.com
          ALHOST   aricent22.com
          RHOST    tekelec21.com
          ARHOST   tekelec22.com
          LPORT    10003         RPORT      10001
          ISTRMS   2             OSTRMS     2           BUFSIZE  200
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     1
          OPEN     NO            ALW        YES         RTXTHR   65535
          RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1

    IP Appl Sock/Assoc table is (4 of 4000) 1% full
;
```

This example shows the associations when a primary remote host is provisioned and an alternate remote host is not provisioned:

`rtrv-assoc:rhosttype=primary`

```
    ipsig 10-02-10 17:37:49 GMT  EAGLE 46.0.0
                   CARD  IPLNK
```

```
    ANAME           LOC   PORT  LINK ADAPTER LPORT RPORT OPEN ALW
    assoc5          1101  A     A    M2PA    10002 10001 NO   YES
    assoc6          1102  A     A    M3UA    30002 30002 NO   NO
    assoc7          1102  B     A    SUA     20001 29011 NO   NO

    IP Appl Sock/Assoc table is (4 of 4000) 1% full
;
```

```
rtrv-assoc:aname=m2pa1
```

```
    ANAME m2pa1
          LOC      1305          IPLNK PORT A           LINK     B1
          ADAPTER  M2PA          VER        M2PA RFC
          LHOST    e1011001.1305a
          ALHOST   ---
          RHOST    e1011501.1305a
          ARHOST   ---
          LPORT    2005          RPORT      2005
          ISTRMS   2             OSTRMS     2           BUFSIZE  200
          RMODE    LIN           RMIN       120         RMAX     800
          RTIMES   10            CWMIN      3000        UAPS     7
          OPEN     NO            ALW        YES         RTXTHR   0
          RHOSTVAL RELAXED       HBTIMER    500         M2PATSET 1

          LSN
          lsm2pa05s
```

Related Commands

chg-assoc, *dlt-assoc*, *ent-assoc*, *rept-stat-assoc*

rtrv-atinpqopts

Retrieve ATINPQ Options

Use this command to retrieve the data that is used for ATI number conditioning.

Parameters

This command has no parameters.

Example

```
rtrv-atinpqopts
```

Dependencies

The ATINP feature must be enabled before this command can be entered.

Output

This example shows output with default ATINPQ options:

```
rtrv-atinpqopts
```

```
    tekelecstp 12-01-04 07:53:46 EST  EAGLE 45.0.0

    ATINPQ OPTIONS
    ----------------------
    ATIACKIMSI      = NONE
    ATIACKMSISDN    = MSISDN
    ATIACKRN        = RN
    ATIDFLTRN       = NONE
    ATIDLM          = NONE
    ATINPTYPE       = ANY
    ENTITYLEN       = NONE
    SNAI            = INTL
    SPORTTYPE       = GSM
    ATISUPPLOCINFO  = OFF
    VLRNUMLEN       = 40
    ATIACKVLRNUM    = RNSPMSISDN

;
```

This example shows output when the Location Information request is supported:

```
rtrv-atinpqopts
```

```
    tekelecstp 12-01-25 12:22:38 EST  EAGLE 45.0.0

    ATINPQ OPTIONS
    -----------------------
    ATIACKIMSI      = GRN
    ATIACKMSISDN    = GRNDLMMSISDN
    ATIACKRN        = GRNDLMRNSP
    ATIDFLTRN       = NONE
    ATIDLM          = 454555817324228
    ATINPTYPE       = ANY
    ENTITYLEN       = NONE
    SNAI            = NAI
    SPORTTYPE       = NONE
    ATISUPPLOCINFO  = ON
    VLRNUMLEN       = 40
    ATIACKVLRNUM    = RNSPMSISDN

;
```

Legend

- **ATIACKIMSI**—IMSI parameter for ACK response message
- **ATIACKMSISDN**—MSISDN parameter for ACK response message
- **ATIACKRN**—Routing Number format
- **SNAI**—NAI of the incoming MSISDN digits
- **ATIDLM**—Outbound message delimiter
- **ATIDFLTRN**—Default Routing Number
- **ATINPTYPE**—Number Portability Type
- **SPORTTYPE**—Service Portability Type
- **GRN**—Generic Routing Number

- **ATISUPPLOCINFO**—Support ATINP query with LocationInformation request if ATINP feature is activated
- **VLRNUMLEN**—Maximum number of digits that could be encoded as VLR-number in ATI ACK response message
- **ATIACKVLRNUM**— VLR-number format

Related Commands

None.

rtrv-atm-lps

Retrieve ATM Link Parameter Set

Use this command to display the parameter values for the ATM link parameter sets in the database configured with the `chg-atm-lps` command, along with the non-configurable ATM parameters.

Parameters

lpset (optional)

The ATM link parameter set to be displayed.

Range:

1 - 30

Default:

All ATM link parameter sets are displayed

Example

```
rtrv-atm-lps:lpset=5
rtrv-atm-lps
```

Dependencies

None

Notes

None

Output

Note: Dashes (--) in the FC NR and FC BC fields indicate that this implementation is not supported on ATM high-speed signaling links.

rtrv-atm-lps:lpset=5

```
    rlghncxa03w 04-01-04 08:40:18 EST  EAGLE 31.3.0
    ATM LINK PARAMETER SET TIMERS AND PARAMETERS (TIMERS IN SECONDS)
                                  SSCOP PARAMETERS
                                TMR  TMR     TMR    TMR    TMR
    LPSET  MAXCC  MAXPD  MAXSTAT  CC   KALIVE  NORSP  POLL   IDLE
    5      4      500    67       0.2  0.125   1.5    0.150  0.125

                                  SSCF-NNI PARAMETERS
           TMRT1  TMRT2  TMRT3     N1
           05.0   120.0  0.000925  64552

                                  SAAL PARAMETERS
           MAX  TMR   TNRNO  TMR    N    TMR
           NRP  SREC  CRED   ERM    BLK  PROV
           1    3600  1.5    0.125  3    0600.0

                              NONCONFIGURABLE PARAMETERS
           SDU   UU       FC  FC
           SIZE  SIZE  N  NR  BC  TSUP  TLOSS  ERMSM  THRES
           272   4     9  --  --  120   1.3    0.1    0.244
;
```

rtrv-atm-lps

```
    rlghncxa03w 04-01-04 08:40:18 EST  EAGLE 31.3.0

                                  SSCOP PARAMETERS
                                TMR  TMR     TMR    TMR    TMR
    LPSET  MAXCC  MAXPD  MAXSTAT  CC   KALIVE  NORSP  POLL   IDLE
    1      4      500    67       0.2  0.125   1.5    0.150  0.125
    2      4      500    67       0.2  0.125   1.5    0.150  0.125
    3      4      500    67       0.2  0.125   1.5    0.150  0.125
    4      4      500    67       0.2  0.125   1.5    0.150  0.125
    5      4      500    67       0.2  0.125   1.5    0.150  0.125
    6      4      500    67       0.2  0.125   1.5    0.150  0.125
    7      4      500    67       0.2  0.125   1.5    0.150  0.125
    8      4      500    67       0.2  0.125   1.5    0.150  0.125
    9      4      500    67       0.2  0.125   1.5    0.150  0.125
    10     4      500    67       0.2  0.125   1.5    0.150  0.125
    11     4      500    67       0.2  0.125   1.5    0.150  0.125
    12     4      500    67       0.2  0.125   1.5    0.150  0.125
    13     4      500    67       0.2  0.125   1.5    0.150  0.125
    14     4      500    67       0.2  0.125   1.5    0.150  0.125
    15     4      500    67       0.2  0.125   1.5    0.150  0.125
    16     4      500    67       0.2  0.125   1.5    0.150  0.125
    17     4      500    67       0.2  0.125   1.5    0.150  0.125
    18     4      500    67       0.2  0.125   1.5    0.150  0.125
    19     4      500    67       0.2  0.125   1.5    0.150  0.125
    20     4      500    67       0.2  0.1     1.5    0.1    0.1

                                  SSCF-NNI PARAMETERS
    LPSET  TMRT1  TMRT2  TMRT3     N1
    1      05.0   015.0  0.000925  64552
    2      05.0   120.0  0.000925  64552
    3      05.0   120.0  0.000925  64552
    4      15.0   010.0  0.000925  64552
    5      05.0   120.0  0.000925  500
    6      05.0   015.0  0.000925  64552
    7      05.0   120.0  0.000925  64552
```

```
    8      05.0   120.0  0.000925  64552
    9      15.0   010.0  0.000925  64552
    10     05.0   015.0  0.000925  64552
    11     05.0   120.0  0.000925  64552
    12     05.0   120.0  0.000925  64552
    13     15.0   010.0  0.000925  64552
    14     05.0   015.0  0.000925  64552
    15     05.0   120.0  0.000925  64552
    16     05.0   120.0  0.000925  64552
    17     15.0   010.0  0.000925  64552
    18     05.0   015.0  0.000925  64552
    19     05.0   120.0  0.000925  64552
    20     05.0   120.0  0.000925  64552

                                    SAAL PARAMETERS
    LPSET  MAX  TMR   TNRNO  TMR    N    TMR
           NRP  SREC  CRED   ERM    BLK  PROV
    1      1    3600  1.5    0.125  3    1200.0
    2      1    3600  1.5    0.125  3    1000.0
    3      1    60    1.5    0.125  3    0600.0
    4      1    3600  1.5    0.125  3    0600.0
    5      1    3600  1.5    0.125  3    0600.0
    6      1    3600  1.5    0.125  3    1200.0
     7     1    3600  1.5    0.125  3    1000.0
    8      1    60    1.5    0.125  3    0600.0
    9      1    3600  1.5    0.125  3    0600.0
    10     1    3600  1.5    0.125  3    0600.0
    11     1    3600  1.5    0.125  3    1200.0
    12     1    3600  1.5    0.125  3    1000.0
    13     1    60    1.5    0.125  3    0600.0
    14     1    3600  1.5    0.125  3    0600.0
    15     1    3600  1.5    0.125  3    0600.0
    16     1    3600  1.5    0.125  3    1200.0
    17     1    3600  1.5    0.125  3    1000.0
    18     1    60    1.5    0.125  3    0600.0
    19     1    3600  1.5    0.125  3    0600.0
    20     1    3600  1.5    0.125  3    0600.0

                              NONCONFIGURABLE PARAMETERS
            SDU   UU       FC  FC
            SIZE  SIZE  N  NR  BC  TSUP  TLOSS  ERMSM  THRES
            272   4     9  --  --  120   1.3    0.1    0.244
;
```

rtrv-atm-lps

```
    tekelecstp 04-01-05 08:40:18 EST  EAGLE 31.3.0
    ATM LINK PARAMETER SET TIMERS AND PARAMETERS (TIMERS IN SECONDS)

                                  SSCOP PARAMETERS
                                  TMR  TMR     TMR    TMR    TMR
    LPSET  MAXCC  MAXPD  MAXSTAT  CC   KALIVE  NORSP  POLL   IDLE
    1      4      500    67       0.2  0.125   1.5    0.150  0.125
.
.
    20     4      500    67       0.2  0.1     1.5    0.1    0.1
    21     4      500    67       0.2  0.1     1.5    0.1    0.1.
.
    30     4      500    67       0.2  0.1     1.5    0.1    0.1

                                   SSCF-NNI PARAMETERS
    LPSET  TMRT1  TMRT2  TMRT3     N1
```

```
    1      05.0   015.0  0.000925  64552
.
.
    20     5       30    0.000925  64552
    21     5      120    0.000925   1000
.
.
    30     5      120    0.000925  64552

                                SAAL PARAMETERS
    LPSET  MAX  TMR   TNRNO  TMR    N    TMR
           NRP  SREC  CRED   ERM    BLK  PROV
     1     1    3600  1.5    0.125  3    1200.0
.
.
     20    1    3600  1.5    0.125  3    0600.0
     21    0    3600  1.5    0.125  3    1200.0
.
.
     30    0    3600  1.5    0.125  3    0600.0

                                   NONCONFIGURABLE PARAMETERS
           SDU   UU       FC  FC
           SIZE  SIZE  N  NR  BC  TSUP  TLOSS  ERMSM  THRES
           272   4     9  --  --  120   1.3    0.1    0.244
;
```

Legend

- **LPSET**—Link parameter set being changed. The system default value for this parameter is 1 for ANSI and, 21 for ITU.
- **ACTION**—Copy a set of ATM signaling link parameters from one parameter set to another.
- **SCRLPSET**—ATM signaling link parameter set used as a source for the action=copy parameter.
- **MAXCC**—Maximum number of transmissions of a BGN, END, ER, or RS PDU
- **MAXPD**—Maximum number of SD PDUs that can be sent before a POLL is sent
- **MAXSTAT**—Maximum number of list elements in a STAT PDU
- **TMRCC**—Timer, in seconds, used during the connection phase to guard against unacknowledged BGN, END, ER or RS PDUs
- **TMRKALIVE**—Timer, in seconds, used during the transient phase when no SD PDUs are being sent to keep connection up
- **TMRNOSP**—Timer, in seconds, used to check that STAT PDUs are arriving often enough
- **TMRPOLL**—Timer, in seconds, used to guarantee that POLL PDUs are sent often enough
- **TMRIDLE**—Timer, in seconds, used during the idle phase when no SD PDUs are being sent to limit time in the idle phase
- **TMRT1**—Time, in seconds, between a link release action and the next link reestablish action during alignment
- **TMRT2**—Total time, in seconds, that SSCF will attempt alignment
- **TMRT3**—Time, in seconds, between proving PDUs
- **N1**—Number of PDUs sent during proving
- **MAXNRP**—Maximum number of retransmitted PDUs during proving
- **TMRSREC**—The timer, in seconds, used to prohibit closely spaced SSCOP recoveries from occurring.
- **TMRNOCRED**—The timer, in seconds, used when the no credit exists and PDUs are available to be sent.

- **TMRERM**—The error rate monitor interval, in seconds.
- **NBLK**—The number of monitoring intervals per block.
- **TMRPROV**—The timer, in seconds, used to monitor the status of a link after it is placed into service.
- **SDU SIZE**—The SSCOP SDU size (set to 272 octets).
- **UU SIZE**—The SCOP UU size (set to 4 octets).
- **N**—The monitoring intervals spanning a.4 second error event (set to 9).
- **FC NR**—The fixed credit increment value.
- **FC BC**—The fixed credit allocation frequency.
- **TSUP—**The superblock timer for layer management, in seconds.
- **TLOSS—**The loss timer for layer management, in seconds.
- **ERMSM—**The error rate monitor smoothing factor.
- **THRES—**The error rate monitor threshold.

Related Commands

chg-atm-lps

rtrv-atm-prm

Retrieve ATM Parameters

Use this command to display system-wide non-configurable ATM layer parameters for each ATM high-speed signaling link. The data displayed includes the ATM interface parameters and the ATM traffic descriptor values.

Parameters

This command has no parameters.

Example

`rtrv-atm-prm`

Dependencies

None

Notes

None

Output

`rtrv-atm-prm`

```
tekelecstp 04-02-05 08:40:18 EST  EAGLE 31.3.0
DS1   DS1   E1    E1                  MAX   MAX   VCI   VPI
```

```
    PCR   SCR   PCR   SCR   BT   CDVT  QOS  VPCs  VCCs  BITS  BITS
    3622  3622  4528  4528  210  100   3    0     1     16    12
;
```

Legend

The ATM traffic descriptors are displayed in the following fields:

- **BT**—Burst tolerance. The number of consecutive cells on the VCL permitted on the ATM interface by the enforcement process, given the PCR and the line speed.
- **CDVT**—The amount of cell delay variation for the VCL in the network ingress direction.
- **PCR**—The maximum or peak cell rate for the VCL (virtual channel link) T1 is for ANSI and E1 is for ITU.
- **QOS**—Quality of service. The performance objectives that must be met by the ATM VCL when it must discard cells during enforcement of the traffic parameters.
- **SCR**—The average or sustainable cell rate supported on the VCL. T1 is for ANSI and E1 is for ITU.
- The ATM interface parameters are displayed in the following fields:
- **MAX VCCs**—The maximum number of simultaneously active Virtual Circuit Connections (VCCs) supported.
- **MAX VPCs**—The maximum number of simultaneously active Virtual Path Connections (VPCs) supported (by the ATM interface).
- **VCI BITS**—The number of allocated VCI bits to be used in the VPIs in the ATM cells for the VCLs supported on the ATM interface.
- **VPI BITS—**The number of bits to be used in the VPIs in the ATM cells for the VPLs terminated on the ATM interface.

Related Commands

rtrv-atm-lps

rtrv-attr-seculog — Display Security Log Characteristic

Use this command to display security log attributes that were configured using the `chg-attr-seculog` command.

Parameters

This command has no parameters.

Example

```
rtrv-attr-seculog
```

Dependencies

None

Notes

None

Output

`rtrv-attr-seculog`

```
    rlghncxa03w 04-01-07 08:16:17 EST  EAGLE 31.3.0
    Security log attributes
    -----------------------
    UPLDALM      yes
    UPSLG         80
;
```

Related Commands

chg-attr-seculog

rtrv-bip

Retrieve Board Identification PROMs

Use this command to show the board identification PROM (BIP) data for the main assembly at the specified card location.

The following information is displayed for the main assembly: board part number, board revision, serial number (7, 8, 11, 12, or 14 digits), manufacturing date, and the software match ID.

For main assemblies, the port A Ethernet address (if ENT01 record exists) and port B Ethernet address (if ENT02 record exists) are also displayed.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110, 1113, 1115

Example

The following example displays the BIP data for the main assembly.

```
rtrv-bip:loc=1201
```

Dependencies

The card location must be valid for the command.

Notes

The `tst-bip` command verifies that the PROM is good by writing to and reading from the PROM. The `rtrv-bip` command shows the level of the BIP, as well as the board part number, the revision number, and the serial number If the `rtrv-bip` command fails, this indicates that communication to the card has failed, and you might need to replace the card. Contact My Oracle Support (MOS) to find out if the card can be reprogrammed.

Output

For main assemblies, the Max Power Rating is also displayed. If the Card Power value is not present in BIP data, then the Max Power Rating is displayed as *Undef* .

This example shows the 7-digit serial number of a main assembly card manufactured on the eleventh week of 1993):

```
rtrv-bip:loc=1201
```

```
    tekelecstp 10-03-14 23:32:51 IST  EAGLE 42.0.0
    ------------------------------------------------------------------------
    Location:  1201  MBD

    Part Number:    850-0187-03
    Revision:       G2                          Week/Year:        11/1993
    Serial Number:  3110195

    Software Match ID:   EG - 001               Max Power Rating :  Undef
    ------------------------------------------------------------------------
    END OF REPORT
;
```

This example shows the 14-digit serial number with Ethernet port A and B records, manufactured on the eleventh week of 2001:

```
rtrv-bip:loc=1201
```

```
    tekelecstp 10-03-14 23:32:51 IST  EAGLE 42.0.0
    ------------------------------------------------------------------------
    Location:  1201 - MBD

    Part Number:    850-0187-03
    Revision:       G2                          Week/Year:        11/2001
    Serial Number:  102200111a0195

    Software Match ID:   EG - 001               Max Power Rating :  Undef

    Ethernet Port A Address: 00001704000C
    Ethernet Port B Address: 000017040
```

```
    ------------------------------------------------------------------------
    END OF REPORT
;
```

This example shows the BIP data for the main assembly when the Max Power Consumption value for the card is present:

```
rtrv-bip:loc=1103
```

```
    tekelecstp 10-03-14 23:32:51 IST  EAGLE 42.0.0
    ------------------------------------------------------------------------
    Location:  1103 - MBD

    Part Number:    870-2212-02
    Revision:       A                           Week/Year:        26/2006
    Serial Number:  10206265084

    Software Match ID:   EG - 001               Max Power Rating :  646 mA
    ------------------------------------------------------------------------
    END OF REPORT
;
```

This example shows the BIP data for the MUX main assembly card:

```
rtrv-bip:loc=1109
```

```
    tekelecstp 10-03-07 23:32:51 IST  EAGLE 42.0.0
    ------------------------------------------------------------------------

    Location:  1109  MBD
    Part Number:    870-2872-01
    Revision:       A                           Week/Year:        11/2003
    Serial Number:  10105365048

    Software Match ID:   EG - 001               Max Power Rating :  646 mA
    ------------------------------------------------------------------------
    END OF REPORT
;
```

Legend

- **Location**—Card location for the BIP information
- **Part Number**—Part number of the card in the specified card location
- **Revision**—Hardware version of the card
- **Serial Number—S**erial number of the card. Serial number formats are:
  - 7-digit serial number—ywwxxxx
  - 8-digit serial number—yywwxxxx
  - 11-digit serial number—nnnyywwxxxx
  - 12-digit serial number—nnnyyww*xxxx
  - 14-digit serial number—nnnyyyyww*xxxx
    - y = year digit (0–9)
    - w = week digit (0–9)
    - n = product identifier digit (0–9)x = serial number digit (0–F hexadecimal)

- * = special character (0–9, a–z, or A–Z, alphanumeric characters)

- **Software Match ID**—Used to check hardware and board type for the BIP information.
- **Max Power Rating**—Maximum power rating of the card.
- **Week/Year**—Week (1–52) and year (4 digits) of the card. The serial number formats are:
  - 7-digit: ywwxxxx
  - 8-digit: yywwxxxx
  - 11-digit: nnnyywwxxxx
  - 12-digit: nnnyyww*xxxx
  - 14-digit: nnnyyyyww*xxxx
  - where y=year, w=week, n=product identifier, x=serial number (0-F, hexadecimal), *=special character (0–9, a–z, or A–Z)

Related Commands

chg-bip-fld , *chg-bip-rec* , *disp-bip* , *tst-bip*

rtrv-card

Retrieve Card

Use this command to display the information about a card. The command displays the card type, the application the card is running, the linkset name, the signaling links, and the signaling link codes. If no parameter is specified, the command displays information for all cards defined by the `ent-card` command. If the loc parameter is specified, the command displays information for the specified card only.

Parameters

links (optional)

Links Provision Status. For the card in the location specified by the loc parameter, all links, only equipped links, or only unequipped links are displayed. If the parameter is not specified, only the equipped links are displayed.

Range:

all

Display all possible links for the card.

equip

Display links that are equipped on the card.

unequip

Display links that are allowed but not equipped on the card.

ipsg

Display the SLKTPS and total card TPS used for a particular card or for all cards configured with the IPSG GPL.

Default:

equip

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115, 6201 - 6208, 6211 - 6218, 6301 - 6108, 6311 - 6118

Default:

Retrieve all

Example

```
rtrv-card
rtrv-card:loc=1205
rtrv-card:links=ipsg
rtrv-card:loc=1111:links=ipsg
rtrv-card:loc=6201
```

Dependencies

The card location slot must be between 1 and 18 and not 9 or 10.

The card location cannot be 1114, 1116, 1117, or 1118.

The shelf location must be 11xx, 12xx, 13xx, 21xx, 22xx, 23xx, 31xx, 32xx, 33xx, 41xx, 42xx, 43xx, 51xx, 52xx, 53xx, 61xx, 62xx, or 63xx.

The specified card location must be equipped in the database.

Notes

None

Output

`rtrv-card`

```
rlghncxa03w 11-03-15 16:34:56 EST  EAGLE 46.0.0
    CARD   TYPE      APPL      LSET NAME     LINK SLC LSET NAME     LINK SLC
    1101   DSM       VSCCP     ------------  A    --  ------------  B    --
    1102   TSM       GLS       ------------  A    --  ------------  B    --
    1108   MCPM      MCP
    1113   E5-MCAP   OAM
    1114   TDM-A
    1115   E5-MCAP   OAM
```

```
    1116   TDM-B
    1117   MDAL
    1205   LIME1     CCS7ITU   e1lim1        A    0   ------------  B    --
                               ------------  A1   --  ------------  B1   --
                               ------------  A2   --  ------------  B2   --
                               ------------  A3   --  ------------  B3   --
    1207   LIME1     SS7ANSI   e1lsn1        A    0   e1jwk4        B    1
                               e1lsn2        A1   2   e1jwk3        B1   2
                               e1lsn3        A2   4   e1jwk2        B2   15
                               ------------  A3   --  e1jwk1        B3   16
    1211   LIMT1     SS7ANSI   t1lsn1        A    0   t1lsn1        B    1
                               ------------  A1   --  t1lsn1        B1   2
                               t1lsn5        A2   0   t1lsn6        B2   6
                               t1lsn7        A3   13  ------------  B3   --
;
```

This example shows the output for an E5-SM4G or E5-SM8G-B card:

`rtrv-card:loc=6111`

```
    tklc1110501 11-03-12 17:33:25 EST  EAGLE5 44.0.0
    CARD   TYPE      APPL     LSET NAME   LINK SLC LSET NAME   LINK SLC
    6111   DSM       VSCCP
;
```

This example lists unequipped links on the provisioned cards:

`rtrv-card:links=unequip`

```
    stdcfg1a 07-05-24 14:04:54 EST  EAGLE 46.0.0
    CARD   TYPE      APPL        UNEQUIPPED LINKS
    1101   LIME1     SS7ANSI     A1   B1   B3
    1102   LIME1     SS7ANSI     A1   B1   A2   B2   A3   B3
    1103   LIME1     SS7ANSI     A1   A2   A3
    1113   E5-MCAP   OAM
    1114   TDM-A
    1115   E5-MCAP   OAM
    1116   TDM-B

    1117   MDAL
;
```

`rtrv-card:links=ipsg`

```
    e1001501 11-02-23 16:20:42 EST  EAGLE 44.0.0
    CARD   TYPE      APPL     LSET NAME   LINK SLC   SLKTPS
    1105   ENET      IPSG     e1e2sg1     A    0     410
                              e1e2sg1     B    4     410
                              e1e2sg1     A1   1     410
                              e1e2sg1     B1   5     410
                              e1e2sg1     A2   2     410
                              e1e2sg1     B2   6     410
                              e1e2sg1     A3   3     410
                              e1e2sg1     B3   7     410
                    Total SLKTPS is (3280 of 5000) 66%
    1211   ENET      IPSG     ls1211a     A    0     500
                              ls1211b     A1   0     600
                              ls1211b     B1   1     600
                              ls1211c     A2   0     700
```

```
                          lsm3ua1     A3   0     1600
                    Total SLKTPS is (4000 of 5000) 80%
    1213   ENET      IPSG     ls1213a     A    0     800
                          ls1213b     A1   0     900
                          ls1213c     A2   0     1000
                          lsm3ua1     A3   1     1600
                    Total SLKTPS is (4300 of 6500) 66%
    1215   ENETB     IPSG     m3ua01      A    0     10
                          m3ua02      B    0     10
                          m3ua03      A1   0     10
                          m3ua04      B1   0     10
                          m3ua05      A2   0     10
                          m3ua06      B2   0     10
                          m3ua07      A3   0     10
                          m3ua08      B3   0     10
                          m3ua09      A4   0     10
                          m3ua10      B4   0     10
                          m3ua11      A5   0     10
                          m3ua12      B5   0     10
                          m3ua13      A6   0     10
                          m3ua14      B6   0     10
                          m3ua15      A7   0     10
                          m3ua16      B7   0     10
                    Total SLKTPS is (1600of 6500) 25%

;
```

`rtrv-card:links=ipsg:loc=1105`

```
    e1001501 08-02-23 16:20:42 EST  EAGLE 38.0.0
    CARD   TYPE      APPL     LSET NAME   LINK SLC   SLKTPS
    1105   ENET      IPSG     e1e2sg1     A    0     410
                          e1e2sg1     B    4     410
                          e1e2sg1     A1   1     410
                          e1e2sg1     B1   5     410
                          e1e2sg1     A2   2     410
                          e1e2sg1     B2   6     410
                          e1e2sg1     A3   3     410
                          e1e2sg1     B3   7     410
                    Total SLKTPS is (3280 of 5000) 66%

;
```

This example includes IPSG cards:

`rtrv-card`

```
    eagle10212 11-03-05 09:34:40 EST  EAGLE 44.0.0
    CARD   TYPE      APPL     LSET NAME   LINK SLC LSET NAME   LINK SLC
    1303   ENET      IPSG     ls1303a     A    0   lsm2pa7     A15  0
    1305   ENETB     IPSG     ls1305a     A    0   ls1305i     B    0
                          ls1305a     A1   1   ls1305i     B1   1
                          ls1305a     A2   2   ls1305i     B2   2
                          ls1305a     A3   3   ls1305i     B3   3
```

This example shows the output when the EPAP Data Split feature is turned on:

```
rtrv-card
```

```
    epap240m 12-01-05 15:48:30 CST  EAGLE 45.0.0
    CARD   TYPE      APPL     LSET NAME   LINK SLC LSET NAME   LINK SLC  DATA
    1101   DSM       VSCCP                                               DN
    1103   DSM       VSCCP                                               IMSI
    1105   DSM       VSCCP                                               COMB
    1107   DSM       VSCCP                                               COMB
    1111   IPSM      IPS
    1113   E5-MCAP   OAM
    1114   TDM-A
    1115   E5-MCAP   OAM
    1116   TDM-B
    1117   MDAL
    1202   LIME1     CCS7ITU  lsi1        A    2
    1203   LIMATM    ATMANSI  lsa1        A    3
    1204   LIMT1     SS7ANSI  lsa1        A    4
    1206   LIME1ATM  ATMITU   lsi1        A    6
```

This example shows the output when we have provisioned E5-APP-B cards:

```
rtrv-card
```

```
tekelecstp 12-07-12 17:06:11 EST  45.0.0-64.37.0
    rtrv-card
    Command entered at terminal #4.
    CARD   TYPE      APPL     LSET NAME   LINK SLC LSET NAME   LINK SLC
    1101   E5-APP-B  EPAP
    1103   E5-APP-B  EPAP
    1107   E5-APP-B  ELAP
    1111   E5-APP-B  ELAP
    1113   E5-MCAP   OAM
    1114   TDM-A
    1115   E5-MCAP   OAM
    1116   TDM-B
    1117   MDAL
```

The following examples show the output when we retrieve the card information with specified location of E5-APP-B card:

```
rtrv-card:loc=1101
```

```
tekelecstp 12-07-13 10:13:48 EST  45.0.0-64.37.0
    rtrv-card:loc=1101
    Command entered at terminal #4.
    CARD   TYPE      APPL     SRVNAME
    1101   E5-APP-B  EPAP     tklc1epap
```

```
rtrv-card:loc=1107
```

```
    tekelecstp 12-07-13 10:13:59 EST  45.0.0-64.37.0
    rtrv-card:loc=1107
    Command entered at terminal #4.
    CARD   TYPE      APPL     SRVNAME
    1107   E5-APP-B  ELAP     tklc1elap
```

This example shows the output when we have provisioned Telco switches:

```
rtrv-card
```

```
  tekelecstp 12-09-06 11:20:45 EST 45.0.0
  rtrv-card
  Command entered at terminal #4.
  CARD   TYPE      APPL  LSET NAME  LINK SLC  LSET NAME  LINK SLC
  1113   E5-MCAP   OAM
  1114   TDM-A
  1115   E5-MCAP   OAM
  1116   TDM-B
  1117   MDAL
  6201   TELCO     SWITCH
  6202   TELCO     SWITCH
  6203   TELCO     SWITCH
  6204   TELCO     SWITCH
  6205   TELCO     SWITCH
  6206   TELCO     SWITCH
;
```

The following example shows the output when we retrieve the card information with specified location of Telco Switch:

```
rtrv-card:loc=6201
```

```
  tekelecstp 12-09-06 11:22:10 EST 45.0.0
  rtrv-card:loc=6201
  Command entered at terminal #4.
  CARD   TYPE      APPL       SRVNAME
  6201   TELCO     SWITCH     telcol
;
```

Legend

- **CARD**—Card location as stenciled on the shelf of the system
- **TYPE**—Type of card
- **APPL**—Application associated with each card
- **LSET NAME**—Linkset name associated with the cards
- **LINK**—Signaling link associated with the linkset.
- **SLC**—Signaling link code
- **UNEQUIPPED LINKS**—Signaling links that are unequipped on the provisioned card
- **SLKTPS**—Transactions Per Second configured for signaling links provisioned on the card
- **DATA**—Type of RTDB data loaded on the card. Displayed when the EPAP Data Split feature is turned on.
- **SRVNAME**- Server Name of the E5-APP-B Card or Telco Switch.

Related Commands

dlt-card, *ent-card*, *init-card*, *rept-stat-card*, *rmv-card*, *rst-card*

rtrv-clkopts

Retrieve Clock Options

Use this command to retrieve the values of the clock parameters which are maintained in the STP's option table. All values are assigned initially to system defaults during STP installation, and can be updated using this command.

Parameters

This command has no parameters.

Example

```
rtrv-clkopts
```

Dependencies

None.

Notes

None

Output

```
rtrv-clkopts
```

```
    e5oam 09-01-02 17:20:05 MST  EAGLE 40.1.0
    CLK OPTIONS
    -----------------------

    PRIMARY
    -----------------------
    HSCLKSRC          rs422
    HSCLKLL        longhaul

    SECONDARY
    -----------------------
    HSCLKSRC          rs422
    HSCLKLL        longhaul
;
```

```
rtrv-clkopts
```

```
    e5oam 09-01-02 17:26:51 MST  EAGLE 40.1.0
    CLK OPTIONS
    -----------------------

    PRIMARY
    -----------------------
    HSCLKSRC          rs422
    HSCLKLL        longhaul

    SECONDARY
    -----------------------
```

```
    HSCLKSRC          rs422
    HSCLKLL       shorthaul
;
```

Related Commands

chg-clkopts

rtrv-cmd

Retrieve Command Attributes

Use this command to retrieve the list of command classes to which a command is assigned. You can retrieve output for one command, commands in one command class, or all commands.

Parameters

class (optional)

The command class whose attributes are to be retrieved.

Range:

ayyyyy

One alphabetic character followed by up to 5 additional alphanumeric characters.

cmd (optional)

The command whose attributes are to be retrieved.

Range:

zzzzzzzzzzzzzzzzzzzz

One alphabetic character followed by up to 19 additional alphanumeric characters, enclosed in double quotes.

Example

```
rtrv-cmd:cmd=”ent-rte”
rtrv-cmd:class=dab
rtrv-cmd
```

Dependencies

The Command Class Management feature must be enabled before a configurable command class name can be specified in the class parameter.

The value of the cmd parameter must be a valid system command.

The value of the class parameter must be a valid configurable or non-configurable command class name.

The Command Class Management feature must be enabled before CHG-CMD or CHG-CMDCLASS command can be entered.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

This example shows the command classes to which the `rept-stat-slk` command is assigned (non-configurable class *sys* and user-configured classes *u01, u02, krb,* and *u11*):

`rtrv-cmd:cmd="rept-stat-slk"`

```
    eagle10404 04-01-22 16:30:56 EST  EAGLE 31.3.0
    cmd                 CLASS
    rept-stat-slk       sys, u01, u02, krb, u11
;
```

This example shows the commands assigned to user-configured command class *krb*:

`rtrv-cmd:class=krb`

```
    eagle10404 04-01-22 16:30:56 EST  EAGLE 31.3.0
    CMD                 CLASS
    rept-stat-slk       sys, u01, u02, krb, u11
    act-slk             link, u09, krb
    ent-user            sa, krb, abc, u23
    alw-card            sys, u09 dab, krb
;
```

`rtrv-cmd:class=link`

```
    eagle10404 10-03-06 16:30:56 EST  EAGLE 42.0.0
    CMD                 CLASS
    alw-slk             link, u11
    unhb-slk            link
    inh-slk             link, abc
    rtrv-meas-sched     link, abc, def
    act-lbp             link
    act-dlk             link
    act-slk             link
    act-lpo             link
    blk-slk             link, abc, u23, u31
    dact-lbp            link
    canc-dlk            link
    canc-lpo            link, u01, u02, u03, u04, u05, u06, u07, u08, u09, u10,

                        u11, u12, u13
    canc-slk            link
    ublk-slk            link, u01, u02, u03, u04, u05, u06, u07, u08, u09, u10,

                        u11, u12, u13, u14, u15, u16, u17, u18, u19, u20, u21,
                        u22, u23, u24, u25, u26, u27, u28, u29, u30, u31, u32
```

```
    rept-meas           link
    chg-meas            link
    tst-dlk             link, krb
    tst-slk             link
;
```

rtrv-cmd

```
    eagle10404 10-03-06 16:30:56 EST  EAGLE 42.0.0
    CMD                 CLASS
    alw-slk             link, u11
    ent-user            sa
    unhb-slk            link
    rtrv-attr-seculog   sa, u31
    inh-slk             link, abc
    rtrv-meas-sched     link, abc, def
    act-lbp             link
    act-dlk             link
    act-slk             link
    rtrv-seculog        sa, abc, def, ghi
    act-lpo             link
    blk-slk             link, abc, u23, u31
    dact-lbp            link
    canc-dlk            link
    inh-card            sys
    canc-lpo            link, u01, u02, u03, u04, u05, u06, u07, u08, u09, u10,

                        u11, u12, u13
    canc-slk            link
    ublk-slk            link, u01, u02, u03, u04, u05, u06, u07, u08, u09, u10,

                        u11, u12, u13, u14, u15, u16, u17, u18, u19, u20, u21,
                        u22, u23, u24, u25, u26, u27, u28, u29, u30, u31, u32
    inh-trm             sys, krb
    rept-meas           link
.
.
.
    chg-meas            link
    tst-dlk             link, krb
    tst-slk             link
;
```

Related Commands

chg-cmd

rtrv-cmdclass

Retrieve Command Class

Use this command to retrieve the name and description of one command class or all command classes.

Parameters

class (optional)

The command class whose name and description are to be retrieved.

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters

Example

```
rtrv-cmdclass:class=krb
```

```
rtrv-cmdclass
```

Dependencies

The Command Class Management feature must be enabled and turned on before a configurable command class name can be specified in the class parameter.

The value of the class parameter must be a valid configurable or non-configurable command class name.

Notes

The Command Class Management feature must be enabled and turned on before configurable command classes will appear in the command output.

Output

In the following examples, classes *u01, u03, u05*, and *u32* are default configurable command class names. Classes *krb* and *dab* are user-assigned configurable command class names. Default command class name *u02* was changed to *krb* and command class name *u04* was changed to *dab*. Descriptions of classes *krb* and *dab* were entered with the descr parameter when the class names were changed with the `chg-cmdclass` command.

```
rtrv-cmdclass:class=krb
```

```
    eagle10404 04-01-22 16:30:56 EST  EAGLE 31.3.0
    class               descr
    krb                 my command class description
;
```

```
rtrv-cmdclass
```

```
    eagle10404 04-01-22 16:30:56 EST  EAGLE 31.3.0
    class               descr
    link                link maintenance commands
    sa                  security administration commands
    sys                 system maintenance commands
    .
    .
    .
    u01                 configurable command class 1
```

```
    krb                 my command class description
    u03                 configurable command class 3
    dab                 your command class description
    u05                 configurable command class 5
    .
    .
    .
    u32                 configurable command class 32
;
```

Related Commands

chg-cmdclass

rtrv-csl

Retrieve Common Screening List

Use this command to retrieve all Common Screening List (CSL) entries for a specified feature, a list of screening entries for the specified feature and screening list name, or a specific DS or PC value for a particular feature and screening list name. The Common Screening List commands are used to tailor certain types of general screening information to specific features.

Parameters

ds (optional)

Digit string. A unique string of digits that is used by the specified screening feature.

Note: The ds or pc parameter must be specified. Both parameters cannot be specified in the same command.

Range:

1 - 15 hexadecimal digits. Valid digits are *0-9, a-f, A-F*.

- 1-6 digits—Prepaid IDP Query Relay *ccnc* list
- 1-15 digits—Prepaid IDP Query Relay *gt* list
- 1-10 digits—Prepaid IDP Query Relay *skbcsm* list
- 4 digits—IDP Screening for Prepaid *skts* list
- 1-15 digits—IDP Screening for Prepaid *insl* list
- 1-15 digits—VFLEX *vmpfx* list
- 1-6 digits—Info Analyzed Relay Base *ccnc* list
- 1-15 digits—Info Analyzed Relay Base *gt* list
- 2 digits—Info Analyzed Relay Base *trig* list
- 1-15 digits — EIR *imsipfx* list

Table 27: TRIGTYPE Hexadecimal Codes lists valid hexadecimal values for the IAR Base *trig* list *ds* entries.

feature (optional)

Feature name. The name of the screening feature for which the command is entered.

Note: The pn or feature parameter must be specified to identify the feature.

Range:

azzzzzzzzzzzzzzzzzzzzzzzz

1 alphabetic character followed by up to 24 optional alphanumeric characters, including spaces and special characters, enclosed in double quotation marks (" ").

- EIR
- IDP Screening for Prepaid
- IDP Service Key Routing
- Info Analyzed Relay Base
- Prepaid IDP Query Relay
- VFLEX

list (optional)

The name of the Common Screening List that is associated with the feature.

Note: This parameter must be specified when the feature uses more than one type of Common Screening List.

Range:

ccnc

CC+NC List

delpfx

The *delpfx* list is not supported at this time. This list should only be used by Oracle personnel.

gt

Global Title List

imsipfx

IMSI Prefix List

insl

In Network Subscriber List

npbypass

SIP NPBYPASS List

skbcsm

SK+BCSM List

skts

SK+TS List

trig

Trigger List

vmpfx

Voice Mail Prefix List

The following screening lists are valid for the indicated features:

ccnc, gt

Prepaid IDP Query Relay and Info Analyzed Relay Base

imsipfx

EIR

npbypass

SIP Number Portability

insl , skts

IDP Screening for Prepaid

skbcsm

Prepaid IDP Query Relay and IDP Service Key Routing

trig

Info Analyzed Relay Base

vmpfx

VFLEX

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24 (optional)

Point code. The ds or a point code parameter must be specified.

pci (optional)

ITU international point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pn (optional)

Part Number. The 9-digit "893xxxxxx" part number of the feature for which the command is entered. The `rtrv-ctrl-feat` command description shows the part number in the command output example.

Note: The pn or feature parameter must be specified to identify the feature.

Range:

893000000 - 893999999

The first 3 digits are *893*. Do not separate the digits with dashes or spaces. The following part numbers are valid for this command:

893012301
EIR

893015501
IDP Screening for Prepaid

893034201
Info Analyzed Relay Base

893016001
Prepaid IDP Query Relay

893016701
VFLEX

scpgta (optional)
Signaling Control Point (SCP) Global Title Address (GTA).

Note: The scpgta parameter is used only by the Prepaid IDP Query Relay feature.

Range:
1 - 21 digits, *none*

1 - 21 hexadecimal digits. Valid digits are *0-9, a-f, A-F*

Example

```
rtrv-csl
rtrv-csl:feature=”Prepaid IDP Query Relay”:list=ccnc:ds=456789
rtrv-csl:feature=”Prepaid IDP Query Relay”:list=ccnc
rtrv-csl:feature="IDP Screening for Prepaid":list=insl:ds=123456789abcdEF
rtrv-csl:scpgta=12345
rtrv-csl:feature="EIR":list=imsipfx:ds=401923423
```

Dependencies

The value specified for the feature parameter must be a valid feature name for a feature that uses a Common Screening List. The feature must be specified as it appears in the `rtrv-ctrl-feat` command output. Enough of the name must be specified to make the name unique when two features begin with the same word or acronym. The specified feature name must be valid for a feature that uses a Common Screening List.

The following parameters are allowed with the indicated common screening list type:

- list=ccnc—ds parameter
- list=gt—ds parameter

- list=imsipfx---ds parameter
- list=insl—ds parameter
- list=skbcsm—ds or scpgta parameter
- list=skts—ds parameter
- list=trig—ds parameter
- list=vmpfx—ds parameter

Only one of the ds, pc, and scpgta parameters can be specified in the command.

The pn or feature parameter must be specified before the list parameter can be specified.

Notes

None

Output

This example retrieves the specified screening entry for the specified feature and screening list:

```
rtrv-csl:feature=”Prepaid IDP Query Relay”:list=ccnc:ds=456789
```

```
    tekelecstp 05-07-12 08:45:21 EST  EAGLE 34.1.0
    Prepaid IDP Query Relay
    CC+NC List
    DS
    ---------------
    456789

    CC+NC List table is (1 of 20) 5% full
;
```

This example retrieves all screening entries for the specified feature and screening list:

```
rtrv-csl:feature=”Prepaid IDP Query Relay”:list=ccnc
```

```
    tekelecstp 05-07-12 08:44:50 EST  EAGLE 35.0.0
    Prepaid IDP Query Relay
    CC+NC List
    DS
    ---------------
    123
    456789
    754532

    CC+NC List table is (3 of 20) 15% full
;
```

```
rtrv-csl:pn=893016701:list=vmpfx
```

```
    tekelecstp 07-08-23 17:30:17 EST  EAGLE 37.6.0
    VFLEX
    VM Prefix List
    DS
    ---------------
```

```
    12
    123
    12345
    123456789abcdef

    VM Prefix List table is (4 of 100) 4% full
;
```

rtrv-csl:feature=”Prepaid IDP Query Relay”

```
    tekelecstp 10-10-29 12:49:31 EST  EAGLE 43.0.0
    Prepaid IDP Query Relay
    CC+NC List
    DS
    ---------------
    000015
    000025
    CC+NC List (   2 of 20) 10%
    Prepaid IDP Query Relay
    GT List
    DS                CDPN BCD

    ---------------   ----------
    1234567815        0

    GT List (   1 of 500) 1%

    Prepaid IDP Query Relay
    SK+BCSM List
    DS                PT         IDPRCDPN   SCPGTA

    ---------------   ---------- ---------- ---------------------
    0000000123        prepaidno  idprcdpn   0000000014
    0000000143        prepaidno  idprcdpn   0000000014
    1234567815        prepaidno  idprcdpn3  1234
    123456782e        prepaidno  idprcdpn   NONE
    1234567890        prepaidno  idprcdpn   NONE

    SK+BCSM List (   5 of 150) 3%
;
```

rtrv-csl

```
    tekelecstp 10-10-29 12:55:34 EST  EAGLE 43.0.0
    Prepaid IDP Query Relay
    CC+NC List
    DS

    ---------------
    000015
    000025

    CC+NC List (   2 of 20) 10%
    Prepaid IDP Query Relay
    GT List
    DS                CDPN BCD

    ---------------   ----------
    1234567815        0
```

```
    GT List (   1 of 500) 1%

    Prepaid IDP Query Relay
    SK+BCSM List
    DS                PT         IDPRCDPN   SCPGTA

    ---------------   ---------- ---------- ---------------------
    0000000123        prepaidno  idprcdpn   0000000014
    0000000143        prepaidno  idprcdpn   0000000014
    1234567815        prepaidno  idprcdpn3  1234
    123456782e        prepaidno  idprcdpn   NONE
    1234567890        prepaidno  idprcdpn   NONE

    SK+BCSM List (   5 of 150) 3%

    IDP Screening for Prepaid
    SK+TS List
    DS

    ---------------
    0025
    0569
    1529

    SK+TS List (   3 of 25) 12%

    IDP Screening for Prepaid
    INSL List
    DS

    ---------------
    0029
    0048
    0148
```

```
    INSL List (3 of 50) 6%
    SIP Number Portability
    PFX List
    DS                  PFXSTRIP
    --------            ----------------
    2                   NO
    3                   NO
    02                  NO
    35                  NO
    002                 NO
    356                 NO
    0002                NO
    3412                NO
    00002               NO
    11110               NO
    12000012            NO
    0000000012          NO
```

```
rtrv-csl:scpgta=0000000014
```

```
    tekelecstp 10-10-29 12:57:35 EST  EAGLE 43.0.0
    Prepaid IDP Query Relay
    SK+BCSM List
    DS                PT         IDPRCDPN   SCPGTA
    ---------------   ---------- ---------- ---------------------
    0000000123        prepaidno  idprcdpn   0000000014
```

```
    0000000143        prepaidno  idprcdpn   0000000014
    SK+BCSM List (   2 of 150) 1%
;
```

```
rtrv-csl:feature="eir":ds=12313342
```

```
    tekelecstp 13-10-03 11:38:55 EST  46.0.0-65.2.0
    rtrv-csl:feature="eir":ds=12313342

    EIR
    PFX List
    DS                TBS        RSP_LIST

    ---------------   ---------- ----------
    12313342          both       whitelist

    PFX List (   4 of 1000) 1%

;
```

Related Commands

chg-csl, *dlt-csl*, *ent-csl*, *rtrv-ctrl-feat*

rtrv-cspc

Retrieve Concerned Signaling Point Code

Use this command to show one or more lists of concerned signaling point codes that are to be notified when subsystem-prohibited or subsystem-allowed messages are received for an associated mate application.

Parameters

grp (optional)

Group name

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters

Default:

Retrieve all.

Example

```
rtrv-cspc
```

```
rtrv-cspc:grp=grp01
```

Dependencies

If specified, the group name must exist in the database.

Notes

If no group parameter is specified, a summary list of group names is displayed with an indication of network type and a percent full indication for each group.

Output

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled:

```
rtrv-cspc
```

```
    rlghncxa03w 04-01-07 11:43:02 EST  EAGLE 31.3.0
    CSPC GRP   NETWORK              PERCENT FULL
    Grp01      ANSI                      2%
    Grp02      ANSI, ITU, ITU-N24        3%
    Grp03      ITU                       2%
;
```

This example shows output when the Spare Point Code Support feature is turned on, and the ANSI/ITU SCCP Conversion feature is enabled:

```
rtrv-cspc:grp=grp02
```

```
    rlghncxa03w 05-01-07 11:43:02 EST  EAGLE 31.12.0
    CSPC GRP      PC             Type
    GRP02           001-012-123     A
                    001-012-124     A
                    7-089-0         I
                  s-2-021-4         I
                  s-00789           N
;
```

This example shows output when the Spare Point Code Support feature is turned on, and the ANSI/ITU SCCP Conversion feature is not enabled:

```
rtrv-cspc:grp=groupi
```

```
    rlghncxa03w 05-01-07 11:43:02 EST  EAGLE 31.12.0
    CSPC GRP      PCI
    groupi          7-089-0
                  s-2-021-4
;
```

This example shows output when the Spare Point Code Support feature is turned on, and the ANSI/ITU SCCP Conversion feature is not enabled:

```
rtrv-cspc:grp=grn16
```

```
    tekelecstp 13-10-18 12:27:33 EST  45.1.0-64.77.0
    CSPC GRP      PCN16
    Grn16         001-02-03
```

```
;
```

Legend

- **CSPC PC TABLE IS 15% FULL**—Relative size of the CSPC point code tables
- **CSPC GRP**—Name of the CSPC broadcast group
- **NETWORK**—Network type or types associated with the point code or codes in the group. (When no parameters are specified in the command, only the groups are listed. The grp parameter must be specified to list the point codes in the specified group.)
- **PERCENT FULL**—Relative size of the CSPC broadcast group
- **PC**—Point codes that make up the CSPC broadcast group
- **Type**—Network type of the point code in the group. (The grp parameter is specified in the command to list the point codes in the specified group.)

Related Commands

dlt-cspc, *ent-cspc*

rtrv-ctrl-feat

Retrieve Controlled Feature

Use this command to retrieve the status of feature access key controlled features that are enabled in the system.

Parameters

enable (optional)

Retrieve controlled features that are enabled with either temporary feature access keys or permanent feature access keys.

Range:

temp

perm

Default:

Retrieve controlled features for both temporary and permanent feature access keys.

expired (optional)

Retrieve controlled features with expired temporary feature access keys.

Range:

yes

no

Default:

no

partnum (optional)

The Part Number to retrieve.

Range:

893000000 - 893999999

Do not include dashes in the 9-digit number.

Default:

Retrieve all controlled features

status (optional)

Retrieve features with the specified status (On or Off).

Range:

on

off

Default:

Retrieve features with On and Off status

Example

```
rtrv-ctrl-feat
rtrv-ctrl-feat:enable=perm
rtrv-ctrl-feat:partnum=893005911
```

Dependencies

None

Notes

When the enable=perm parameter is specified, the expired parameter value is understood to be *no*.

The product right-to-use features (EAGLE5, EAGLE, and IP7) are not mutually exclusive. The hierarchy for product right-to-use features is EAGLE5, then EAGLE, then IP7. This means that if the EAGLE5 feature is on, the product is EAGLE5 regardless of the setting of the other product right-to-use features. Some EAGLE features require that a specific product right-to-use feature is enabled and turned on.

For systems being upgraded, the product right-to-use feature for the specific product is turned on. For example, upgrading from an EAGLE release in a system that uses no EAGLE features to a release that uses at least one EAGLE feature causes the EAGLE product right-to-use feature to be enabled and turned on during the conversion.

For new installation, no product right-to-use features are on. The appropriate product right-to-use feature for the highest required product in the hierarchy must be enabled and turned on.

Output

The following output examples will differ from the output shown at your terminal and might include features that are not supported in your system. You must be entitled to use a feature before you can enable the feature and turn the feature on. If you are not sure whether you are entitled to use a feature, contact your Oracle Sales Representative or Account Representative.

If a Part Number (partnum parameter) is entered that belongs to a feature associated with quantity, the output will show which quantity is currently enabled on the system, even if the specified Part Number is for a different quantity. The output will also include the temporary enabled information, if applicable.

`rtrv-ctrl-feat`

```
rlghncxa03w 12-03-13 16:40:40 EST EAGLE 45.0.0
The following features have been permanently enabled:

Feature Name               Partnum    Status  Quantity
HC-MIM SLK Capacity        893012707   on     64
Command Class Management   893005801   on     ----
LNP Short Message Service  893006601   on     ----
Prepaid SMS Intercept Ph1  893006701   on     ----
Intermed GTT Load Sharing  893006901   on     ----
MNP Circ Route Prevent     893007001   on     ----
XGTT Table Expansion       893006101   on     400000
XMAP Table Expansion       893007710   on     3000
Large System # Links       893005911   on     2800
Routesets                  893006403   on     8000
EAGLE5 Product             893007101   on     ----
EAGLE Product              893007201   off    ----
IP7 Product                893007301   off    ----
Network Security Enhance   893009101   off    ----
Telnet                     893005701   on     ----
Port Chk for MO SMS        893009301   on     ----
SCCP Loop Detection        893016501   off    ----
LNP ELAP Configuration     893010901   on     ----
LNP ported TNs             893011036   on     384000000
LNP ported LRNs            893010501   on     200000
LNP ported NPANXXs         893009402   on     350000
15 Minute Measurements     893012101   off    ----
EIR                        893012301   on     ----
EAGLE OA&M IP Security     893400001   off    ----
SCCP Conversion            893012001   on     ----
SE-HSL SLK Capacity        893013005   on     32
GSM Map Screening (GMS)    893013201   on     ----
Enhanced GMS (EGMS)        893012401   on     ----
MTP MAP Screening          893013501   on     ----
Spare Point Code Support   893013601   on     ----
GSM MAP SRI Redirect       893014001   on     ----
ISUP NP with EPAP          893013801   on     ----
Origin-Based MTP Routing   893014201   on     ----
ITUN-ANSI SMS Conversion   893015301   on     ----
Flexible GTT Load-Sharing  893015401   on     ----
1100 TPS/DSM for ITU NP    893018001   off    ----
IDP Screening for Prepaid  893015501   on     ----
Prepaid IDP Query Relay    893016001   on     ----
Origin Based SCCP Routing  893014301   on     ----
GPort SRI Query for PP     893017701   off    ----
Large MSU for IP Sig       893018401   off    ----
Transaction Based GTT LS   893017101   on     ----
Weighted GTT Loadsharing   893017001   off    ----
Hex Digit Support for GTT  893018501   on     ----
SEAS over IP               893018801   on     ----
E5-SM4G Throughput Cap     893019102   on     6800
```

```
HIPR2 High Rate Mode        893020101   on     ----
Circ Route Auto-Recovery    893017601   on     ----
Enhanced Far-End Loopback   893018101   on     ----
Multiple Linkset to APC     893019701   on     ----
Proxy Point Code            893018710   on     100
GPORT                       893017201   on     ----
APORT                       893016601   on     ----
IS41 GSM Migration          893017301   off    ----
MTP Msgs for SCC Apps       893017401   off    ----
INP                         893017901   on     ----
ANSI-41 INP Query           893017801   on     ----
MO-based GSM SMS NP         893019401   on     ----
MO-based IS41 SMS NP        893019501   on     ----
MO SMS B-Party Routing      893024601   on     ----
AMGTT                       893021801   on     ----
MT-Based GSM SMS NP         893020001   on     ----
MT-Based GSM MMS NP         893024101   on     ----
MT-Based IS41 SMS NP        893019901   on     ----
G-Flex MAP Layer Routing    893021701   on     ----
G-Flex                      893021901   on     ----
VFLEX                       893016701   on     ----
ST-HSL-A SLK Capacity       893027304   on     24
IDPR ASD                    893025701   on     ----
IDPR GRN                    893025601   on     ----
TIF ASD                     893024501   on     ----
TIF GRN                     893025501   on     ----
TIF Number Portability      893018901   on     ----
TIF SCS Forwarding          893022201   on     ----
TIF Simple Number Subst.    893024001   on     ----
TCAP Opcode Based Routing   893027801   on     ----
Flex Lset Optnl Based Rtg   893027701   on     ----
MO SMS IS41-to-GSM Migr     893026201   on     ----
ISLSBR                      893026501   on     ----
ITU TCAP LRN QUERY(LRNQT)   893026301   on     ----
ATINP                       893022101   off    ----
IDP A-Party Blacklist       893033201   on     ----
IDP A-Party Routing         893033301   on     ----
IDP Service Key Routing     893033601   on     ----
TIF Number Substitution     893022501   on     ----
MO SMS ASD                  893026701   on     ----
MO SMS GRN                  893026601   on     ----
GTT LS ARI                  893027401   off    ----
GTT Action - DISCARD        893027501   on     ----
GTT Action – DUPLICATE      893027601   on     ----
GTT Action - FORWARD        893037501   on     ----
INP Circ Route Prevention   893028501   off    ----
TOBR Opcode Quantity        893027901   on     3
VGTT with 16 GTT lengths    893024801   on     ----
6-Way LS on Routesets       893019801   on     ----
ANSI41 AIQ                  893034901   on     ----
Info Analyzed Relay Base    893034201   off    ----
Info Analyzed Relay NP      893026101   off    ----
Info Analyzed Relay ASD     893035001   off    ----
Info Analyzed Relay GRN     893035101   off    ----
MTPRTD GWS Stop Action      893035601   on     ----
TIF Subscr CgPN Blacklist   893037601   on     ----
TIF Range CgPN Blacklist    893037701   on     ----
Service Portability         893034301   on     ----
S-Port Sub Dfrntiation      893037901   off    ----
LOCREQ Query Response       893038501   off    ----
Integrated Measurements     893037301   off    ----
PC & CIC Translation        893037201   on     1000
XUDT UDT Conversion         893035301   on     ----
3 Links per E5-ATM Card     893039101   on     5
```

```
Integrated GLS              893038901   on     ----
NPP Unlimited SDWC Chars    893039301   off    ----
EPAP Data Split             893039801   on     ----
E5-ENET-B IPSG High TPS     893039501   on     ----
S13/S13' Int for EIR        893042401   on     ----
Dual ExAP Config            893040501   on     ----
SIPNP                       893040601   on     ----
;
```

```


The following features have been temporarily enabled:
 Feature Name               Partnum       Status Quantity   Trial Period Left
 MNP Circ Route Prevent     893007001     On     ----       20 days 8 hrs 57
mins

 The following features have expired temporary keys:
 Feature Name               Part Num
 OnOffFeatV
;
```

`rtrv-ctrl-feat:enable=perm`

```
  rlghncxa03w 12-03-13 16:40:40 EST EAGLE 45.0.0
  The following features have been permanently enabled:
  Feature Name               Partnum      Status  Quantity
  15 Minute Measurements     893012101    off     ----
  Command Class Management   893005801    on      ----
  EAGLE OA&M IP Security     893400001    off     ----
  EAGLE Product              893007201    on      ----
  EAGLE5 Product             893007101    off     ----
  Enhanced GMS (EGMS)        893012401    on      ----
  MNP Circ Route Prevent     893007001    on      ----
  GSM Map Screening (GMS)    893013201    on      ----
  Intermed GTT Load Sharing  893006901    on      ----
  IP7 Product                893007301    on      ----
  Large System # Links       893005911    on      2800
  LNP ELAP Configuration     893010901    on      ----
  MTP MAP Screening          893013501    on      ----
  Network Security Enhance   893009101    on      ----
  Port Chk for MO SMS        893009301    on      ----
  Prepaid SMS Intercept Ph1  893006701    on      ----
  Routesets                  893006401    on      6000
  SCCP Conversion            893012001    on      ----
  SE-HSL SLK Capacity        893013005    on      32
  Spare Point Code Support   893013601    on      ----
  ITUN-ANSI SMS Conversion   893015301    on      ----
  Flexible GTT Load-Sharing  893015401    on      ----
  Telnet                     893005701    on      ----
  XGTT Table Expansion       893006101    on      400000
  XMAP Table Expansion       893007710    on      3000
  Origin-Based MTP Routing   893014201    on      ----
  IDP Screening for Prepaid  893015501    on      ----
  Origin Based SCCP Routing  893014301    on      ----
  Transaction Based GTT LS   893017101    on      ----
  GPort SRI Query for PP     893017701    off     ----
  Large MSU for IP Sig       893018401    off     ----
  Hex Digit Support for GTT  893018501    on      ----
  E5-SM4G Throughput Cap     893019101    on      5000
  HIPR2 High Rate Mode       893020101    on      ----
  AMGTT CgPA Upgrade         893021803    on      ----
```

```
  MT-Based GSM SMS NP        893020001    on      ----
  MT-Based GSM MMS NP        893024101    on      ----
  MT-Based IS41 SMS NP       893019901    on      ----
  G-Flex MAP Layer Routing   893021701    on      ----
  G-Flex                     893021901    on      ----
  VFLEX                      893016701    on      ----
  ST-HSL-A SLK Capacity      893027304    on      24
  VFLEX                      893016701    on      ----
  IDPR ASD                   893025701    on      ----
  IDPR GRN                   893025601    on      ----
  TIF ASD                    893024501    on      ----
  TIF GRN                    893025501    on      ----
  MO SMS B-Party Routing     893024601    on      ----
  MO SMS IS41-to-GSM Migr    893026201    on      ----
  ISLSBR                     893026501    on      ----
  TCAP Opcode Based Routing  893027801    on      ----
  Flex Lset Optnl Based Rtg  893027701    on      ----
  ITU TCAP LRN QUERY(LRNQT)  893026301    on      ----
  TIF Number Portability     893018901    on      ----
  TIF SCS Forwarding         893022201    on      ----
  TIF Simple Number Subst.   893024001    on      ----
  IDP A-Party Blacklist      893033201    on      ----
  IDP A-Party Routing        893033301    on      ----
  IDP Service Key Routing    893033601    on      ----
  TIF Number Substitution    893022501    off     ----
  MO SMS ASD                 893026701    on      ----
  MO SMS GRN                 893026601    on      ----
  GTT LS ARI                 893027401    off     ----
  GTT Action - DISCARD       893027501    on      ----
  GTT Action - DUPLICATE     893027601    on      ----
  GTT Action - FORWARD       893027501    on      ----
  INP Circ Route Prevention  893028501    on      ----
  TOBR Opcode Quantity       893027901    on      3
  VGTT with 16 GTT lengths   893024801    on      ----
  6-Way LS on Routesets      893019801    on      ----
  ANSI41 AIQ                 893034901    off     ----
  Info Analyzed Relay Base   893034201    off     ----
  Info Analyzed Relay NP     893026101    off     ----
  Info Analyzed Relay ASD    893035001    off     ----
  Info Analyzed Relay GRN    893035101    off     ----
  MTPRTD GWS Stop Action     893035601    on      ----
  TIF Subscr CgPN Blacklist  893037601    on      ----
  TIF Range CgPN Blacklist   893037701    on      ----
  Service Portability        893034301    on      ----
  S-Port Sub Dfrntiation     893037901    off     ----
  LOCREQ Query Response      893038501    on      ----
  Integrated Measurements    893037301    off     ----
  PC & CIC Translation       893037201    on      1000
  XUDT UDT Conversion        893035301    on      ----
  3 Links per E5-ATM Card    893039101    on      5
  Integrated GLS             893038901    off     ----
  NPP Unlimited SDWC Chars   893039301    off     ----
  EPAP Data Split            893039801    on      ----
  E5-ENET-B IPSG High TPS    893039501    on      ----
  S13/S13' Int for EIR       893042401    on      ----
  Dual ExAP Config           893040501    on      ----
  SIPNP                      893040601    on      ----
```

`rtrv-ctrl-feat:enable=temp`

```
  rlghncxa03w 04-07-29 16:40:40 EST EAGLE 31.6.0
  The following features have been temporarily enabled:
```

```
  Feature Name               Partnum      Status  Quantity   Trial Period Left
  MNP Circ Route Prevent     893007001    On      ----       20 days 8 hrs 57
mins

  The following features have expired temporary keys:
  Feature Name               Part Num
  OnOffFeatV                 893492401
;
```

rtrv=ctrl-feat:expired=yes

```
  rlghncxa03w 04-02-29 16:40:40 EST EAGLE 31.3.0
  The following features have expired temporary keys:
  Feature Name                Part Num
  OnOffFeatV                  893492401
;
```

rtrv-ctrl-feat:partnum=893013201

```
  rlghncxa03w 04-07-29 16:40:40 EST EAGLE 31.6.0
  The following features have been permanently enabled:
  Feature Name                Partnum      Status  Quantity
  GSM Map Screening (GSM)     893013201    on      ----

  The following features have been temporarily enabled:
  Feature Name                Partnum      Status  Quantity   Trial Period Left

  Zero entries found.

  The following features have expired temporary keys:
  Feature Name                Part Num
  Zero entries found.
;
```

rtrv-ctrl-feat:partnum=893040601

```
tekelecstp 12-07-25 17:20:24 EST EAGLE 45.0.0
rtrv-ctrl-feat:partnum=893040601
Command entered at terminal #4.
The following features have been permanently enabled:
  Feature Name                Partnum       Status  Quantity
  SIPNP                       893040601     on      ----

  The following features have been temporarily enabled:
  Feature Name               Partnum       Status  Quantity   Trial Period Left

  Zero entries found.

  The following features have expired temporary keys:
  Feature Name                PartNum
  Zero entries found.
;
```

rtrv-ctrl-feat:partnum= 893042401

```
    tekelecstp 13-03-20 17:20:24 EST  EAGLE 45.1.0
    rtrv-ctrl-feat:partnum=893042401
```

```
Command entered at terminal #4.
The following features have been permanently enabled:
Feature Name              Partnum   Status Quantity
S13/S13' Int for EIR      893042401 on     ----

The following features have been temporarily enabled:
Feature Name              Partnum   Status Quantity   Trial Period Left
Zero entries found.

The following features have expired temporary keys:
Feature Name              Partnum
Zero entries found.
```

Related Commands

chg-ctrl-feat, *enable-ctrl-feat*

rtrv-data-rtdb

Retrieve Data RTDB

This command retrieves data from the RTDB on an active Service Module card. If the loc parameter is specified and the target card is an active Service Module card, the RTDB data is retrieved from that card. If the loc parameter is not specified, the data is retrieved on the active Service Module card that has the lowest IMT address. The RTDB status on the active Service Module card can be coherent or incoherent.

For LNP database items (TN) all Service Module cards are queried for the existence of the specified item. Either the Service Module card specified by the **loc** parameter or the Service Module card with the lowest IMT address returns full item information. Any remaining Service Module cards return either COHERENT or INCOHERENT if the item is found in the RTDB on the card.

Parameters

dn (optional)

Dialed Number.

Range:

5 - 15 digits

entity (optional)

Network Entity.

Range:

1 - 15 digits

entitytype (optional)

Entity Type.

Range:

sp

Service Provider: Any 10-digit TN

rn

Routing Number: Any 10-digit TN

vmsid

Voice Mail Server ID: Any 1-15 digit hexadecimal number

grn

Generic Routing Number: Any 1-15 digit hexadecimal number

imei (optional)

International Mobile Equipment Identity.

Range:

14 digits

imsi (optional)

International Mobile Subscriber Identity.

Range:

5 - 15 digits

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1117, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

lrn (optional)

Location Routing Number.

Range:

10 digits

npanxx (optional)

Numbering Plan Area.

Range:

6 digits

tn (optional)

Telephone Number.

Range:

10 digits

Example

```
rtrv-data-rtdb:tn=9194663133
rtrv-data-rtdb:npanxx=919466
rtrv-data-lrn=9194460000
rtrv-data-rtdb:imsi=12345
rtrv-data-rtdb:dn=12345
rtrv-data-rtdb:entity=abcdefabcdefabc
```

Retreive DN information from a specific Service Module card.

```
rtrv-data-rtdb:dn=19195554444:loc=1107
```

Retreive entity data from a specific Service Module card.

```
rtrv-data-rtdb:entity=12345:loc=1107
```

Dependencies

The specified card location must be equipped in the database.

At least one of the imsi, dn, entity, imei, entitytype, npanxx, lrn, or tn parameters must be specified.

Only one of the tn, lrn, or npanxx parameters can be specified in the command.

If the npanxx, lrn, or tn parameter is specified, the LNP ELAP Configuration feature must be on.

If the AINPQ, EIR, G-Flex, G-Port, INP, Prepaid IDP Relay Query, Prepaid SMS Intercept Ph1 (PPSMS), or V-Flex feature is turned on, or the ATINP feature is enabled, then the imsi, dn, entity, imei, or entitytype parameter must be specified.

If the imsi parameter is specified, then the G-Flex, EIR, or S13 feature must be turned on.

The G-Flex, G-Port, or V-Flex feature must be turned on, or the ATINP feature must be enabled before the entity parameter can be specified.

If the entitytype parameter is specified, the entity parameter must be specified.

If the imei parameter is specified, the EIR or S13 feature must be turned on.

The destination specified by the loc parameter must correspond to a Service Module card running the VSCCP application.

The destination specified by the loc parameter must correspond to a Service Module card that is IS-NR.

A primary Service Module card must be provisioned.

The card location slot must be between 1 - 16 and not 9 or 10.

The frame location must be 1xxx, 2xxx, 3xxx, 4xxx, 5xxx, 6xxx.

The shelf location must be 11xx, 12xx, 13xx, 21xx, 22xx, 23xx, 31xx, 32xx, 33xx, 41xx, 42xx, 43xx, 51xx, 52xx, 53xx, or 61xx.

An EPAP-related feature must be turned on before the entity, entitytype, or dn parameter can be specified.

The value specified by the loc parameter must indicate a DN or IMSI card before the dn or imsi parameter can be specified, respectively.

Notes

For DN and DN Block entries, whichever entity is provisioned in the order of SP/RN, VMSID, GRN, will become EntIdx1.

Output

Note: A value of "---" in the TT column indicates that the service does not have a translation type defined in the EAGLE and that call processing will ignore the override data displayed.

This example retrieves LRN Data:

```
rtrv-data-rtdb:lrn=1111111111
```

```
    tekelecstp 09-08-30 15:23:45 EST  EAGLE 41.1.0
    Card Loc     : 1103   Status:Coherent
    Card Loc: 1103
    LRN         SP
    1111111111  tklc

    SERV    TT   XLAT    RI   PCA             SSN  NGT  RGTA
    CLASS   10   DPCSSN  GT      002-002-002  2    ---  yes
    WSMSC   11   DPCSSN  SSN     010-010-010  10   ---  no

;
```

This example retrieves NPANXX Data:

```
rtrv-data-rtdb:npanxx=919225
```

```
    tekelecstp 09-08-30 15:37:36 EST  EAGLE 41.1.0

    Card Loc     : 1103   Status:Coherent
    Card Loc: 1103
        NPANXX  MR   LRN
        919225  yes  yes  LA   LI
    SERV    TT   XLAT    RI   PCA             SSN  NGT  RGTA
    AIN     ---  DPC     GT   --------------  ---  ---  no
    IN      ---  DPC     GT   --------------  ---  ---  no
    CLASS   10   DPCSSN  SSN     007-007-007  7    ---  no

;
```

This example retrieves TN Data:

```
rtrv-data-rtdb:tn=9192252645
```

```
    tekelecstp 09-08-30 15:38:56 EST  EAGLE 41.1.0

    Card Loc     : 1103   Status:Coherent
    Card Loc: 1103
    TN          SP    LRN         PTYPE
```

```
    9192252645  tklc  1111111111  none  LA LI

    SERV    TT   XLAT    RI   PCA             SSN  NGT  RGTA
    LIDB    ---  DPCSSN  SSN     003-003-003  3    ---  no
    ISVM    ---  DPCSSN  SSN     004-004-004  4    ---  no
;
```

This example retrieves IMSI Data:

`rtrv-data-rtdb:imsi=12345`

```
    tekelecstp 08-05-11 07:55:28 EST  EAGLE5 39.0.0
    Card Loc     : 1105   Status : Coherent
      IMSI                EntIdx         IMEI Index
      12345               H'00000002     H'00000006

      Entity Address  Type PC(NATL-gg) RI  SSN TT  NP NAI DA
      abcdef123456abc SP   02000       SSN 122 000 00 000 prefix

      SRFIMSI         NSSN  CCGT  NTT  NNP  NNAI
      1234567890abcde yes   no    no   no   no

      IMEI            VERSION  BLACK  GRAY  WHITE
      12345678901234      0    yes    yes   yes

;
```

This example retrieves Entity data:

`rtrv-data-rtdb:entity=abcdef123456abc`

```
    tekelecstp 09-08-30 07:53:00 EST  EAGLE5 41.1.0

    INFO: Default value of Entity Type is : SP
;
    tekelecstp 06-03-30 07:53:00 EST  EAGLE5 35.0.0

    Card Loc     : 1105   Status : Coherent

      Entity Address  Type PC(NATL-gg) RI  SSN TT  NP NAI DA     SRFIMSI
      abcdef123456abc SP   02000       SSN 122 000 00 000 prefix 1234567890abcde


      NSSN  CCGT  NTT  NNP  NNAI
      yes   no    no   no   no

;
```

This example retrieves IMEI data:

`rtrv-data-rtdb:imei=12345678abcdef`

```
    tekelecstp 06-03-30 07:54:55 EST  EAGLE5 35.0.0

    Card Loc     : 1105   Status : Coherent

      IMEI            VERSION  BLACK  GRAY  WHITE
      12345678abcdef      0    yes    no    yes
```

```
;
```

This example retrieves data for a DN associated with two NEs:

`rtrv-data-rtdb:dn=111111111111111`

```
    tekelecstp 08-08-11 07:56:48 EST  EAGLE5 39.1.0

    Card Loc     : 1103   Status:Coherent
      DN                   Portability Type (255)
      111111111111111      No portability type

      EntIdx1       EntIdx2
      H'00000007    H'00000005

      Entity Address  Type       PC(INTL   ) RI  SSN TT  NP NAI DA
      bcda4321        RN         5-005-5     GT  000 000 00 000 none

      SRFIMSI         NSSN  CCGT  NTT  NNP  NNAI
                      no    no    no   no   no

      Entity Address  Type       PC(ANSI   ) RI  SSN TT  NP NAI DA
      abcd1234        VMSID   -------------- GT  000 000 00 000 none

      SRFIMSI         NSSN  CCGT  NTT  NNP  NNAI
                      no    no    no   no   no

    ASD Address: 1234567890

;
```

This example retreives DN data from a specific Service Module card:

`rtrv-data-rtdb:dn=19195554444:loc=1107`

```
    tekelecstp 08-08-26 14:03:15 EST  EAGLE5 39.1.0

    Card Loc     : 1107   Status:Coherent
      DN                   Portability Type (  1)     Entity Index
      19195554444          Own Number ported out      H'0000513d

      Entity Address  Type    PC(ANSI   ) RI  SSN TT  NP NAI DA
      1234            RN   -------------- GT  000 000 00 000 none

      SRFIMSI         NSSN  CCGT  NTT  NNP  NNAI
                      no    no    no   no   no

    ASD Address: 1234567890

;
```

This example retrieves DN data associated with one NE:

`rtrv-data-rtdb:dn=12345`

```
    tekelecstp 08-08-18 07:56:48 EST  EAGLE5 39.1.0

    Card Loc     : 1101   Status:Coherent
```

```
      DN                  Portability Type (255)
      12345               No portability type

      EntIdx1       EntIdx2
      -------       -------

    ASD Address: 1234567890

;
```

This example retrieves DN data when the data is non-ported:

`rtrv-data-rtdb:dn=d1000`

```
    tklc1090203 08-10-20 10:57:33 EST  EAGLE 40.0.0

    Card Loc     : 1215   Status:Coherent
      DN                  Portability Type ( 36)
      d1000               Not Identified to be ported

      EntIdx1       EntIdx2
      -------       -------

    ASD Address: abcd0
;
```

This example retrieves data for a DN associated with one NE, one ASD and one NS:

`rtrv-data-rtdb:dn=2324567893`

```
    tekelecstp 09-04-11 07:56:48 EST  EAGLE5 41.0.0

    Card Loc     : 1103   Status:Coherent
      DN                  Portability Type (255)       Category
      2324567893          No portability type          Private

      EntIdx
      H'00000007

      Entity Address  Type       PC(INTL   ) RI  SSN TT  NP NAI DA
      bcda4321        RN         5-005-5     GT  000 000 00 000 none

      SRFIMSI         NSSN  CCGT  NTT  NNP  NNAI
                      no    no    no   no   no
    ASD Address: 1234567890

    NS Address        NS Category
    2312457895        Public

;
```

This example retrieves data for a non-ported DN associated with one ASD and one NS:

`rtrv-data-rtdb:dn=1347823456`

```
    tekelecstp 09-04-11 07:56:48 EST  EAGLE5 41.0.0

    Card Loc     : 1105   Status:Coherent
      DN                  Portability Type ( 36)       Category
```

```
      1347823456           Not Identified to be ported   Public

      EntIdx
      -------

    ASD Address: 1234545367

    NS Address        NS Category
    1345692324        Private

;
```

This example retrieves data for a DN located in a non-ranged entry and listed as an A-Party Blacklisted private number:

`rtrv-data-rtdb:dn=123456`

```
    tekelecstp 09-06-18 07:56:48 EST  EAGLE5 41.1.0

    Card Loc     : 1101   Status:Coherent
      DN                  Portability Type (255)        Category
      123456              No portability type           Private
                                                        A-Pty Blk
```

This example retrieves data for a DN located in a ranged entry and listed as an A-Party Blacklisted public number:

`rtrv-data-rtdb:dn=123456`

```
    tekelecstp 09-06-18 07:56:48 EST  EAGLE5 41.1.0

    Card Loc     : 1101   Status:Coherent
      BEG DNBLK       END DNBLK       Portability Type (255)      Category
      112233          4455667         No portability type         Public
                                                                  A-Pty Blk
```

This example retrieves NPANXX split data:

`rtrv-data-rtdb:npanxx=919111`

```
    tekelecstp 09-08-30 15:37:36 EST  EAGLE 41.1.0

    Card Loc     : 1103   Status:Coherent
    Card Loc: 1103
        NPANXX  MR   LRN
    OLD 919111  yes  no   LA   LI
    NEW 918111  yes  yes  LA   LI

    Default Data
    SERV    TT   XLAT    RI   PCA             SSN  NGT  RGTA
    LIDB    ---  DPC     GT      001-001-001  ---  ---  no

;
```

Legend

- **Card Loc**—Location of the card that contains the retrieved information
- **Status**—RTDB database status; Coherent or Incoherent
- **IMSI**—International Mobile Subscriber Identity
- **EntIdx, EntIdx1, EntIdx2**—Hexadecimal index where the Network Entity data is stored in the Entity Bucket on the Service Module card
- **IMEI Index**—Hexadecimal index at which the IMEI data is stored in the IMEI Bucket on the Service Module card or S13 card running DEIRHC GPL.
- **Entity Address**—Hexadecimal Network Entity address
- Type—Network Entity type; Service Provider (SP), Routing Number (RN), Voice Mail Server ID (VMSID) or Generic Routing Number (GRN)
- **PC** (*type of PC*)—Point code and type of point code (ANSI; NATL - ITU National with or without group code (-gg)
- **RI**—Routing Indicator
- **SSN**—Subsystem Number
- **TT**—Translation Type
- **NP**—Numbering Plan
- **DA**—Digits action (Prefix, Suffix, or none)
- **SRFIMSI**—Signaling Relay Function IMSI
- **IMSI**—International Mobile Subscriber Identity.
- **NSSN**—New Subsystem Number (yes or no)
- **CCGT**—Cancel GT (yes or no)
- **NTT**—New Translation Type
- **NNP**—New Numbering Plan
- **NNAI**—New Nature of Address Indicator.
- **IMEI**—International Mobile Equipment Identity
- **VERSION**—IMEI data version
- **BLACK, WHITE, GRAY**—Equipment Identity Register search lists
- **DN**—Dialed Number
- **ASD Address**—Additional Subscriber Data address
- **Portability Type** (*number*)—
  - 0—Not known to be ported
  - 1—Own number ported out
  - 2—Foreign number ported to Foreign network
  - 3—Prepaid Short Message Service (PPSMS) subscriber on server #1
  - 4—PPSMS subscriber on server #2
  - 5—IS41 to GSM migrated subscriber with only GSM handset active
  - 6—PPSMS subscriber on server #3
  - 7—PPSMS subscriber on server #4
  - 8—PPSMS subscriber on server #5
  - 9—PPSMS subscriber on server #6
  - 10—PPSMS subscriber on server #7
  - 11—PPSMS subscriber on server #8
  - 12—PPSMS subscriber on server #9
  - 13—PPSMS subscriber on server #10
  - 14—PPSMS subscriber on server #11
  - 15—PPSMS subscriber on server #12

- 16—PPSMS subscriber on server #13
- 17—PPSMS subscriber on server #14
- 18—PPSMSsubscriber on server #15
- 19—PPSMS subscriber on server #16
- 20—PPSMS subscriber on server #17
- 21—PPSMS subscriber on server #18
- 22—PPSMS subscriber on server #19
- 23—PPSMS subscriber on server #20
- 24—PPSMS subscriber on server #21
- 25—PPSMS subscriber on server #22
- 26—PPSMS subscriber on server #23
- 27—PPSMS subscriber on server #24
- 28—PPSMS subscriber on server #25
- 29—PPSMS subscriber on server #26
- 30—PPSMS subscriber on server #27
- 31—PPSMS subscriber on server #28
- 32—PPSMS subscriber on server #29
- 33—PPSMS subscriber on server #30
- 34—PPSMS subscriber on server #31
- 35—PPSMS subscriber on server #32
- 36—Not Identified to be ported
- 255—No portability type

- **NS Address**—Address of the associated DN, used for Number Substitution
- **NS Category**—Category of the associated DN, used for Number Substituion
- **NPA**—Number Planning Area (Area Code)
- **NXX**—Exchange Code

Related Commands

None.

rtrv-dconn

Retrieve Diameter Connection

Use this command to retrieve Diameter connection entries. The DCONN table supports the provisioning information related to the diameter connections.

Parameters

aname (optional)

Association name configured in the association table and linked with a diameter connection.

Range:

ayyyyyyyyyyyyyy

A string of alphanumeric characters, beginning with a letter and up to 15 characters in length. Valid values are a..z, A..Z, 0..9.

Default:

No change to the current value

System Default:

null

dcname (optional)

Diameter connection name. This parameter specifies the unique logical name assigned to each diameter connection.

Range:

ayyyyyyyyyyyyyy

A string of alphanumeric characters, beginning with a letter and up to 15 characters in length. Valid values are a..z, A..Z, 0..9.

Default:

No change to the current value

System Default:

null

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
rtrv-dconn
rtrv-dconn:dcname=connection1
rtrv-dconn:aname=assoc12d
rtrv-dconn:loc=1103
```

Dependencies

The S13/S13' EIR feature must be enabled before retrieving any diameter connection entry.

The DCONN table should be accessible.

The specified card location must be equipped.

A DEIR card must be present at the specified location.

DCNAME must be present in DCONN table.

The value specified for the ANAME parameter must be present in the IPAPSOCK table and referred by a diameter connection.

Multiple combinations of optional parameters are not allowed.

Notes

Multiple combinations of optional parameters are not allowed.

If optional parameters are specified, only the entries that match the entered parameters are displayed.

Output

This example displays output when no parameter is specified:

`rtrv-dconn`

```
    tekelecstp 14-03-21 02:59:22 EAGLE 46.0.0 65.11.0
    rtrv-dconn
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 02:59:22 MST  EAGLE 46.0.0 65.11.0

    DCNAME           ANAME            LOC   RSVDTPS  MAXTPS  Tw(s)  Td(s)
    ------------------------------------------------------------------------
    d1               a1               1101  250      8000    6      3
    d2               a2               1101  250      8000    6      3
    d31              a31              1101  250      8000    6      3
    d41              a41              1101  250      8000    6      3
    d3               a3               1101  250      8000    6      3
    d4               a4               1101  250      8000    6      3
    dd10             aa10             1101  250      8000    6      3
    b1               b1               1103  250      8000    6      3
    b2               b2               1103  250      8000    6      3
    b31              b31              1103  250      8000    6      3
    b41              b41              1103  250      8000    6      3
    b3               b3               1103  250      8000    6      3
    b4               b4               1103  1500     8000    7      5
    b10              b10              1103  250      8000    6      3
    aasw234edf56tgr  x1               1105  250      8000    6      3

    DCONN table is (15 of 512) 3% full.
;
```

This example displays output when the DCNAME parameter is specified:

`rtrv-dconn:dcname=d1`

```
    tekelecstp 14-03-21 03:01:22 MST  EAGLE 46.0.0 65.11.0
    rtrv-dconn:dcname=d1
```

```
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 03:01:22 MST  EAGLE 46.0.0 65.11.0

    DCNAME           ANAME            LOC   RSVDTPS  MAXTPS  Tw(s)  Td(s)
    ------------------------------------------------------------------------
    d1               a1               1101  250      8000    6      3
;
```

This example displays output when the ANAME parameter is specified:

`rtrv-dconn:aname=a1`

```
tekelecstp 14-03-21 03:03:24 MST  EAGLE 46.0.0 65.11.0
    rtrv-dconn:aname=a1
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 03:03:24 MST  EAGLE 46.0.0 65.11.0

    DCNAME           ANAME            LOC   RSVDTPS  MAXTPS  Tw(s)  Td(s)
    ------------------------------------------------------------------------
    d1               a1               1101  250      8000    6      3
```

This example displays output when the LOC parameter is specified:

`rtrv-dconn:loc=1101`

```
tekelecstp 14-03-21 03:06:01 MST  EAGLE 46.0.0-65.11.0
    rtrv-dconn:loc=1101
    Command entered at terminal #19.
;
```

```
Command Accepted - Processing
    tekelecstp 14-03-21 03:06:01 MST  EAGLE 46.0.0-65.11.0

    DCNAME           ANAME            LOC   RSVDTPS  MAXTPS  Tw(s)  Td(s)
    ------------------------------------------------------------------------
    d1               a1               1101  250      8000    6      3
    d2               a2               1101  250      8000    6      3
    d31              a31              1101  250      8000    6      3
    d41              a41              1101  250      8000    6      3
    d3               a3               1101  250      8000    6      3
    d4               a4               1101  250      8000    6      3
    dd10             aa10             1101  250      8000    6      3

    DCONN table is (15 of 512) 3% full.

;
```

Legend

This section defines the fields used in the `rtrv-dconn` command output:

- **DCNAME** --- Diameter connection name.
- **ANAME** --- Association name configured in IPAPSOCK table which is associated with the diameter connection.
- **LOC** --- Specifies the DEIR card location on which the particular diameter connection is configured.
- **RSVDTPS** --- This (Reserved TPS) is the guaranteed TPS for a diameter connection.
- **MAXTPS** --- This is the maximum TPS for a diameter connection.
- **Tw** --- This (Diameter Watchdog Timer) timer is used to control how long the S13 process will wait for a DWA (Diameter Watchdog Answer) response before sending a DWR (Diameter Watchdog Request).
- **Td** --- This (Diameter Peer Disconnect Timer) is used to control how long the S13 process will wait for a DPA (Disconnect Peer Answer) response before sending a DPR (Disconnect Peer Request).

Related Commands

chg-dconn, *dlt-dconn*, *ent-dconn*

rtrv-deiropts

Retrieve Diameter EIR Options

Use this command to retrieve S13/S13' diameter EIR configuration options.

Parameters

This command has no input parameters.

Example

```
rtrv-deiropts
```

Dependencies

The S13/S13' EIR Feature must be enabled before retrieving Diameter EIR configuration options.

The DEIROPTS table should be accessible.

Output

This example shows output with default DEIR options.

```
rtrv-deiropts
```

```
tekelecstp 13-03-16 11:43:52 EST EAGLE 45.1
rtrv-deiropts
```

```
Command entered at terminal #4.
 DEIRGRSP         = off              DEIRRSPTYPE      = type1
 DEIRIMSICHK      = off              CONGERR          = 3004
 VENDID           = 0                APPLID           = 16777252
 PRODUCT          = none             DPR Cause        = Do not want to talk(2)
 DEIRIMSISCRN     = off              DEIRLOGWL        = off
 DEIRDFLTIMSISCRN = off              DEIRDFLTIMSILKUP = range
 DEIRDFLTIMSIRESP = whitelist
```

This example shows output with provisioned DEIR options.

`rtrv-deiropts`

```
tekelecstp 13-03-16 11:43:52 EST EAGLE 45.1
rtrv-deiropts
Command entered at terminal #4.
 DEIRGRSP         = off               DEIRRSPTYPE      = type1
 DEIRIMSICHK      = off               CONGERR          = 3004
 VENDID           = 4004              APPLID           = 16777252
 PRODUCT          = abc               DPR Cause        = Busy(1)
 DEIRIMSISCRN     = off               DEIRLOGWL        = off
 DEIRDFLTIMSISCRN = off               DEIRDFLTIMSILKUP = both
 DEIRDFLTIMSIRESP = blacklist
```

Legend

- **DEIRGRSP** -- S13/S13' EIR Global Response Type. The Global Response Type is used to override the response that is sent back to the MME.
- **DEIRRSPTYPE** -- S13/S13' EIR Response Type. The Response Type is used to determine how the lists are to be searched.
- **DEIRIMSICHK** -- Indicates whether IMSI will be used when determining if an IMEI is to be "black" listed or not.
- **CONGERR** -- It displays the diameter response to be sent by DEIRHC card at the time of card congestion.
- **VENDID** -- S13 local Vendor ID. All the outgoing messages that require Vendor ID in Vendor-Specific-Application-ID AVP will use this configured value.
- **APPLID** -- Authentication Application ID. The application ID configured should match with the Auth-Application-Id (AVP Code 258) value in Vendor-Specific-Application-ID AVP. This application ID is fixed and cannot be changed.
- **PRODUCT** -- It contains the vendor-assigned name for the product. All the outgoing messages that require Product name AVP will use this configured value.
- **DPR Cause** -- It is a Disconnect Cause in DPR (Disconnect Peer Request) message sent by the DEIRHC card.
- **DEIRIMSISCRN** -- Indicates whether the IMSI Screening for Diameter Equipment Identity Register (EIR) will be done before the IMEI check.
- **DEIRLOGWL** -- Indicates whether the white list logging for Diameter Equipment Identity Register (EIR) will be on.
- **DEIRDFLTIMSISCRN** -- Indicates whether the default IMSI Screening for Diameter Equipment Identity Register (EIR) will be on.
- **DEIRDFLTIMSILKUP** -- Indicates the order of IMEI table lookup for default IMSI screening.
- **DEIRDFLTIMSIRESP** -- Indicates the default IMEI status for default IMSI screening.

Related Commands

chg-deiropts

rtrv-dlk

Retrieve Data Link

Use this command to show the parameters of a TCP/IP data link.

Parameters

ipaddr (optional)

The TCP/IP data link's IP address. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where *192.126.100* is the network number and *5* is the machine's host number.

Range:

1-223, *0-255*

4 numbers separated by dots

1-223—first number

0–255—the other three numbers

Default:

Display all.

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

All TCP/IP data links are shown.

Example

```
rtrv-dlk
rtrv-dlk:loc=1201
rtrv-dlk:ipaddr=193.4.201.34
```

Dependencies

The loc and ipaddr parameters cannot be specified in the same command.

The shelf and card must be equipped.

The specified card must have a TCP/IP data link assigned to it.

Notes

None

Output

In this example, cards at locations 1201 and 1203 are E5-ENET or E5-ENET-B cards running the STPLAN application. For these cards, the value of the auto parameter is defaulted to *no*, and the value of the duplex parameter is defaulted to half.

The cards at locations 1101, 1103 and 1107 are E5-ENET or E5-ENET-B cards running the STPLAN application. For these cards, if the auto=yes parameter is specified, then the values of speed and duplex parameters are not shown.

```
rtrv-dlk
```

```
    tekelecstp 07-02-06 11:12:47 EST  EAGLE 37.0.0
    LOC   IPADDR            LINK SPEED  DUPLEX  AUTO
    1101  192.168.63.34     100Mbit     FULL    NO
    1103  192.168.63.11     10Mbit      HALF    NO
    1107  192.168.63.12     ------      ----    YES
    1201  192.168.63.13     10Mbit      HALF    NO
    1203  192.168.63.14     10Mbit      HALF    NO
;
```

```
rtrv-dlk:loc=1101
```

```
    tekelecstp 07-02-01 14:09:13 EST  EAGLE 37.0.0
    LOC   IPADDR            LINK SPEED  DUPLEX  AUTO
    1101  192.168.63.34     100Mbit     FULL    NO
;
```

```
rtrv-dlk:ipaddr=192.168.63.11
```

```
    tekelecstp 07-02-01 14:19:14 EST  EAGLE 37.0.0
    LOC   IPADDR            LINK SPEED  DUPLEX  AUTO
    1103  192.168.63.11     10Mbit      HALF    NO
;
```

This example shows the output when the specified IP address is not assigned to a TCP/IP data link:

```
rtrv-dlk:ipaddr=193.4.201.28
```

```
   tekelecstp 07-02-01 14:19:14 EST  EAGLE 37.0.0
   LOC   IPADDR            LINK SPEED  DUPLEX  AUTO
   IPADDR not assigned to a TCP/IP Link.
;
```

This example shows the output when there are no TCP/IP data links in the database.

`rtrv-dlk`

```
    tekelecstp 07-02-02 14:19:14 EST  EAGLE 37.0.0
    LOC   IPADDR           LINK SPEED  DUPLEX  AUTO
    No TCP/IP Links are defined in the database.
;
```

This example shows the output when the specified IP address is assigned to a TCP/IP node instead of a TCP/IP data link:

`rtrv-dlk:ipaddr=193.4.201.63`

```
    tekelecstp 07-02-01 12:12:10 EST  EAGLE 37.0.0
    LOC   IPADDR           LINK SPEED  DUPLEX  AUTO
    IPADDR assigned to a TCP/IP Node.
;
```

Legend

- **IPADDR**—IP address associated with the interface on the data link
- **LOC**—Card location containing the data link
- **LINK SPEED**—Bandwidth for the interface in megabits per second, **10** or **100**
- **AUTO**—Whether or not to automatically determine duplex and speed. If the value is *yes*, then duplex and speed are automatically determined. If the value is *no*, then duplex and speed are not automatically determined.
- **DUPLEX**—Mode of operation of the interface

Related Commands

act-dlk, *canc-dlk*, *dlt-dlk*, *ent-dlk*, *rept-stat-dlk*, *tst-dlk*

rtrv-dstn Retrieve Destination

Use this command to show the destination point code entries in the Destination point code table.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

aliasa (optional)

ANSI alias point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

aliasa/aliasi/aliasn/aliasn24/aliasn16 (optional)

Alias point code.

aliasi (optional)

ITU international alias point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*). If this parameter is specified with an ITU international destination (*dpci*) point code, the prefix subfields cannot be the same, i.e., both spare or both non-spare.

If an ITU international destination (*dpci*) point code is entered, then the *dpci* and *aliasi prefix* subfields cannot be the same (both spare or both non-spare). Up to 2 comma-delimited entries can be entered in the point code list.

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

aliasn (optional)

ITU national alias point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnn-gc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*). If this parameter is specified with an ITU national destination (*dpcn*) point code, the prefix subfields cannot be the same, i.e., both spare or both non-spare.

If an ITU national destination (*dpcn*) point code is entered, then the *dpcn* and *aliasn prefix* subfields cannot be the same (both spare or both non-spare). Up to 2 comma-delimited entries can be entered in the point code list.

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

aliasn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

aliasn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

clli (optional)

Common Language Location Identifier. The Common Language Location Identifier assigned to the link.

Range:

ayyyyyyyyyy

1 alphabetic character followed by 10 alphanumeric characters

Default:

none

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member (ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, *, **, ****

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk values *, **, and *** are not valid for the *ni* subfield.

If ** or *** is specified for the *nc* subfield, either *, **, or *** must be specified for the *ncm* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc=000* is not valid if *ni=001-005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006-255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni= 006-255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the

`chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

*s-, p-, ps, 0-16383, aa-zz, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

An asterisk (*) can be specified for the node (*nnnnn* or every member of a flexible point code) or for the group code (*gc*) only when group codes are present in the point codes.

An asterisk (*) can be specified either for the node or for the group code, but not both.

prefix—s-, p-, ps-

*nnnnn—0-16383, **

*gc—aa-zz, **

m1-m2-m3-m4—0-14 for each member; values must sum to 14; or *-*-*-* when the point code includes a group code.

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

homescp (optional)

This parameter displays all destination point codes (DPCs) that have the internal Home SCP flag set to the specified value.

Range:

yes

the DPC is considered a Home SCP for messages with no Global Title Address Digits

no

the DPC is not considered a Home SCP for messages with no Global Title Address Digits

homesmsc (optional)

This parameter displays all destination point codes (DPCs) that have the internal Home SMSC flag set to the specified value.

Range:

yes

the DPC is considered a Home SMSC for messages with no Global Title Address Digits

no

the DPC is not considered a Home SMSC for messages with no Global Title Address Digits

msar (optional)

Memory space accounting report. When the NRT feature or the CRMD feature, or both, is turned on, this parameter specifies whether summary or detail destination table memory space accounting information is displayed. The *summary* or *detail* report appears following the destination information that is requested by entering the command with or without other parameters. The only parameter value displays a detail destination table memory space accounting report without any other destination information. If neither feature is on, only the summary report information is displayed; the detail report information cannot be displayed.

Range:

detail

only

summary

Default:

detail

if `rtrv-dstn` is entered with no parameters

summary

if `rtrv-dstn` is entered with parameters

ncai (optional)

Nested cluster allowed indicator. This parameter specifies whether the route to the cluster point code can be different for provisioned members of the cluster and whether clusters with nested cluster point codes, or clusters that do not allow nested cluster point codes are displayed.

Range:

yes

Display clusters with NCAI set to *yes*

no

Display clusters with the NCAI set to *no*

nprst (optional)

NM bits reset. This parameter displays all entries with the specified value of the nprst option.

Range:

off

Display entries with an NPRST value of *off*

on

Display entries with an NPRST value of *on*

pcst (optional)

Point code subtype. This parameter displays point codes with the specified subtype.

Range:

none

Display only point codes without subtype prefixes

p

Display only private point codes

ps

Display only private and spare point codes

s

Display only spare point codes

pctype (optional)

Point code domain. This parameter displays point codes of the specified domain type.

Range:

ansi

Display only ANSI point codes

itui

Display only ITU International point codes

itun

Display only ITU National point codes

itun24

Display only 24-bit ITU National point codes

itun16

Display only 16-bit ITU National point codes

ppc (optional)

ANSI proxy point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

The proxy point code must be a full point code.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

ppc/ppca/ppci/ppcn/ppcn24/ppcn16 (optional)

Proxy Point Code.

The proxy point code must be a full point code.

ppci (optional)

ITU international proxy point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

ppcn (optional)

ITU national proxy point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (*members*) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The prefix subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

ppcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

ppcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

prx (optional)

Proxy point code indicator.

Range:

yes

Will be used as a proxy point code

no

Will not be used a proxy point code.

sccpmsgcnv (optional)

SCCP UDT(S)/XUDT(S) Message Conversion Indicator. The type of conversion performed on messages for the specified destination.

Range:

none

conversion is not required on messages for the destination

udt2xudt

convert all UDT(S) messages for the destination to XUDT(S) messages

xudt2udt

convert all non-segmented XUDT(S) messages for the destination to UDT(S) messages

sxudt2udt

convert all segmented and non-segmented XUDT(S) messages for the destination to UDT(S) messages

spc (optional)

ANSI secondary point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

spca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

spc/spca/spci/spcn/spcn24/spcn16 (optional)

Secondary point code.

spci (optional)

ITU international secondary point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

spcn (optional)

ITU national secondary point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

spcn24 (optional)

24-bit ITU national secondary point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

spcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

splitiam (optional)

IAM/SAM split. This parameter displays all entries with the specified splitiam parameter value.

Range:

15 - 31, none

Example

This example displays all encountered destination point codes that are members of network cluster 20-2 as well as the cluster address:

```
rtrv-dstn:dpca=20-2-***
```

This example displays the destination with an ANSI alias of 222-200-200:

```
rtrv-dstn:aliasa=222-200-200
```

This example displays all encountered ANSI alias destination point codes that have a network indicator of 222 and a network cluster of 200:

```
rtrv-dstn:aliasa=222-200-**
```

This example displays the destination with a CLLI of rlghncbb001:

```
rtrv-dstn:clli=rlghncbb001
```

This example displays the secondary point code 6:

```
rtrv-dstn:spc=6-6-6
```

This example displays a single cluster (the NRT feature must be turned on):

```
rtrv-dstn:dpc=010-*-*
```

This example displays a single ITU national destination (the ITUDUPPC feature must be turned on):

```
rtrv-dstn:dpcn=3-15-15-15-fr:spc=1-15-15-15-fr
```

This example displays all ITU national group codes by duplicate point code:

```
rtrv-dstn:dpcn=2050-*
```

This example displays all ITU national point codes within a group code:

```
rtrv-dstn:dpcn=*-fr
```

This example displays 24-bit ITU national point code 15-100-10:

```
rtrv-dstn:dpcn24=15-100-10
```

This example displays 24-bit ITU national alias point code 4:

```
rtrv-dstn:aliasn24=4-4-4
```

This example displays a private point code:

```
rtrv-dstn:dpca=p-12-12-12
```

This example displays a private and spare point code:

```
rtrv-dstn:dpci=ps-1-234-1
```

This example displays all ANSI private point codes:

```
rtrv-dstn:pctype=ansi:pcst=p
```

This example displays all ITU national private and spare point codes:

```
rtrv-dstn:pctype=itun:pcst=ps
```

This example displays all ANSI point codes that do not have point code subtype prefixes:

```
rtrv-dstn:pctype=ansi
```

This example displays all point codes that do not have point code subtype prefixes:

```
rtrv-dstn:pcst=none
```

This example displays all private point codes:

```
rtrv-dstn:pcst=p
```

This example displays all spare point codes:

```
rtrv-dstn:pcst=s
```

This example displays all proxy destinations:

```
rtrv-dstn:prx=yes
```

This example displays all destinations using a specified proxy point code:

```
rtrv-dstn:ppc=1-1-1
```

This example displays full DPCs when the homescp=yes parameter is specified:

```
rtrv-dstn:homescp=yes
```

This example displays all point codes where the sccpmsgcnv=udt2xudt parameter is specified:

```
rtrv-dstn:sccpmsgcnv=udt2xudt
```

This example displays 16-bit ITU national point code 125-2-25:

```
rtrv-dstn:dpcn16=125-2-25
```

This example displays a 16-bit ITU national alias point code:

```
rtrv-dstn:aliasn16=2-3-4
```

Dependencies

Note: A full point code contains numerical values for all three segments of the point code.

Only one destination point code parameter, or one alias point code parameter, or one CLLI parameter can be specified in the command; these parameters cannot be specified together in the command.

If the dpcn or aliasn parameter is specified, the format must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

If specified (except when spc=none), the secondary point code must be a full point code.

Cluster destinations are allowed only if the Cluster Routing Management and Diversity (CRMD) feature is turned on.

Alias point codes must be specified as full point codes.

When the msar=only parameter is specified, no other parameters can be specified in the command.

Network routing is valid only if the Network Routing (NRT) feature is turned on.

The pcst parameter value *s* or *ps* cannot be specified when the pctype value *ansi* or *itun24* or *itun16* is specified.

The pctype and pcst parameters cannot be specified in the same command with the destination point code, alias point code, secondary point code, clli, msar=only, and ncai parameters.

The clli=none parameter cannot be specified.

The Proxy Point Code feature must be enabled before the prx parameter can be specified.

The Proxy Point Code feature must be enabled before the ppc parameter can be specified.

The prx parameter can be specified with only the pctype, pcst, or msar parameter.

The ppc parameter can be specified with only the msar parameter.

A valid value must be specified for the prx parameter.

The point code specified by the ppc parameter must be a full point code.

Proxy point codes, as specified by the ppc parameter, cannot be private.

PRX point codes cannot be private.

The XUDT UDT Conversion feature must be turned on before the sccpmsgcnv parameter can be specified.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

In this command, only ITU-international and ITU national point codes and aliases support the spare point code subtype prefix (s-). Only ITU-international and ITU national point codes support the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-). Aliases do not support the private (internal) point code prefix.

Summary description of the reports that are produced by the various DPC parameter syntaxes is shown:

- `rtrv-dstn:dpc=ni-nc-ncm` —Report for fully provisioned destination *ni-nc-ncm*
- `rtrv-dstn:dpc=ni-*-*` —Report for provisioned network destination with the specified network indicator. If * is specified in the *nc* field, * must be specified in the *ncm* field.
- `rtrv-dstn:dpc=ni-**-*` —Report for the full network cluster for the specified *ni*
- `rtrv-dstn:dpc=ni-***-*` —Report for the full network cluster and the network cluster address (if any) for the specified *ni*
- `rtrv-dstn:dpc=ni-nc-*` —Report for provisioned cluster destination *ni-nc-**
- `rtrv-dstn:dpc=ni-nc-**` —Report showing all destinations whose network (*ni*) and cluster (*nc*) components match those specified. The network cluster address *ni-nc-** (if it exists) is not reported.
- `rtrv-dstn:dpc=ni-nc-***` —Report showing all destinations whose network (*ni*) and cluster (*nc*) components match those specified. The network cluster address *ni-nc-** (if it exists) is also reported.
- `rtrv-dstn:dpcn24=msa-ssa-sp` —Report for fully provisioned 24-bit destination *main signaling area-sub signaling area-signaling point*

Asterisks in ANSI Point Codes

Two asterisks in the *ncm* subfield of a cluster point code produces a summary report that shows all point code destinations residing in the given cluster (for example, *20-2-***). This does not include the specified cluster point code (for example, *20-2-**).

Three asterisks in the *ncm* subfield of a cluster point code (for example, *20-2-****) produces a summary report that shows all point code destinations residing in the given network cluster. The specified cluster point code is also displayed if it exists.

If the linkset name is specified (lsn parameter) and the dpc/dpca parameter's *ncm* subfield is specified with asterisks, all route entries are displayed that have the specified linkset and that match the specified dpc/dpca parameter's subfield values.

Asterisks in ITU-N Duplicate Point Codes and Flexible Format Point Codes

When the ITU Duplicate Point Code (ITUDUPPC) feature is on,

- An asterisk (*) can be specified for the group code of an ITU-N duplicate point code to display all ITU-N point codes that have the specified node value (for example, *10101-**).
- An asterisk (*) can be specified for the node of an ITU-N duplicate point code to display all ITU-N point codes that have the specified group code value (for example, **-ab*).

When the ITUDUPPC feature is on and the STP flexible point code option (npcfmti) is used to change the ITU-N point format to four members (*m1-m2-m3-m4-gc*)

- An asterisk (*) can be specified for the group code of an ITU-N flexible point code to display all ITU-N point codes that have the specified point code value (for example, 15)
- An asterisk (*) can be specified for every member of the ITU-N flexible point code to display all ITU-N flexible point codes that have the same group code (for example, *, **-15-*-*-*-ab* is not valid).

If the Proxy Point Code feature is enabled, then the values specified for the ppc and dpc parameters must be full point codes. Cluster point codes and private point codes are not supported.

Output

Destination Table Memory Space Accounting Information

Each output example for this command shows the display of destination table memory space accounting information. The msar parameter value and the NCR, NRT, CRMD, and Origin-based MTP Routing feature settings determine whether a summary report or a detail report is displayed.

Summary Report

When the NCR, NRT, CRMD, and Origin-based MTP Routing features are off, the summary report is displayed when the command is entered with and without parameters specified and for all of the msar parameter values. The detail report cannot be displayed. The summary information appears at the end of the requested destination information, or appears without any other destination information when the msar=only parameter is specified.

When one or more of the NCR, NRT, CRMD, and Origin-based MTP Routing features are on, the summary report is displayed:

- When the command is entered with one or more parameters to select the specific destination information to be displayed. The summary information appears at the end of the requested destination information. (The msar=summary parameter is the default in this case.)
- When the command is entered with only the msar=summary parameter specified. The summary information appears at the end of the destination information.

The maximum number of destinations that can be provisioned depends on the Routes and Routesets quantity features that are on in the system (see the `rtrv-feat` dstn5000 entry and the `rtrv-ctrl-feat` Routesets entry). The `chg-stpopts` command's mtpdpcq parameter must be set to the value of the Routes or Routesets quantity feature to allow the maximum number of destinations to be provisioned.

The number currently provisioned is the value *x*, the allowed maximum is the value *y*, and the table percent full is the value *z* shown in the following first line of the summary report:

```
Destination table is (x of y) z% full
```

- When no Routes or Routesets quantity features are on in the system, a maximum of 2000 destinations can be provisioned.
- When the DSTN5000 (5000 Routes) feature bit is on, a maximum of 5000 destinations can be provisioned.
- When the 6000, 7000, 8000, or 10,000 Routesets quantity feature is enabled, a maximum of the corresponding number of destinations can be provisioned.

The maximum number of aliases that can be provisioned depends on the quantity features that are on in the system (see the `rtrv-feat` dstn5000 entry and the `rtrv-ctrl-feat` Routesets entry). The number currently provisioned is the *x* value, the allowed maximum is the *y* value, and the table percent full is the *z* value shown in the following second line of the summary report:

```
Alias table is (x of y) z% full
```

- When no Routes or Routesets quantity features are on in the system, a maximum of 12000 aliases can be provisioned.
- When the DSTN5000 feature bit is on, a maximum of 12000 aliases can be provisioned.
- When the 6000 Routesets feature quantity is enabled, a maximum of 12000 aliases can be provisioned.
- When the 7000 or 8000 Routesets quantity feature is enabled, a maximum of 8000 aliases can be provisioned.

- When the 10000 Routesets quantity feature is enabled, a maximum of 10000 aliases can be provisioned.

Detail Report

When the NCR, NRT, CRMD, and Origin-based MTP Routing features are off, the detail report cannot be displayed.

When one or more of the NCR, NRT, CRMD, or Origin-based MTP Routing features are on, the detail report is displayed:

- When the command is entered with no parameters. The detail report appears at the end of the destination information. (The msar=detail parameter value is the default in this case.)
- When the msar=detail parameter is specified with one or more other parameters to select the specific destination information to be displayed. The detail report appears at the end of the requested destination information.
- When the msar=only parameter is specified. The detail report appears with no other destination information.

The maximum number of destinations that can be provisioned depends on the Routes and Routesets quantity features that are on in the system (see the `rtrv-feat` dstn5000 entry and the `rtrv-ctrl-feat` Routesets entry). The `chg-stpopts` command's mtpdpcq parameter must be set to the value of the quantity feature to allow the maximum number of destinations to be provisioned. The possible maximum numbers of destinations are described in the *Summary Report* section.

In the example of the detail report, the allowed maximum number of destinations is the DESTINATION ENTRIES ALLOCATED value. The list of values under the allocated value includes the TOTAL DPCs currently provisioned and the Destination table CAPACITY (% FULL).

The allowed maximum number of aliases is the ALIASES ALLOCATED value. The list of values under the allocated value include the current number of ALIASES USED and the Aliases table CAPACITY (% FULL). The possible maximum numbers of aliases are described in the *Summary Report* section.

The output for the `rtrv-dstn` command does not change when the Proxy Point Code feature is on.

Abbreviated output is indicated by 3 vertical dots as shown:

.

.

.

This example shows destination table memory space accounting information contained in a summary report. In the example, the NCR, NRT, CRMD, and Origin-based MTP Routing features are all off. The Summary Report information appears without any other destination information.

```
rtrv-dstn:msar=only
```

```
    rlghncxa03w 06-06-01 16:02:05 EST  EAGLE 35.0.0
    Destination table is (0 of 2000) 0% full
    Alias table is (0 of 12000) 0% full
    RTRV-DSTN: MASP A - COMPLTD
;
```

This example shows the output for a detail report. One or more of the NCR, NRT, CRMD or Origin-based MTP Routing features are on. The Detail Report information appears without any other destination information.

```
rtrv-dstn:msar=only
```

```
    eagle10115 08-12-09 10:00:37 EST EAGLE 40.1.0
    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  178
        EXCEPTION DPC(s):              17
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 199
        CAPACITY (% FULL):             10%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 206
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500
;
```

This example shows the output when the NCR, NRT, and CRMD features are off, and no Routes or Routesets quantity features are on:

```
rtrv-dstn
```

```
    tekelecstp 08-01-21 10:31:06 EST  EAGLE 38.0.0

    No destinations meeting the requested criteria were found

    Destination table is (0 of 2000) 0% full
    Alias table is (0 of 12000) 0% full
;
```

This example shows the output when one or more of the NCR, NRT, or CRMD features are on and no Routes or Routesets features are on:

```
rtrv-dstn
```

```
    tekelecstp 08-01-21 10:31:06 EST  EAGLE 38.0.0

    No destinations meeting the requested criteria were found

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                    0
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 0
        TOTAL DPC(s):                   0
        CAPACITY (% FULL):             0%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                   0
        CAPACITY (% FULL):             0%
    X-LIST ENTRIES ALLOCATED:         500
;
```

This example shows all provisioned destinations. The example contains abbreviated output.

```
rtrv-dstn
```

```
    tekelecstp 10-10-15 14:46:12 EST  EAGLE 43.0.0
    rtrv-dstn
    Command entered at terminal #4.
    Extended Processing Time may be Required
```

```
      DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
      001-001-000   stp1        no  ---  --------------   --------------   SS7
      003-001-000   mstp        no  ---  --------------   --------------   SS7
      004-001-000   stp4        no  ---  --------------   --------------   SS7
.
.
.
      200-200-*     cluster2    yes no   --------------   --------------   SS7
      005-006-001   ----------- no  ---  --------------      005-006-001   SS7
      001-001-001   dstn01      no  ---  --------------   --------------   SS7
    p-001-001-001   dstn01p     no  ---  --------------   --------------   SS7
      001-001-002   dstn02      no  ---     1-001-2       --------------   SS7
    p-001-001-002   dstn02p     no  ---     1-011-2       --------------   SS7
      001-001-003   dstn03      no  ---   s-1-001-3       --------------   SS7
    p-001-001-003   dstn03p     no  ---   s-1-011-3       --------------   SS7
      001-001-004   dstn04      no  ---  --------------      02060         SS7
    p-001-001-004   dstn04p     no  ---  --------------      01060         SS7
      001-070-001   tgtansi001  no  ---  --------------   --------------   SS7
      001-001-005   dstn05      no  ---  --------------    s-02061         SS7
    p-001-001-005   dstn05p     no  ---  --------------    s-01061         SS7
.
.
.
      DPCI          CLLI        BEI ELEI   ALIASA          ALIASN/N24    DMN
    s-4-002-0       ----------- no  ---     010-001-001    s-08228         SS7
      2-010-0       dstn13      no  ---  --------------   --------------   SS7
    p-2-010-0       dstn13p     no  ---  --------------   --------------   SS7
      2-010-1       dstn14      no  ---     002-010-001   --------------   SS7
    p-2-010-1       dstn14p     no  ---     002-100-001   --------------   SS7
      2-010-2       dstn15      no  ---  --------------      04178         SS7
    p-2-010-2       dstn15p     no  ---  --------------      08178         SS7
      2-010-3       dstn16      no  ---  --------------    s-04179         SS7
    p-2-010-3       dstn16p     no  ---  --------------    s-08179         SS7
.
.
.
     s-2-020-0      dstn21      no  ---  --------------   --------------   SS7
    ps-2-020-0      dstn21p     no  ---  --------------   --------------   SS7
     s-2-020-1      dstn22      no  ---     002-020-001   --------------   SS7
    ps-2-020-1      dstn22p     no  ---     002-200-001   --------------   SS7
     s-2-020-2      dstn23      no  ---  --------------      04258         SS7
    ps-2-020-2      dstn23p     no  ---  --------------      08258         SS7
     s-2-020-3      dstn24      no  ---  --------------    s-04259         SS7
    ps-2-020-3      dstn24p     no  ---  --------------    s-08259         SS7
     s-2-070-3      tgtitui003  no  ---  --------------   --------------   SS7
.
.
.
     s-2-029-6      rtxroute002 no  ---     002-029-006    s-04269         SS7
      DPCI          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
      3-030-0       dstn29      no  ---   s-3-030-0       --------------   SS7
    p-3-030-0       dstn29p     no  ---   s-3-031-0       --------------   SS7
      3-030-1       dstn30      no  ---   s-3-030-1          06385         SS7
    p-3-030-1       dstn30p     no  ---   s-3-031-1          07385         SS7
.
.
.
      DPCI          CLLI        BEI ELEI   ALIASN          ALIASN        DMN
      3-030-4       dstn33      no  ---   s-06388          06388         SS7
    p-3-030-4       dstn33p     no  ---   s-07388          07388         SS7
      3-030-5       dstn34      no  ---     06389         s-06389         SS7
    p-3-030-5       dstn34p     no  ---     07389         s-07389         SS7
```

```
     s-3-040-6       dstn39      no  ---  s-06471           06471         SS7
    ps-3-040-6       dstn39p     no  ---  s-07471           07471         SS7
     s-3-040-7       dstn40      no  ---    06472         s-06472         SS7
    ps-3-040-7       dstn40p     no  ---    07472         s-07472         SS7

       DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
       06157         ----------- no  ---    020-005-002   --------------  SS7
       08192         dstn41      no  --- --------------   --------------  SS7
     p-08192         dstn41p     no  --- --------------   --------------  SS7
       08193         dstn42      no  ---    004-000-001   --------------  SS7
     p-08193         dstn42p     no  ---    004-200-001   --------------  SS7
       08194         dstn43      no  --- --------------      4-000-2       SS7
     p-08194         dstn43p     no  --- --------------      4-040-2       SS7
       08195         dstn44      no  --- --------------    s-4-000-3       SS7
     p-08195         dstn44p     no  --- --------------    s-4-040-3       SS7
       08753         tgtitun001  no  --- --------------   --------------   SS7
.
.
.

       DPCN          CLLI        BEI ELEI   ALIASI          ALIASI        DMN
       08198         dstn47      no  ---  s-4-000-6         4-000-6       SS7
     p-08198         dstn47p     no  ---  s-4-040-6         4-040-6       SS7
       08199         dstn48      no  ---    4-000-7       s-4-000-7       SS7
     p-08199         dstn48p     no  ---    4-040-7       s-4-040-7       SS7
     s-08278         dstn55      no  ---  s-4-010-6         4-010-6       SS7
    ps-08278         dstn55p     no  ---  s-4-050-6         4-050-6       SS7
     s-08279         dstn56      no  ---    4-010-7       s-4-010-7       SS7
    ps-08279         dstn56p     no  ---    4-050-7       s-4-050-7       SS7
     s-08379         rtxroute003 no  ---  s-4-058-7         4-058-7       SS7

       DPCN          CLLI        BEI ELEI   ALIASN          ALIASI        DMN
       12688         dstn57      no  ---  s-12688         --------------  SS7
     p-12688         dstn57p     no  ---  s-13688         --------------  SS7
       12689         dstn58      no  ---  s-12689           6-050-1       SS7
     p-12689         dstn58p     no  ---  s-13689           6-060-1       SS7
       12690         dstn59      no  ---  s-12690         s-6-050-2       SS7
     p-12690         dstn59p     no  ---  s-13690         s-6-060-2       SS7
     s-12691         dstn60      no  ---    12691         --------------  SS7
    ps-12691         dstn60p     no  ---    13691         --------------  SS7
     s-12692         dstn61      no  ---    12692           6-050-4       SS7
    ps-12692         dstn61p     no  ---    13692           6-060-4       SS7
     s-12693         dstn62      no  ---    12693         s-6-050-5       SS7
    ps-12693         dstn62p     no  ---    13693         s-6-060-5       SS7

       DPCN24        CLLI        BEI ELEI   ALIASA          ALIASI        DMN
       003-003-004   ----------- no  ---    003-003-003     3-003-4       SS7
       006-005-001   dstn63      no  --- --------------   --------------  SS7
     p-006-005-001   dstn63p     no  --- --------------   --------------  SS7
       006-005-002   dstn64      no  ---    006-005-002   --------------  SS7
     p-006-005-002   dstn64p     no  ---    006-005-020   --------------  SS7
       006-005-003   dstn65      no  --- --------------      6-005-3       SS7
     p-006-005-003   dstn65p     no  --- --------------      6-050-3       SS7
       006-070-001   tgtitun24a  no  --- --------------   --------------   SS7
       006-005-004   dstn66      no  --- --------------    s-6-005-4       SS7
     p-006-005-004   dstn66p     no  --- --------------    s-6-050-4       SS7
       006-005-005   dstn67      no  ---    006-005-005     6-005-5       SS7
     p-006-005-005   dstn67p     no  ---    006-005-050     6-050-5       SS7
       006-070-002   tgtitun24b  no  --- --------------   --------------   SS7

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  178
        EXCEPTION DPC(s):              17
        NETWORK DPC(s):                 0
```

```
        CLUSTER DPC(s):                4
        TOTAL DPC(s):                199
        CAPACITY (% FULL):            10%
    ALIASES ALLOCATED:              12000
        ALIASES USED:                206
        CAPACITY (% FULL):             2%
    X-LIST ENTRIES ALLOCATED:        500

;
```

This example shows the 24-bit ITUN Destination Point Code(s) assigned to a specified 24-bit ITUN Secondary Point Code:

`rtrv-dstn:spcn24=6-5-0`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:spcn24=6-5-0
    Command entered at terminal #4.
    Extended Processing Time may be Required

    SPCN24=    006-005-000

       DPCN24        CLLI        BEI ELEI   ALIASA           ALIASI        DMN
       003-003-004   ----------- no  ---    003-003-003      3-003-4       SS7
       006-005-001   dstn63      no  --- --------------   --------------   SS7
     p-006-005-001   dstn63p     no  --- --------------   --------------   SS7
       006-005-002   dstn64      no  ---    006-005-002   --------------   SS7
     p-006-005-002   dstn64p     no  ---    006-005-020   --------------   SS7
       006-005-003   dstn65      no  --- --------------      6-005-3       SS7
     p-006-005-003   dstn65p     no  --- --------------      6-050-3       SS7
       006-070-001   tgtitun24a  no  --- --------------   --------------   SS7
       006-005-004   dstn66      no  --- --------------    s-6-005-4       SS7
     p-006-005-004   dstn66p     no  --- --------------    s-6-050-4       SS7
       006-005-005   dstn67      no  ---    006-005-005      6-005-5       SS7
     p-006-005-005   dstn67p     no  ---    006-005-050      6-050-5       SS7
       006-070-002   tgtitun24b  no  --- --------------   --------------   SS7

    Destination table is (199 of 2000) 10% full
    Alias table is (206 of 12000) 2% full

;
```

This example shows the output when the ncai=yes parameter is specified:

`rtrv-dstn:ncai=yes`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:ncai=yes
    Command entered at terminal #4.
    Extended Processing Time may be Required

    NCAI= yes

       DPCA          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
       100-100-*     cluster1    no  no   --------------   --------------   SS7
       200-200-*     cluster2    yes no   --------------   --------------   SS7

    Destination table is (199 of 2000) 10% full
    Alias table is (206 of 12000) 2% full
```

```
;
```

This example shows the retrieval of a single cluster:

```
rtrv-dstn:dpc=200-200-*
```

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0

       DPCA          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
       200-200-*     cluster2    yes no  --------------   --------------   SS7
       SPCA         NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       -----------  yes          none   off   none     no     no    none

    Destination table is (197 of 2000) 10% full
    Alias table is (206 of 12000) 2% full
;
```

This example shows when the ncai=no parameter is specified:

```
rtrv-dstn:ncai=no
```

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:ncai=no
    Command entered at terminal #4.
    Extended Processing Time may be Required

    NCAI= no

       DPCA          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
       040-001-*     myncaibeno  no  no  --------------   --------------   SS7
       040-010-*     myncaibeno2 no  no  --------------   --------------   SS7

    Destination table is (199 of 2000) 10% full
    Alias table is (206 of 12000) 2% full

;
```

This example shows a single cluster with the NRT feature turned on:

```
rtrv-dstn:dpc=010-*-*
```

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0

       DPCA          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
       010-*-*       ----------- --- --- --------------   --------------   SS7

       SPCA         NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       -----------  ----         none   off   none     no     no    none

    Destination table is (200 of 2000) 10% full
    Alias table is (206 of 12000) 2% full

;
```

This example shows a single ITU national destination with the ITUDUPPC (ITU Duplicate Point Code) feature turned on:

```
rtrv-dstn:dpcn=08199-tk
```

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0

       DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
       08199-tk      dstn48duptk no  --- --------------      4-006-2       SS7

       SPCN         NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       -----------  ----         none   off   none     no     no    none

    Destination table is (207 of 2000) 10% full
    Alias table is (215 of 12000) 2% full
;
```

This example shows all ITU national group codes by duplicate point code:

```
rtrv-dstn:dpcn=8198-*
```

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
       08198-nz      dstn47dupnz no  --- --------------   --------------   SS7

       DPCN          CLLI        BEI ELEI   ALIASI          ALIASI        DMN
       08198-aa      dstn47      no  ---  s-4-000-6         4-000-6       SS7
       08198-fr      dstn47dupfr no  ---  s-4-005-7         4-005-7       SS7
       08198-tk      dstn47duptk no  ---    4-006-0       s-4-006-0       SS7

    Destination table is (207 of 2000) 10% full
    Alias table is (215 of 12000) 2% full
;
```

This example shows a single cluster when the NRT and DSTN5000 features are turned on:

```
rtrv-dstn:dpc=010-*-*
```

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0

       DPCI          CLLI        BEI ELEI   ALIASA          ALIASN/N24    DMN
       010-*-*       ----------- no  no  --------------   --------------   SS7

       SPCI         NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       -----------  ----         none   off   none     no     no    udt2xudt

    Destination table is (3 of 6000) 1% full
    Alias table is (4 of 12000) 1% full
;
```

This example shows the output when the 6000 Routesets and CRMD features are turned on:

```
rtrv-dstn
```

```
    tekelecstp 10-10-15 14:46:12 EST  EAGLE 43.0.0
    rtrv-dstn
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
```

```
       003-003-003   ----------- no  --- --------------   --------------   SS7
       004-004-004   ----------- no  --- --------------   --------------   SS7
       005-005-005   ----------- no  --- --------------   --------------   SS7
       008-001-*     ----------- no  no  --------------   --------------   SS7

    DESTINATION ENTRIES ALLOCATED:   6000
        FULL DPC(s):                    3
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                   4
        CAPACITY (% FULL):              1%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                   0
        CAPACITY (% FULL):              0%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example shows the output for a specific DPC when the 6000 Routesets and the CRMD features are on:

`rtrv-dstn:dpc=8-1-*`

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0

       DPCA          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
       008-001-*     ----------- no  no  --------------   --------------   SS7

       SPCA         NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       -----------  no           none   off   none     no     no    none

    Destination table is (4 of 6000) 1% full
    Alias table is (0 of 12000) 0% full
;
```

This example shows the output for a 24-bit ITU-N destination point code with an assigned 24-bit ITU-N secondary point code:

`rtrv-dstn:dpcn24=6-5-2`

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0
       DPCN24        CLLI        BEI ELEI   ALIASA           ALIASI        DMN
       006-005-002   dstn64      no  ---    006-005-002   --------------   SS7

       SPCN24       NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       -----------  ----         none   off   none     no     no    none

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full

;
```

This example shows a specific 24-bit ITU-N alias point code:

`rtrv-dstn:aliasn24=3-41-5`

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0
```

```
      DPCI          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
   ps-3-040-5       dstn38p     no  ---    3-041-5         003-041-005   SS7

      SPCI         NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
      -----------  ----         none   off   none     no     no    none

   Destination table is (208 of 2000) 10% full
   Alias table is (216 of 12000) 2% full

;
```

This example shows the output for a linkset that contains a private point code:

`rtrv-dstn:dpci=ps-3-40-3`

```
   eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0

      DPCI          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
   ps-3-040-3       dstn36p     no  ---    3-041-3         07467-aa      SS7

      SPCI         NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
      -----------  ----         none   off   none     no     no    none

   Destination table is (208 of 2000) 10% full
   Alias table is (216 of 12000) 2% full

;
```

This example shows ANSI point codes with the private point code subtype prefix (p-):

`rtrv-dstn:pctype=ansi:pcst=p`

```
   eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
   rtrv-dstn:pctype=ansi:pcst=p
   Command entered at terminal #4.
   Extended Processing Time may be Required

      DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
    p-001-001-001   dstn01p     no  --- --------------   --------------   SS7
    p-001-001-002   dstn02p     no  ---    1-011-2       --------------   SS7
    p-001-001-003   dstn03p     no  ---  s-1-011-3       --------------   SS7
    p-001-001-004   dstn04p     no  --- --------------      01060-aa      SS7
    p-001-001-005   dstn05p     no  --- --------------    s-01061-aa      SS7
    p-001-001-006   dstn06p     no  --- --------------      001-011-006   SS7
    p-001-001-007   dstn07p     no  ---    1-011-7         01063-aa      SS7
    p-001-002-000   dstn08p     no  ---    1-012-0       s-01064-aa      SS7
    p-001-002-001   dstn09p     no  ---  s-1-012-1         01065-aa      SS7
    p-001-002-002   dstn10p     no  ---  s-1-012-2       s-01066-aa      SS7
    p-001-002-003   dstn11p     no  ---    1-012-3         001-012-003   SS7
    p-001-002-004   dstn12p     no  ---  s-1-012-4         001-012-004   SS7

   Destination table is (208 of 2000) 10% full
   Alias table is (216 of 12000) 2% full

;
```

This example shows ITU-I point codes with the spare point code subtype prefix (s-):

```
rtrv-dstn:pctype=itui:pcst=s
```

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pctype=itui:pcst=s
    Command entered at terminal #4.
    Extended Processing Time may be Required

      DPCI          CLLI        BEI ELEI   ALIASA          ALIASN/N24    DMN
     s-4-002-0      ----------- no  ---    010-001-001    s-08228-aa     SS7
     s-2-020-0      dstn21      no  --- --------------   --------------   SS7
     s-2-020-1      dstn22      no  ---    002-020-001   --------------   SS7
     s-2-020-2      dstn23      no  --- --------------      04258-aa      SS7
     s-2-020-3      dstn24      no  --- --------------    s-04259-aa      SS7
     s-2-070-3      tgtitui003  no  --- --------------   --------------   SS7
     s-2-020-4      dstn25      no  --- --------------      002-020-004   SS7
     s-2-020-5      dstn26      no  ---    002-020-005      04261-aa      SS7
     s-2-020-6      dstn27      no  ---    002-020-006    s-04262-aa      SS7
     s-2-020-7      dstn28      no  ---    002-020-007      002-020-007   SS7
     s-2-070-4      tgtitui004  no  --- --------------   --------------   SS7
     s-3-070-3      tgtitui007  no  --- --------------   --------------   SS7
     s-3-070-4      tgtitui008  no  --- --------------   --------------   SS7
     s-2-029-6      rtxroute002 no  ---    002-029-006    s-04269-aa      SS7

      DPCI          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
     s-3-040-2      dstn35      no  ---    3-040-2       --------------   SS7
     s-3-040-3      dstn36      no  ---    3-040-3         06467-aa       SS7
     s-3-040-4      dstn37      no  ---    3-040-4        s-06468-aa      SS7
     s-3-040-5      dstn38      no  ---    3-040-5         003-040-005    SS7

      DPCI          CLLI        BEI ELEI   ALIASN          ALIASN        DMN
     s-3-040-6      dstn39      no  ---  s-06471-aa        06471-aa       SS7
     s-3-040-7      dstn40      no  ---    06472-aa       s-06472-aa      SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full

;
```

This example shows ITU-N point codes with the private point code subtype prefix (p-):

```
rtrv-dstn:pctype=itun:pcst=p
```

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pctype=itun:pcst=p
    Command entered at terminal #4.
    Extended Processing Time may be Required

      DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
     p-08192-aa     dstn41p     no  --- --------------   --------------   SS7
     p-08193-aa     dstn42p     no  ---    004-200-001   --------------   SS7
     p-08194-aa     dstn43p     no  --- --------------      4-040-2       SS7
     p-08195-aa     dstn44p     no  --- --------------    s-4-040-3       SS7
     p-08196-aa     dstn45p     no  ---    004-200-004      4-040-4       SS7
     p-08197-aa     dstn46p     no  ---    004-200-005    s-4-040-5       SS7

      DPCN          CLLI        BEI ELEI   ALIASI          ALIASI        DMN
     p-08198-aa     dstn47p     no  ---  s-4-040-6         4-040-6        SS7
     p-08199-aa     dstn48p     no  ---    4-040-7        s-4-040-7       SS7

      DPCN          CLLI        BEI ELEI   ALIASN          ALIASI        DMN
     p-12688-aa     dstn57p     no  ---  s-13688-aa      --------------   SS7
```

```
     p-12689-aa      dstn58p     no  ---  s-13689-aa         6-060-1       SS7
     p-12690-aa      dstn59p     no  ---  s-13690-aa       s-6-060-2       SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full
;
```

This example shows ITU-N point codes with the private and spare point code subtype prefix (ps-):

`rtrv-dstn:pctype=itun:pcst=ps`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pctype=itun:pcst=ps
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
    ps-08272-aa      dstn49p     no  --- --------------   --------------   SS7
    ps-08273-aa      dstn50p     no  ---    004-200-010   --------------   SS7
    ps-08274-aa      dstn51p     no  --- --------------      4-050-2       SS7
    ps-08275-aa      dstn52p     no  --- --------------    s-4-050-3       SS7
    ps-08276-aa      dstn53p     no  ---    004-200-040      4-050-4       SS7
    ps-08277-aa      dstn54p     no  ---    004-200-050    s-4-050-5       SS7

       DPCN          CLLI        BEI ELEI   ALIASI          ALIASI        DMN
    ps-08278-aa      dstn55p     no  ---  s-4-050-6          4-050-6       SS7
    ps-08279-aa      dstn56p     no  ---    4-050-7        s-4-050-7       SS7

       DPCN          CLLI        BEI ELEI   ALIASN          ALIASI        DMN
    ps-12691-aa      dstn60p     no  ---    13691-aa      --------------   SS7
    ps-12692-aa      dstn61p     no  ---    13692-aa        6-060-4       SS7
    ps-12693-aa      dstn62p     no  ---    13693-aa       s-6-060-5       SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full

;
```

This example displays ANSI point codes. The example displays abbreviated output.

`rtrv-dstn:pctype=ansi`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pctype=ansi
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       001-001-000   stp1        no  --- --------------   --------------   SS7
       003-001-000   mstp        no  --- --------------   --------------   SS7
.
.
.
       100-100-*     cluster1    no  no  --------------   --------------   SS7
       100-100-001   ----------- no  --- --------------   --------------   SS7
       200-200-*     cluster2    yes no  --------------   --------------   SS7
       005-006-001   ----------- no  --- --------------      005-006-001   SS7
       001-001-001   dstn01      no  --- --------------   --------------   SS7
     p-001-001-001   dstn01p     no  --- --------------   --------------   SS7
       001-001-002   dstn02      no  ---    1-001-2       --------------   SS7
```

```
     p-001-001-002   dstn02p     no  ---    1-011-2       --------------   SS7
       001-001-003   dstn03      no  ---  s-1-001-3       --------------   SS7
     p-001-001-003   dstn03p     no  ---  s-1-011-3       --------------   SS7
       001-001-004   dstn04      no  --- --------------      02060-aa      SS7
     p-001-001-004   dstn04p     no  --- --------------      01060-aa      SS7
       001-070-001   tgtansi001  no  --- --------------   --------------   SS7
       001-001-005   dstn05      no  --- --------------    s-02061-aa      SS7
     p-001-001-005   dstn05p     no  --- --------------    s-01061-aa      SS7
       001-001-006   dstn06      no  --- --------------      001-001-006   SS7
     p-001-001-006   dstn06p     no  --- --------------      001-011-006   SS7
       001-001-007   dstn07      no  ---    1-001-7         02063-aa      SS7
     p-001-001-007   dstn07p     no  ---    1-011-7         01063-aa      SS7
       001-002-000   dstn08      no  ---    1-002-0       s-02064-aa      SS7
     p-001-002-000   dstn08p     no  ---    1-012-0       s-01064-aa      SS7
       001-070-002   tgtansi002  no  --- --------------   --------------   SS7
       001-002-001   dstn09      no  ---  s-1-002-1         02065-aa      SS7
     p-001-002-001   dstn09p     no  ---  s-1-012-1         01065-aa      SS7
       001-002-002   dstn10      no  ---  s-1-002-2       s-02066-aa      SS7
     p-001-002-002   dstn10p     no  ---  s-1-012-2       s-01066-aa      SS7
       001-002-003   dstn11      no  ---    1-002-3         001-002-003   SS7
     p-001-002-003   dstn11p     no  ---    1-012-3         001-012-003   SS7
       001-002-004   dstn12      no  ---  s-1-002-4         001-002-004   SS7
     p-001-002-004   dstn12p     no  ---  s-1-012-4         001-012-004   SS7
       001-070-003   tgtansi003  no  --- --------------   --------------   SS7
       200-002-001   rtxroute001 no  --- --------------   --------------   SS7
       040-001-*     myncaibeno  no  no  --------------   --------------   SS7
       040-010-*     myncaibeno2 no  no  --------------   --------------   SS7
       010-*-*       ----------- --- --- --------------   --------------   SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full
;
```

This example shows ITU-I point codes:

```
rtrv-dstn:pctype=itui
```

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pctype=itui
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCI          CLLI        BEI ELEI   ALIASA          ALIASN/N24    DMN
     s-4-002-0       ----------- no  ---    010-001-001    s-08228-aa     SS7
       2-010-0       dstn13      no  --- --------------   --------------   SS7
     p-2-010-0       dstn13p     no  --- --------------   --------------   SS7
       2-010-1       dstn14      no  ---    002-010-001   --------------   SS7
     p-2-010-1       dstn14p     no  ---    002-100-001   --------------   SS7
       2-010-2       dstn15      no  --- --------------      04178-aa      SS7
     p-2-010-2       dstn15p     no  --- --------------      08178-aa      SS7
       2-010-3       dstn16      no  --- --------------    s-04179-aa      SS7
     p-2-010-3       dstn16p     no  --- --------------    s-08179-aa      SS7
       2-070-1       tgtitui001  no  --- --------------   --------------   SS7
       2-010-4       dstn17      no  --- --------------      002-010-004   SS7
     p-2-010-4       dstn17p     no  --- --------------      002-100-004   SS7
       2-010-5       dstn18      no  ---    002-010-005      04181-aa      SS7
     p-2-010-5       dstn18p     no  ---    002-100-005      08181-aa      SS7
       2-010-6       dstn19      no  ---    002-010-006    s-04182-aa      SS7
     p-2-010-6       dstn19p     no  ---    002-100-006    s-08182-aa      SS7
       2-010-7       dstn20      no  ---    002-010-007      002-010-007   SS7
     p-2-010-7       dstn20p     no  ---    002-100-007      002-100-007   SS7
       2-070-2       tgtitui002  no  --- --------------   --------------   SS7
```

```
     s-2-020-0       dstn21      no  --- --------------   --------------   SS7
    ps-2-020-0       dstn21p     no  --- --------------   --------------   SS7
     s-2-020-1       dstn22      no  ---    002-020-001   --------------   SS7
    ps-2-020-1       dstn22p     no  ---    002-200-001   --------------   SS7
     s-2-020-2       dstn23      no  --- --------------      04258-aa      SS7
    ps-2-020-2       dstn23p     no  --- --------------      08258-aa      SS7
     s-2-020-3       dstn24      no  --- --------------    s-04259-aa      SS7
    ps-2-020-3       dstn24p     no  --- --------------    s-08259-aa      SS7
     s-2-070-3       tgtitui003  no  --- --------------   --------------   SS7
     s-2-020-4       dstn25      no  --- --------------      002-020-004   SS7
    ps-2-020-4       dstn25p     no  --- --------------      002-200-004   SS7
     s-2-020-5       dstn26      no  ---    002-020-005      04261-aa      SS7
    ps-2-020-5       dstn26p     no  --- --------------   --------------   SS7
     s-2-020-6       dstn27      no  ---    002-020-006    s-04262-aa      SS7
    ps-2-020-6       dstn27p     no  ---    002-200-005      08261-aa      SS7
     s-2-020-7       dstn28      no  ---    002-020-007      002-020-007   SS7
    ps-2-020-7       dstn28p     no  ---    002-200-007      002-200-007   SS7
     s-2-070-4       tgtitui004  no  --- --------------   --------------   SS7
     s-3-070-3       tgtitui007  no  --- --------------   --------------   SS7
     s-3-070-4       tgtitui008  no  --- --------------   --------------   SS7
     s-2-029-6       rtxroute002 no  ---    002-029-006    s-04269-aa      SS7

       DPCI          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
       3-030-0       dstn29      no  ---  s-3-030-0       --------------   SS7
     p-3-030-0       dstn29p     no  ---  s-3-031-0       --------------   SS7
       3-030-1       dstn30      no  ---  s-3-030-1          06385-aa      SS7
     p-3-030-1       dstn30p     no  ---  s-3-031-1          07385-aa      SS7
       3-030-2       dstn31      no  ---  s-3-030-2        s-06386-aa      SS7
     p-3-030-2       dstn31p     no  ---  s-3-031-2        s-07386-aa      SS7
       3-070-1       tgtitui005  no  ---  s-3-070-1       --------------   SS7
       3-030-3       dstn32      no  ---  s-3-030-3          003-030-003   SS7
     p-3-030-3       dstn32p     no  ---  s-3-031-3          003-031-003   SS7
       3-070-2       tgtitui006  no  ---  s-3-070-2       --------------   SS7
     s-3-040-2       dstn35      no  ---    3-040-2       --------------   SS7
    ps-3-040-2       dstn35p     no  ---    3-041-2       --------------   SS7
     s-3-040-3       dstn36      no  ---    3-040-3          06467-aa      SS7
    ps-3-040-3       dstn36p     no  ---    3-041-3          07467-aa      SS7
     s-3-040-4       dstn37      no  ---    3-040-4        s-06468-aa      SS7
    ps-3-040-4       dstn37p     no  ---    3-041-4        s-07468-aa      SS7
     s-3-040-5       dstn38      no  ---    3-040-5          003-040-005   SS7
    ps-3-040-5       dstn38p     no  ---    3-041-5          003-041-005   SS7

       DPCI          CLLI        BEI ELEI   ALIASN           ALIASN        DMN
       3-030-4       dstn33      no  ---  s-06388-aa          06388-aa      SS7
     p-3-030-4       dstn33p     no  ---  s-07388-aa          07388-aa      SS7
       3-030-5       dstn34      no  ---    06389-aa        s-06389-aa      SS7
     p-3-030-5       dstn34p     no  ---    07389-aa        s-07389-aa      SS7
     s-3-040-6       dstn39      no  ---  s-06471-aa          06471-aa      SS7
    ps-3-040-6       dstn39p     no  ---  s-07471-aa          07471-aa      SS7
     s-3-040-7       dstn40      no  ---    06472-aa        s-06472-aa      SS7
    ps-3-040-7       dstn40p     no  ---    07472-aa        s-07472-aa      SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full
;
```

This example shows ITU-N point codes:

`rtrv-dstn:pctype=itun`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pctype=itun
```

```
Command entered at terminal #4.
Extended Processing Time may be Required

   DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
   06157-aa      ----------- no  ---    020-005-002   --------------  SS7
   08192-aa      dstn41      no  --- --------------   --------------  SS7
 p-08192-aa      dstn41p     no  --- --------------   --------------  SS7
   08193-aa      dstn42      no  ---    004-000-001   --------------  SS7
 p-08193-aa      dstn42p     no  ---    004-200-001   --------------  SS7
   08194-aa      dstn43      no  --- --------------      4-000-2      SS7
 p-08194-aa      dstn43p     no  --- --------------      4-040-2      SS7
   08195-aa      dstn44      no  --- --------------    s-4-000-3      SS7
 p-08195-aa      dstn44p     no  --- --------------    s-4-040-3      SS7
   08753-aa      tgtitun001  no  --- --------------   --------------  SS7
   08196-aa      dstn45      no  ---    004-000-004      4-000-4      SS7
 p-08196-aa      dstn45p     no  ---    004-200-004      4-040-4      SS7
   08197-aa      dstn46      no  ---    004-000-005    s-4-000-5      SS7
 p-08197-aa      dstn46p     no  ---    004-200-005    s-4-040-5      SS7
   08754-aa      tgtitun002  no  --- --------------   --------------  SS7
 s-08272-aa      dstn49      no  --- --------------   --------------  SS7
ps-08272-aa      dstn49p     no  --- --------------   --------------  SS7
 s-08273-aa      dstn50      no  ---    004-010-001   --------------  SS7
ps-08273-aa      dstn50p     no  ---    004-200-010   --------------  SS7
 s-08274-aa      dstn51      no  --- --------------      4-010-2      SS7
ps-08274-aa      dstn51p     no  --- --------------      4-050-2      SS7
 s-08275-aa      dstn52      no  --- --------------    s-4-010-3      SS7
ps-08275-aa      dstn52p     no  --- --------------    s-4-050-3      SS7
 s-08755-aa      tgtitun003  no  --- --------------   --------------  SS7
 s-08276-aa      dstn53      no  ---    004-010-004      4-010-4      SS7
ps-08276-aa      dstn53p     no  ---    004-200-040      4-050-4      SS7
 s-08277-aa      dstn54      no  ---    004-010-005    s-4-010-5      SS7
ps-08277-aa      dstn54p     no  ---    004-200-050    s-4-050-5      SS7
 s-08756-aa      tgtitun004  no  --- --------------   --------------  SS7
   08757-aa      tgtitun005  no  --- --------------   --------------  SS7
 s-08758-aa      tgtitun006  no  --- --------------   --------------  SS7
   08199-fr      dstn48dupfr no  --- --------------    s-4-006-1      SS7
   08199-tk      dstn48duptk no  --- --------------      4-006-2      SS7
   08198-nz      dstn47dupnz no  --- --------------   --------------  SS7
 s-08273-fr      dstn50dupfr no  --- --------------      4-006-3      SS7

   DPCN          CLLI        BEI ELEI   ALIASI          ALIASI        DMN
   08198-aa      dstn47      no  ---  s-4-000-6        4-000-6       SS7
 p-08198-aa      dstn47p     no  ---  s-4-040-6        4-040-6       SS7
   08199-aa      dstn48      no  ---    4-000-7      s-4-000-7       SS7
 p-08199-aa      dstn48p     no  ---    4-040-7      s-4-040-7       SS7
 s-08278-aa      dstn55      no  ---  s-4-010-6        4-010-6       SS7
ps-08278-aa      dstn55p     no  ---  s-4-050-6        4-050-6       SS7
 s-08279-aa      dstn56      no  ---    4-010-7      s-4-010-7       SS7
ps-08279-aa      dstn56p     no  ---    4-050-7      s-4-050-7       SS7
 s-08379-aa      rtxroute003 no  ---  s-4-058-7        4-058-7       SS7
   08198-fr      dstn47dupfr no  ---  s-4-005-7        4-005-7       SS7
   08198-tk      dstn47duptk no  ---    4-006-0      s-4-006-0       SS7

   DPCN          CLLI        BEI ELEI   ALIASN          ALIASI        DMN
   12688-aa      dstn57      no  ---  s-12688-aa     --------------  SS7
 p-12688-aa      dstn57p     no  ---  s-13688-aa     --------------  SS7
   12689-aa      dstn58      no  ---  s-12689-aa       6-050-1       SS7
 p-12689-aa      dstn58p     no  ---  s-13689-aa       6-060-1       SS7
   12690-aa      dstn59      no  ---  s-12690-aa     s-6-050-2       SS7
 p-12690-aa      dstn59p     no  ---  s-13690-aa     s-6-060-2       SS7
 s-12691-aa      dstn60      no  ---    12691-aa     --------------  SS7
ps-12691-aa      dstn60p     no  ---    13691-aa     --------------  SS7
 s-12692-aa      dstn61      no  ---    12692-aa       6-050-4       SS7
ps-12692-aa      dstn61p     no  ---    13692-aa       6-060-4       SS7
```

```
     s-12693-aa      dstn62      no  ---    12693-aa       s-6-050-5       SS7
    ps-12693-aa      dstn62p     no  ---    13693-aa       s-6-060-5       SS7
     s-08272-fr      dstn49dupfr no  ---    08300-fr      --------------   SS7
     s-08272-tk      dstn49duptk no  ---    08300-tk         4-006-7       SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full

;
```

This example shows point codes that have no point code subtype prefix. The example contains abbreviated output.

`rtrv-dstn:pcst=none`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pcst=none
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       001-001-000   stp1        no  --- --------------   --------------   SS7
       003-001-000   mstp        no  --- --------------   --------------   SS7
.
.
.
       200-200-*     cluster2    yes no  --------------   --------------   SS7
       005-006-001   ----------- no  --- --------------      005-006-001   SS7
       001-001-001   dstn01      no  --- --------------   --------------   SS7
       001-001-002   dstn02      no  ---    1-001-2       --------------   SS7
       001-001-003   dstn03      no  ---  s-1-001-3       --------------   SS7
       001-001-004   dstn04      no  --- --------------      02060-aa      SS7
       001-070-001   tgtansi001  no  --- --------------   --------------   SS7
       001-001-005   dstn05      no  --- --------------    s-02061-aa      SS7
       001-001-006   dstn06      no  --- --------------      001-001-006   SS7
       001-001-007   dstn07      no  ---    1-001-7         02063-aa      SS7
       001-002-000   dstn08      no  ---    1-002-0        s-02064-aa      SS7
       001-070-002   tgtansi002  no  --- --------------   --------------   SS7
       001-002-001   dstn09      no  ---  s-1-002-1         02065-aa      SS7
       001-002-002   dstn10      no  ---  s-1-002-2        s-02066-aa      SS7
       001-002-003   dstn11      no  ---    1-002-3         001-002-003   SS7
       001-002-004   dstn12      no  ---  s-1-002-4         001-002-004   SS7
       001-070-003   tgtansi003  no  --- --------------   --------------   SS7
       200-002-001   rtxroute001 no  --- --------------   --------------   SS7
       040-001-*     myncaibeno  no  no  --------------   --------------   SS7
       040-010-*     myncaibeno2 no  no  --------------   --------------   SS7
       010-*-*       ----------- --- --- --------------   --------------   SS7

       DPCI          CLLI        BEI ELEI   ALIASA          ALIASN/N24    DMN
       2-010-0       dstn13      no  --- --------------   --------------   SS7
       2-010-1       dstn14      no  ---    002-010-001   --------------   SS7
       2-010-2       dstn15      no  --- --------------      04178-aa      SS7
       2-010-3       dstn16      no  --- --------------    s-04179-aa      SS7
       2-070-1       tgtitui001  no  --- --------------   --------------   SS7
       2-010-4       dstn17      no  --- --------------      002-010-004   SS7
       2-010-5       dstn18      no  ---    002-010-005      04181-aa      SS7
       2-010-6       dstn19      no  ---    002-010-006    s-04182-aa      SS7
       2-010-7       dstn20      no  ---    002-010-007      002-010-007   SS7
       2-070-2       tgtitui002  no  --- --------------   --------------   SS7

       DPCI          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       3-030-0       dstn29      no  ---  s-3-030-0       --------------   SS7
```

```
       3-030-1       dstn30      no  ---  s-3-030-1          06385-aa      SS7
       3-030-2       dstn31      no  ---  s-3-030-2        s-06386-aa      SS7
       3-070-1       tgtitui005  no  ---  s-3-070-1       --------------   SS7
       3-030-3       dstn32      no  ---  s-3-030-3          003-030-003   SS7
       3-070-2       tgtitui006  no  ---  s-3-070-2       --------------   SS7

       DPCI          CLLI        BEI ELEI   ALIASN          ALIASN        DMN
       3-030-4       dstn33      no  ---  s-06388-aa        06388-aa      SS7
       3-030-5       dstn34      no  ---    06389-aa       s-06389-aa      SS7

       DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
       06157-aa      ----------- no  ---    020-005-002   --------------   SS7
       08192-aa      dstn41      no  --- --------------   --------------   SS7
       08193-aa      dstn42      no  ---    004-000-001   --------------   SS7
       08194-aa      dstn43      no  --- --------------      4-000-2       SS7
       08195-aa      dstn44      no  --- --------------    s-4-000-3       SS7
       08753-aa      tgtitun001  no  --- --------------   --------------   SS7
       08196-aa      dstn45      no  ---    004-000-004      4-000-4       SS7
       08197-aa      dstn46      no  ---    004-000-005    s-4-000-5       SS7
       08754-aa      tgtitun002  no  --- --------------   --------------   SS7
       08757-aa      tgtitun005  no  --- --------------   --------------   SS7
       08199-fr      dstn48dupfr no  --- --------------    s-4-006-1       SS7
       08199-tk      dstn48duptk no  --- --------------      4-006-2       SS7
       08198-nz      dstn47dupnz no  --- --------------   --------------   SS7

       DPCN          CLLI        BEI ELEI   ALIASI          ALIASI        DMN
       08198-aa      dstn47      no  ---  s-4-000-6          4-000-6       SS7
       08199-aa      dstn48      no  ---    4-000-7        s-4-000-7       SS7
       08198-fr      dstn47dupfr no  ---  s-4-005-7          4-005-7       SS7
       08198-tk      dstn47duptk no  ---    4-006-0        s-4-006-0       SS7

       DPCN          CLLI        BEI ELEI   ALIASN          ALIASI        DMN
       12688-aa      dstn57      no  ---  s-12688-aa      --------------   SS7
       12689-aa      dstn58      no  ---  s-12689-aa         6-050-1       SS7
       12690-aa      dstn59      no  ---  s-12690-aa       s-6-050-2       SS7

       DPCN24        CLLI        BEI ELEI   ALIASA          ALIASI        DMN
       003-003-004   ----------- no  ---    003-003-003      3-003-4       SS7
       006-005-001   dstn63      no  --- --------------   --------------   SS7
       006-005-002   dstn64      no  ---    006-005-002   --------------   SS7
       006-005-003   dstn65      no  --- --------------      6-005-3       SS7
       006-070-001   tgtitun24a  no  --- --------------   --------------   SS7
       006-005-004   dstn66      no  --- --------------    s-6-005-4       SS7
       006-005-005   dstn67      no  ---    006-005-005      6-005-5       SS7
       006-070-002   tgtitun24b  no  --- --------------   --------------   SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full
;
```

This example shows point codes with the spare point code subtype prefix (s-):

`rtrv-dstn:pcst=s`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pcst=s
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCI          CLLI        BEI ELEI   ALIASA          ALIASN/N24    DMN
     s-4-002-0       ----------- no  ---    010-001-001    s-08228-aa      SS7
     s-2-020-0       dstn21      no  --- --------------   --------------   SS7
```

```
     s-2-020-1       dstn22      no  ---    002-020-001   --------------   SS7
     s-2-020-2       dstn23      no  --- --------------      04258-aa      SS7
     s-2-020-3       dstn24      no  --- --------------    s-04259-aa      SS7
     s-2-070-3       tgtitui003  no  --- --------------   --------------   SS7
     s-2-020-4       dstn25      no  --- --------------      002-020-004   SS7
     s-2-020-5       dstn26      no  ---    002-020-005      04261-aa      SS7
     s-2-020-6       dstn27      no  ---    002-020-006    s-04262-aa      SS7
     s-2-020-7       dstn28      no  ---    002-020-007      002-020-007   SS7
     s-2-070-4       tgtitui004  no  --- --------------   --------------   SS7
     s-3-070-3       tgtitui007  no  --- --------------   --------------   SS7
     s-3-070-4       tgtitui008  no  --- --------------   --------------   SS7
     s-2-029-6       rtxroute002 no  ---    002-029-006    s-04269-aa      SS7

       DPCI          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
     s-3-040-2       dstn35      no  ---    3-040-2       --------------   SS7
     s-3-040-3       dstn36      no  ---    3-040-3         06467-aa       SS7
     s-3-040-4       dstn37      no  ---    3-040-4        s-06468-aa      SS7
     s-3-040-5       dstn38      no  ---    3-040-5         003-040-005    SS7

       DPCI          CLLI        BEI ELEI   ALIASN          ALIASN        DMN
     s-3-040-6       dstn39      no  ---  s-06471-aa         06471-aa      SS7
     s-3-040-7       dstn40      no  ---    06472-aa       s-06472-aa      SS7

       DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
     s-08272-aa      dstn49      no  --- --------------   --------------   SS7
     s-08273-aa      dstn50      no  ---    004-010-001   --------------   SS7
     s-08274-aa      dstn51      no  --- --------------      4-010-2       SS7
     s-08275-aa      dstn52      no  --- --------------    s-4-010-3       SS7
     s-08755-aa      tgtitun003  no  --- --------------   --------------   SS7
     s-08276-aa      dstn53      no  ---    004-010-004      4-010-4       SS7
     s-08277-aa      dstn54      no  ---    004-010-005    s-4-010-5       SS7
     s-08756-aa      tgtitun004  no  --- --------------   --------------   SS7
     s-08758-aa      tgtitun006  no  --- --------------   --------------   SS7
     s-08273-fr      dstn50dupfr no  --- --------------      4-006-3       SS7

       DPCN          CLLI        BEI ELEI   ALIASI          ALIASI        DMN
     s-08278-aa      dstn55      no  ---  s-4-010-6         4-010-6       SS7
     s-08279-aa      dstn56      no  ---    4-010-7        s-4-010-7       SS7
     s-08379-aa      rtxroute003 no  ---  s-4-058-7         4-058-7       SS7

       DPCN          CLLI        BEI ELEI   ALIASN          ALIASI        DMN
     s-12691-aa      dstn60      no  ---    12691-aa      --------------   SS7
     s-12692-aa      dstn61      no  ---    12692-aa        6-050-4       SS7
     s-12693-aa      dstn62      no  ---    12693-aa       s-6-050-5      SS7
     s-08272-fr      dstn49dupfr no  ---    08300-fr      --------------   SS7
     s-08272-tk      dstn49duptk no  ---    08300-tk        4-006-7       SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full
;
```

This example shows point codes with the private point code subtype prefix (p-):

`rtrv-dstn:pcst=p`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pcst=p
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
     p-001-001-001   dstn01p     no  --- --------------   --------------   SS7
```

```
     p-001-001-002   dstn02p     no  ---    1-011-2       --------------   SS7
     p-001-001-003   dstn03p     no  ---  s-1-011-3        --------------   SS7
     p-001-001-004   dstn04p     no  --- --------------       01060-aa      SS7
     p-001-001-005   dstn05p     no  --- --------------     s-01061-aa      SS7
     p-001-001-006   dstn06p     no  --- --------------       001-011-006   SS7
     p-001-001-007   dstn07p     no  ---    1-011-7          01063-aa      SS7
     p-001-002-000   dstn08p     no  ---    1-012-0        s-01064-aa      SS7
     p-001-002-001   dstn09p     no  ---  s-1-012-1          01065-aa      SS7
     p-001-002-002   dstn10p     no  ---  s-1-012-2        s-01066-aa      SS7
     p-001-002-003   dstn11p     no  ---    1-012-3          001-012-003   SS7
     p-001-002-004   dstn12p     no  ---  s-1-012-4          001-012-004   SS7

       DPCI          CLLI        BEI ELEI   ALIASA           ALIASN/N24    DMN
     p-2-010-0       dstn13p     no  --- --------------   --------------   SS7
     p-2-010-1       dstn14p     no  ---    002-100-001   --------------   SS7
     p-2-010-2       dstn15p     no  --- --------------       08178-aa      SS7
     p-2-010-3       dstn16p     no  --- --------------     s-08179-aa      SS7
     p-2-010-4       dstn17p     no  --- --------------       002-100-004   SS7
     p-2-010-5       dstn18p     no  ---    002-100-005       08181-aa      SS7
     p-2-010-6       dstn19p     no  ---    002-100-006     s-08182-aa      SS7
     p-2-010-7       dstn20p     no  ---    002-100-007       002-100-007   SS7

       DPCI          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
     p-3-030-0       dstn29p     no  ---  s-3-031-0        --------------   SS7
     p-3-030-1       dstn30p     no  ---  s-3-031-1          07385-aa      SS7
     p-3-030-2       dstn31p     no  ---  s-3-031-2        s-07386-aa      SS7
     p-3-030-3       dstn32p     no  ---  s-3-031-3          003-031-003   SS7

       DPCI          CLLI        BEI ELEI   ALIASN           ALIASN        DMN
     p-3-030-4       dstn33p     no  ---  s-07388-aa          07388-aa      SS7
     p-3-030-5       dstn34p     no  ---    07389-aa        s-07389-aa      SS7

       DPCN          CLLI        BEI ELEI   ALIASA           ALIASI        DMN
     p-08192-aa      dstn41p     no  --- --------------   --------------   SS7
     p-08193-aa      dstn42p     no  ---    004-200-001   --------------   SS7
     p-08194-aa      dstn43p     no  --- --------------       4-040-2       SS7
     p-08195-aa      dstn44p     no  --- --------------     s-4-040-3       SS7
     p-08196-aa      dstn45p     no  ---    004-200-004       4-040-4       SS7
     p-08197-aa      dstn46p     no  ---    004-200-005     s-4-040-5       SS7

       DPCN          CLLI        BEI ELEI   ALIASI           ALIASI        DMN
     p-08198-aa      dstn47p     no  ---  s-4-040-6          4-040-6       SS7
     p-08199-aa      dstn48p     no  ---    4-040-7        s-4-040-7       SS7

       DPCN          CLLI        BEI ELEI   ALIASN           ALIASI        DMN
     p-12688-aa      dstn57p     no  ---  s-13688-aa       --------------   SS7
     p-12689-aa      dstn58p     no  ---  s-13689-aa          6-060-1       SS7
     p-12690-aa      dstn59p     no  ---  s-13690-aa        s-6-060-2       SS7

       DPCN24        CLLI        BEI ELEI   ALIASA           ALIASI        DMN
     p-006-005-001   dstn63p     no  --- --------------   --------------   SS7
     p-006-005-002   dstn64p     no  ---    006-005-020   --------------   SS7
     p-006-005-003   dstn65p     no  --- --------------       6-050-3       SS7
     p-006-005-004   dstn66p     no  --- --------------     s-6-050-4       SS7
     p-006-005-005   dstn67p     no  ---    006-005-050       6-050-5       SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full
;
```

This example shows point codes with the private and spare point code subtype prefix (ps-):

```
rtrv-dstn:pcst=ps
```

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:pcst=ps
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCI          CLLI        BEI ELEI   ALIASA          ALIASN/N24    DMN
    ps-2-020-0       dstn21p     no  ---  --------------   --------------   SS7
    ps-2-020-1       dstn22p     no  ---    002-200-001   --------------   SS7
    ps-2-020-2       dstn23p     no  --- --------------      08258-aa      SS7
    ps-2-020-3       dstn24p     no  --- --------------    s-08259-aa      SS7
    ps-2-020-4       dstn25p     no  --- --------------      002-200-004   SS7
    ps-2-020-5       dstn26p     no  --- --------------   --------------   SS7
    ps-2-020-6       dstn27p     no  ---    002-200-005      08261-aa      SS7
    ps-2-020-7       dstn28p     no  ---    002-200-007      002-200-007   SS7

       DPCI          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
    ps-3-040-2       dstn35p     no  ---    3-041-2       --------------   SS7
    ps-3-040-3       dstn36p     no  ---    3-041-3         07467-aa      SS7
    ps-3-040-4       dstn37p     no  ---    3-041-4        s-07468-aa     SS7
    ps-3-040-5       dstn38p     no  ---    3-041-5         003-041-005   SS7

       DPCI          CLLI        BEI ELEI   ALIASN          ALIASN        DMN
    ps-3-040-6       dstn39p     no  ---  s-07471-aa         07471-aa      SS7
    ps-3-040-7       dstn40p     no  ---    07472-aa       s-07472-aa      SS7

       DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
    ps-08272-aa      dstn49p     no  --- --------------   --------------   SS7
    ps-08273-aa      dstn50p     no  ---    004-200-010   --------------   SS7
    ps-08274-aa      dstn51p     no  --- --------------      4-050-2       SS7
    ps-08275-aa      dstn52p     no  --- --------------    s-4-050-3       SS7
    ps-08276-aa      dstn53p     no  ---    004-200-040      4-050-4       SS7
    ps-08277-aa      dstn54p     no  ---    004-200-050    s-4-050-5       SS7

       DPCN          CLLI        BEI ELEI   ALIASI          ALIASI        DMN
    ps-08278-aa      dstn55p     no  ---  s-4-050-6         4-050-6       SS7
    ps-08279-aa      dstn56p     no  ---    4-050-7        s-4-050-7       SS7

       DPCN          CLLI        BEI ELEI   ALIASN          ALIASI        DMN
    ps-12691-aa      dstn60p     no  ---    13691-aa      --------------   SS7
    ps-12692-aa      dstn61p     no  ---    13692-aa         6-060-4       SS7
    ps-12693-aa      dstn62p     no  ---    13693-aa       s-6-060-5       SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full

;
```

This example shows the output for an ANSI destination point code with a single SPC:

```
rtrv-dstn:dpca=1-56-5
```

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0
       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       001-056-005   ----------- no  ---    1-056-2         16000         SS7
       SPC          NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       -----------  no           none   off   none     no     no    sxudt2udt

    Destination table is (12 of 2000) 1% full
```

```
    Alias table is (4 of 12000) 1% full
;
```

This example shows the 24-bit ITU-N destination point code(s) assigned to the 24-bit ITU-N secondary point code:

`rtrv-dstn:spcn24=6-5-0`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:spcn24=6-5-0
    Command entered at terminal #4.
    Extended Processing Time may be Required

    SPCN24=    006-005-000

       DPCN24        CLLI        BEI ELEI   ALIASA          ALIASI        DMN
       003-003-004   ----------- no  ---    003-003-003     3-003-4       SS7
       006-005-001   dstn63      no  --- --------------   --------------   SS7
     p-006-005-001   dstn63p     no  --- --------------   --------------   SS7
       006-005-002   dstn64      no  ---    006-005-002   --------------   SS7
     p-006-005-002   dstn64p     no  ---    006-005-020   --------------   SS7
       006-005-003   dstn65      no  --- --------------      6-005-3       SS7
     p-006-005-003   dstn65p     no  --- --------------      6-050-3       SS7
       006-070-001   tgtitun24a  no  --- --------------   --------------   SS7
       006-005-004   dstn66      no  --- --------------    s-6-005-4       SS7
     p-006-005-004   dstn66p     no  --- --------------    s-6-050-4       SS7
       006-005-005   dstn67      no  ---    006-005-005     6-005-5       SS7
     p-006-005-005   dstn67p     no  ---    006-005-050     6-050-5       SS7
       006-070-002   tgtitun24b  no  --- --------------   --------------   SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full
;
```

This example shows a summary report for all point code destinations that are members of the given network. This does not include the specified network routing point code 40-*-*.

`rtrv-dstn:dpc=40-**-*`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:dpc=40-**-*
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       040-001-*     myncaibeno  no  no   --------------   --------------   SS7
       040-010-*     myncaibeno2 no  no   --------------   --------------   SS7
       040-001-001   noncluster1 no  --- --------------   --------------   SS7
       040-001-002   noncluster2 no  --- --------------   --------------   SS7
    Destination table is (211 of 2000) 11% full
    Alias table is (216 of 12000) 2% full

;
```

This example shows summary output when proxy point code destinations are present:

```
rtrv-dstn
```

```
    tekelecstp 10-10-15 14:46:12 EST  EAGLE 43.0.0
    rtrv-dstn
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       002-002-002   ----------- no  ---  --------------   --------------   SS7
       001-001-001   ----------- no  ---  --------------   --------------   SS7
       001-001-002   ----------- no  ---  --------------   --------------   SS7
       001-001-003   ----------- no  ---  --------------   --------------   SS7
       001-001-004   ----------- no  ---  --------------   --------------   SS7
       001-001-005   ----------- no  ---  --------------   --------------   SS7
       001-001-006   ----------- no  ---  --------------   --------------   SS7
       001-001-007   ----------- no  ---  --------------   --------------   SS7
       001-001-008   ----------- no  ---  --------------   --------------   SS7
       001-001-009   ----------- no  ---  --------------   --------------   SS7
       001-001-010   ----------- no  ---  --------------   --------------   SS7

    Destination table is (11 of 2000) 1% full
    Alias table is (0 of 12000) 0% full
    PPC table is (1 of 10) 10% full

;
```

This example shows the output for a destination that references a proxy point code:

```
rtrv-dstn:dpc=1-1-1
```

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0
       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       001-001-001   ----------- no  ---  --------------   --------------   SS7

       PPCA         NCAI PRX     RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       002-002-002  ---- no      none   off   none     no     no    none

    Destination table is (30 of 2000) 2% full
    Alias table is (0 of 12000) 0% full
    PPC table is (1 of 100) 10% full
;
```

This example shows summary information for all destinations using a specified proxy point code:

```
rtrv-dstn:ppc=2-2-2
```

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:ppc=2-2-2
    Command entered at terminal #4.
    Extended Processing Time may be Required

    PPCA=    002-002-002

       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       001-001-001   ----------- no  ---  --------------   --------------   SS7
       001-001-002   ----------- no  ---  --------------   --------------   SS7
       001-001-003   ----------- no  ---  --------------   --------------   SS7
       001-001-004   ----------- no  ---  --------------   --------------   SS7
       001-001-005   ----------- no  ---  --------------   --------------   SS7
       001-001-006   ----------- no  ---  --------------   --------------   SS7
```

```
       001-001-007   ----------- no  --- --------------   --------------   SS7
       001-001-008   ----------- no  --- --------------   --------------   SS7
       001-001-009   ----------- no  --- --------------   --------------   SS7
       001-001-010   ----------- no  --- --------------   --------------   SS7

    Destination table is (11 of 2000) 1% full
    Alias table is (0 of 12000) 0% full
    PPC table is (1 of 10) 10% full

;
```

This example shows summary information for all proxy destinations:

```
rtrv-dstn:prx=yes
```

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:prx=yes
    Command entered at terminal #4.
    Extended Processing Time may be Required

    PRX= yes

       DPCA          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
       001-001-001   ----------- no  --- --------------   --------------   SS7
       001-001-002   ----------- no  --- --------------   --------------   SS7
       001-001-003   ----------- no  --- --------------   --------------   SS7
       001-001-004   ----------- no  --- --------------   --------------   SS7

    Destination table is (17 of 2000) 1% full
    Alias table is (0 of 12000) 0% full
    PPC table is (4 of 10) 40% full
;
```

This example shows the output for a specific destination point code when the Proxy Point Code feature is turned on and the DPC refers to a secondary point code. The *homesmsc* and *homescp* flags are provisioned.

```
rtrv-dstn:dpc=3-3-3
```

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0
       DPCA          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN
       003-003-003   ----------- no  --- --------------   --------------   SS7
       SPCA         NCAI PRX     RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       009-009-009  ---- no      none   off   none     yes    yes   none
    Destination table is (4 of 2000) 1% full
    Alias table is (0 of 12000) 0% full
    PPC table is (2 of 10) 20% full

;
```

This example shows the ITUN destination point code(s) within a spare group code when the ITUDUPPC feature is on and the STP flexible point code option (*npcfmti*) is set to the 4-member ITUN point format to (*m1-m2-m3-m4-gc*):

```
rtrv-dstn:dpcn=s-*-*-*-*-fr
```

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-dstn:dpcn=s-*-*-*-*-fr
```

```
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCN          CLLI        BEI ELEI   ALIASA           ALIASI        DMN
     s-1034-0-0-1-fr dstn50dupfr no  ---  --------------      4-006-3       SS7

       DPCN          CLLI        BEI ELEI   ALIASN           ALIASI        DMN
     s-1034-0-0-0-fr dstn49dupfr no  ---    1037-1-0-0-fr --------------   SS7

    Destination table is (208 of 2000) 10% full
    Alias table is (216 of 12000) 2% full

;
```

This example shows the output when the rcause and nprst parameters are provisioned:

`rtrv-dstn:dpci=1-1-1`

```
    eagle10115 10-08-12 10:00:37 EST  EAGLE 43.0.0

       DPCI          CLLI        BEI ELEI   ALIASA           ALIASN/N24    DMN
       1-001-1       ----------- no  ---    001-001-001      16000         SS7

       SPCI         NCAI         RCAUSE NPRST SPLITIAM HMSMSC HMSCP SCCPMSGCNV
       -----------  no           5      on    none     no     no    none

    Destination table is (12 of 2000) 1% full
    Alias table is (4 of 12000) 1% full
;
```

This example shows the output when IAM/SAM splitting is provisioned:

`rtrv-dstn:splitiam=20`

```
    tklc1191001 10-10-28 07:25:13 EST  EAGLE5 43.0.0
    rtrv-dstn:splitiam=20
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA          CLLI        BEI ELEI   ALIASI           ALIASN/N24    DMN

       DPCI          CLLI        BEI ELEI   ALIASA           ALIASN/N24    DMN
       1-001-1       ----------- no  ---    001-001-001   --------------   SS7

       DPCN          CLLI        BEI ELEI   ALIASA           ALIASI        DMN
       DPCN24        CLLI        BEI ELEI   ALIASA           ALIASI        DMN

    DESTINATION ENTRIES ALLOCATED:   8000
        FULL DPC(s):                  864
        EXCEPTION DPC(s):            5184
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 0
        TOTAL DPC(s):                6048
        CAPACITY (% FULL):             76%
    ALIASES ALLOCATED:               8000
        ALIASES USED:                1511
        CAPACITY (% FULL):             19%
    X-LIST ENTRIES ALLOCATED:         500
;
```

This example shows summary information for all the destinations with sccpmsgcnv=udt2xudt:

```
rtrv-dstn:sccpmsgcnv=udt2xudt
```

```
    eagle10115 10-11-22 10:00:36 EST  EAGLE 43.0.0

       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       009-009-009   ----------- no  --- --------------   --------------   SS7

       DPCI          CLLI        BEI ELEI   ALIASA          ALIASN/N24    DMN

       DPCN          CLLI        BEI ELEI   ALIASA          ALIASI        DMN
       01234         ----------- no  --- --------------   --------------   SS7

       DPCN24        CLLI        BEI ELEI   ALIASA          ALIASI        DMN

    Destination table is (5 of 2000) 1% full
    Alias table is (0 of 12000) 0% full

;
```

This example shows the output when the NCR, NRT, and CRMD features are on, and the 10,000 Routesets feature is enabled:

```
rtrv-dstn
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0
       DPCA          CLLI        BEI ELEI   ALIASI          ALIASN/N24    DMN
       003-003-003   ----------- no  --- --------------   --------------   SS7
       004-004-004   ----------- no  --- --------------   --------------   SS7
       005-005-005   ----------- no  --- --------------   --------------   SS7
       008-001-*     ----------- no  no  --------------   --------------   SS7

    DESTINATION ENTRIES ALLOCATED:   10000
        FULL DPC(s):                    9
        NETWORK DPC(s):                 0
        CLUSTER DPC(s):                 1
        TOTAL DPC(s):                  10
        CAPACITY (% FULL):             1%
    ALIASES ALLOCATED:               10000
        ALIASES USED:                   0
        CAPACITY (% FULL):              0%
    X-LIST ENTRIES ALLOCATED:         500
;
```

This example shows the output when the CRMD, NCR, NRT features are off and the 10,000 Routesets feature is enabled. If the route table is not empty, the provisioned DSTP is also displayed:

```
rtrv-dstn
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0
    Destination table is (10 of 10000) 1% full
    Alias table is (8 of 10000) 1% full
    RTRV-DSTN: MASP A – COMPLTD
;
```

This example shows the output when the J7 Support feature is enabled:

```
rtrv-dstn:pctype=itun16
```

```
    tekelecstp 13-02-27 15:13:41 EST  45.0.0-64.56.0
    rtrv-dstn:pctype=ansi
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCN16          CLLI      BEI ELEI   ALIASI           ALIASN
DMN
       001-002-006   ----------- no  ---    001-002-005     ---------
SS7

    Destination table is (2 of 2000) 1% full
    Alias table is (2 of 12000) 1% full

;
```

Legend

- **DPC/DPCA/DPCI/DPCN/DPCN24**—Destination point code
- **CLLI**—Command Language Location Indicator
- **BEI**—Broadcast Exception Indicator
- **ELEI**—Cluster Exception-List Exclusion Indicator
- **NCAI**—Nested Cluster Allowed Indicator
- **ALIASA/ALIASI/ALIASN/ALIASN24**—Alias point code
- **SPC**—Secondary point code
- **DMN**—Destination Entity Domain
- **PPC**—Proxy Point Code
- **PRX**—Proxy Point Code Indicator
- **RCAUSE**—Release Cause
- **NPRST**—NM Bits Reset
- **SPLITIAM**—IAM/SAM Split
- **HOMESMSC**—Home SMSC
- **HOMESCP**—Home SCP
- **SCCPMSGCNV**—SCCP Message Conversion Indicator

Related Commands

chg-dstn, *chg-rte*, *dlt-dstn*, *dlt-rte*, *ent-dstn*, *ent-rte*, *rept-stat-dstn*, *rept-stat-rte*, *rtrv-rte*

rtrv-e1 Retrieve E1 Information

Use this command to retrieve information for a specified E1 interface or for all E1 interfaces that have been defined by the `ent-e1` command for an HC-MIM or E5-E1T1/E5-E1T1-B card used as an E1 or SE-HSL card.

Parameters

e1port (optional)

E1 port number

The value must be an E1 port that has already been configured with an E1 interface on the specified E1 card (loc parameter).

Range:

1 - 8

Default:

If not specified, all E1 ports are listed.

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

If not specified, all E1 card locations are listed.

Example

```
rtrv-e1
rtrv-e1:loc=1307:e1port=2
rtrv-e1:loc=1311:e1port=1
```

Dependencies

The loc and e1port parameters must be specified together in the command.

The E1 interface of the E1 card specified by the loc parameter must already be defined (see the `ent-e1` command) before this command can be entered.

The card specified by the loc parameter must be a LIME1 card type.

An E1 interface must already be defined on the port specified by the e1port parameter before this command can be entered.

The following card locations (loc parameter) are not valid for this command: 1113 through 1118 and all *xy*09 and *xy*10 locations (where *x* is the frame and *y* is the shelf).

Notes

None.

Output

This example shows HC-MIM cards used as E1 cards. Cards with CHANBRDG=MASTER or CHANBRDG=SLAVE have 2 ports configured in channel bridging mode to allow non-signaling data pass-through.

`rtrv-e1`

```
    rlghncxa03w 05-01-20 09:07:58 EST  EAGLE5 33.0.0
         E1                                                  LINK   MIMSU
    LOC   PORT  CRC4  CAS  ENCODE  E1TSEL    SI  SN  CHANBRDG  CLASS  RATE
    1307  7     ON    OFF  HDB3    LINE      0   0   ------    CHAN   ----
    1307  8     ON    OFF  HDB3    LINE      0   0   ------    CHAN   ----
    1311  1     OFF   OFF  AMI     EXTERNAL  3   6   MASTER    CHAN   ----
    1311  2     OFF   OFF  AMI     EXTERNAL  3   6   SLAVE     CHAN   ----
    1311  5     OFF   OFF  AMI     RECOVERED 3   6   MASTER    CHAN   ----
    1311  6     OFF   OFF  AMI     RECOVERED 3   6   SLAVE     CHAN   ----
;
```

This example shows time slot entries (TSx) for the E1 card.

`rtrv-e1:loc=1307:e1port=7`

```
    rlghncxa03w 05-01-20 09:07:58 EST  EAGLE5 33.0.0
         E1                                                  LINK   MIMSU
    LOC   PORT  CRC4  CAS  ENCODE  E1TSEL    SI  SN  CHANBRDG  CLASS  RATE
    1307  7     ON    OFF  HDB3    LINE      0   0   ------    CHAN   ----

    TS0  (N/A)     TS8   ------    TS16  ------    TS24  ------
    TS1  ------    TS9   ------    TS17  ------    TS25  ------
    TS2  ------    TS10  ------    TS18  ------    TS26  ------
    TS3  ------    TS11  ------    TS19  ------    TS27  ------
    TS4  ------    TS12  1307,A    TS20  ------    TS28  ------
    TS5  ------    TS13  ------    TS21  ------    TS29  ------
    TS6  ------    TS14  ------    TS22  ------    TS30  ------
    TS7  ------    TS15  ------    TS23  ------    TS31  ------
;
```

This example shows information for port 7 for the E1 card in card location 1311. Port 8 is channel bridged with port 7 on this card for non-signaling data pass through.

`rtrv-e1:loc=1311:e1port=7`

```
    rlghncxa03w 05-01-20 09:07:58 EST  EAGLE5 33.0.0
         E1                                                  LINK   MIMSU
    LOC   PORT  CRC4  CAS  ENCODE  E1TSEL    SI  SN  CHANBRDG  CLASS  RATE
    1311  7     OFF   OFF  AMI     EXTERNAL  3   6   MASTER    CHAN   ----

    TS0  (N/A)     TS8   ------    TS16  ------    TS24  ------
    TS1  ------    TS9   ------    TS17  1311,B31  TS25  ------
    TS2  ------    TS10  ------    TS18  ------    TS26  ------
    TS3  ------    TS11  ------    TS19  ------    TS27  ------
    TS4  ------    TS12  1311,A    TS20  ------    TS28  ------
    TS5  ------    TS13  ------    TS21  1311,A24  TS29  ------
    TS6  ------    TS14  ------    TS22  ------    TS30  ------
    TS7  ------    TS15  ------    TS23  ------    TS31  ------
;
```

This example shows information for port 8 for the E1 card in card location 1311. Port 8 is channel bridged with port 7 on this card for non-signaling data pass through.

```
rtrv-e1:loc=1311:e1port=8
```

```
    rlghncxa03w 05-01-20 09:07:58 EST  EAGLE5 33.0.0
          E1                                                  LINK   MIMSU
    LOC   PORT  CRC4  CAS  ENCODE  E1TSEL    SI  SN  CHANBRDG  CLASS  RATE
    1311  8     OFF   OFF  AMI     EXTERNAL  3   6   SLAVE     CHAN   ----
;
```

This example shows information for the card in location 1307, which has an SE-HSL link. Time slot entries (TSx) are not shown for cards with SE-HSL links because time slots are not configured for "unchannelized" cards.

```
rtrv-e1:loc=1307:e1port=7
```

```
    rlghncxa03w 05-05-20 09:07:58 EST  EAGLE5 34.0.0
          E1                                                  LINK   MIMSU
    LOC   PORT  CRC4  CAS  ENCODE  E1TSEL    SI  SN  CHANBRDG  CLASS  RATE
    1307  7     ON    ---  HDB3    LINE      --  --  ------    UNCHAN 1000
;
```

This example shows HC-MIM cards used as E1 cards. Cards with LINKCLASS=UNCHAN have SE-HSL links.

```
rtrv-e1
```

```
    rlghncxa03w 05-01-20 09:07:58 EST  EAGLE5 34.0.0
          E1                                                  LINK    MINSU
    LOC   PORT  CRC4  CAS  ENCODE  E1TSEL    SI  SN  CHANBRDG  CLASS   RATE
    1307  7     ON    ---  HDB3    LINE      --  --  ------    UNCHAN  1000
    1307  8     ON    ---  HDB3    LINE      --  --  ------    UNCHAN  2000
    1311  1     OFF   ON   AMI     LINE      1   1   ------    CHAN    ----
;
```

Legend

- **LOC**—E1 card location
- **E1PORT**—E1 port number on an E1 card
- **CRC4**—CRC4 indicator
- **CAS**—CAS/CRC indicator (*on*: CAS is used; *off*: CRC is used)
- **ENCODE**—Indicator for use of HDB3 or AMI encoding/decoding
- **E1TSEL**—E1 timing source indicator (*external*: master timing source; *line*: slave timing source; *recovered*: the timing source for the even-numbered port in a channel bridged pair is recovered from the odd-numbered port of the pair.)
- **SI**—Value of two Spare International bits of NFAS data
- **SN**—Value of five Spare National bits of NFAS data
- **CHANBRDG**—Indicates whether an odd numbered port is not channel bridged with its adjacent even numbered port for non-signaling data pass through (dashes), or the port is the odd-numbered channel bridged port on the card (MASTER), or the port is the even-numbered channel bridged port on the card (SLAVE) on an HC-MIM or E5-E1T1 card.

- **LINKCLASS**—Indicates whether an HC-MIM or E5-E1T1 card is used as a "channelized" E1 Card (CHAN) or an "unchannelized" SE-HSL card (UNCHAN)
- **MINSURATE**—Minimum number of signaling units present on a link uniformly distributed. A value appears in this field only when the LINKCLASS field value is UNCHAN.
- **TSx**—Timeslot

Related Commands

chg-e1, *dlt-e1*, *ent-e1*, *tst-e1*

rtrv-eisopts

Retrieve EAGLE Support for Integrated Sentinel Options

Use this command to retrieve the status of the copy functions for the EAGLE 5 Integrated Monitoring Support (E5IS) feature.

Parameters

This command has no parameters.

Example

`rtrv-eisopts`

Dependencies

The EAGLE 5 Integrated Monitoring Support (E5IS) feature must be turned on before this command can be entered.

Notes

None

Output

`rtrv-eisopts`

```
    rlghncxa03w 10-02-04 10:07:58 EST  EAGLE 42.0.0
    EIS OPTIONS
    --------------------------------
    EISCOPY = ON

    FAST COPY OPTIONS
    --------------------------------
    FCGPL = IPSG      FCMODE = FCOPY
    FCGPL = IPGHC     FCMODE = FCOPY
    --------------------------------
;
```

Related Commands

chg-eisopts

rtrv-enum-acl

Retrieve ENUM ACL Table Entry

Use this command to retrieve an entry from the ENUM Access Control List (ACL) Table. The ENUM ACL Table supports the provisioning information related to the allowed IP addresses for the ENUM application.

Parameters

ipaddr (optional)

This is a TCP/IP address expressed in standard dot notation. It specifies allowed IP addresses for the ENUM application.

Range:

Four numbers separated by dots, with each number in the range of 0-255, *.

Note: It also supports wildcard characters as follows:

xxx.xxx.xxx.*
xxx.xxx.*.*
xxx.*.*.*

where xxx can be any number in range of 0-255.

System Default:

0.0.0.0

Example

```
rtrv-enum-acl
rtrv-enum-acl:ipaddr=10.248.13.9
rtrv-enum-acl:ipaddr=10.248.13.*
rtrv-enum-acl:ipaddr=10.248.*.*
rtrv-enum-acl:ipaddr=10.*.*.*
```

Dependencies

The ENUM ACL Table should be accessible.

The IP address specified by the IPADDR parameter should be provisioned in the ENUM ACL Table.

The IP address specified by the IPADDR parameter must be a valid IP address.

Notes

Wildcard IP addresses are allowed to support the ranges of IP addresses.

Output

This example displays output when the IPADDR parameter is not specified:

`rtrv-enum-acl`

```
tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    rtrv-enum-acl
    Command entered at terminal #4.
    RTRV-ENUM-ACL: MASP A - COMPLTD
;
   ACL IPADDR
   ---------------
   10.248.13.4
   10.245.13.*
   12.*.*.*

   ENUMACL table is (3 of 100) 3% full.
```

`rtrv-enum-acl:ipaddr=10.248.13.9`

```
tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    rtrv-enum-acl:ipaddr=10.248.13.9
    Command entered at terminal #4.
    RTRV-ENUM-ACL: MASP A - COMPLTD
;
   ACL IPADDR
   ---------------
   10.248.13.9
```

Related Commands

dlt-enum-acl, *ent-enum-acl*

rtrv-enumopts — Retrieve ENUM Options

Use this command to retrieve the parameters from the ENUMOPTS table.

Parameters

This command has no input parameters.

Example

`rtrv-enumopts`

Dependencies

The ENUMOPTS table should be accessible.

Output

This example shows output with default ENUM options.

`rtrv-enumopts`

```
tekelecstp 14-06-02 11:43:52 EST EAGLE 46.1.0
rtrv-enumopts
Command entered at terminal #4.

MAXDNDIGS = 10
CONGLVL1  = 40
CONGLVL2  = 80
CNGNTFY   = no
CNGRCODE  = ENUM QRY REFUSED(5)

;
```

Related Commands

chg-enumopts

rtrv-enum-prof

Retrieve ENUM Profile Table Entry

Use this command to retrieve the existing profile entry which has data to generate the ENUM response for three supported resource record formats such as NAPTR, NS and CNAME. The ENUM Profile Table stores the profile entry.

Parameters

prn (optional)

Profile name. This parameter specifies the unique logical name assigned to the profile entry used to generate the ENUM response.

Range:

zzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and up to 10 characters in length. Valid values are a..z, A..Z, 0..9.

rtrype (optional)

Response type. This parameter specifies the response type for the profile. It identifies the profile used to generate the ENUM response for each resource record type.

Range:

naptr

cname

ns

Default:

No change to the current value

System Default:

naptr

sparm (optional)

Service parameter. This parameter specifies the supported ENUM services. The ENUM application shall only support two ENUM Services.

Range:

tel

sip

Default:

No change to the current value

System Default:

tel

Example

```
rtrv-enum-prof:prn=pr1
rtrv-enum-prof:sparm=tel
rtrv-enum-prof:rtype=ns
rtrv-enum-prof:rtype=naptr:sparm=sip
```

Dependencies

The ENUM Profile Table should be accessible.

The Profile name parameter cannot be specified with any other parameter.

The Profile name must be present in the ENUM Profile Table.

Either provide the SPARM parameter alone or with the RTYPE=NAPTR parameter.

Notes

None.

Output

The example shows the output of a profile having RTYPE = NAPTR.

```
> rtrv-enum-prof:prn=pr1
```

```
tekelecstp 18-05-29 04:55:20 MST  EST EAGLE 46.1.0
rtrv-enum-prof:prn=pr1
```

```
  PROFILE NAME: pr1
    RTYPE    : naptr      SPARM    : sip
    PREF     : yes        RRDOMAIN : abc.oracle.com
    RPDOMAIN : ---
;
```

The example shows the output of a profile having RTYPE = NS.

```
> rtrv-enum-prof:prn=pr2
```

```
    tekelecstp 18-05-29 04:57:20 MST  EST EAGLE 46.1.0
    rtrv-enum-prof:prn=pr2

    PROFILE NAME: ns
     RTYPE    : ns          SPARM  : ---         PREF  : ---
     RRDOMAIN : ---
     RPDOMAIN : def.oracle.com
;
```

The example shows the output of a NAPTR type profile in which replacement domain name is not provisioned.

```
> rtrv-enum-prof:prn=pr3
```

```
    tekelecstp 18-05-29 04:58:20 MST  EST EAGLE 46.1.0
    rtrv-enum-prof:prn=pr3

  PROFILE NAME: pr3
    RTYPE    : naptr      SPARM    : sip
    PREF     : yes        RRDOMAIN : abc1.oracle.com
    RPDOMAIN : ---
;
```

The example shows the output of `rtrv-enum-prof` without any parameter.

```
rtrv-enum-prof
```

```
    tekelecstp 18-05-29 04:59:20 MST  EST EAGLE 46.1.0
    rtrv-enum-prof

    PROFILE NAME: default
     RTYPE    : ns          SPARM  : ---         PREF  : ---
     RRDOMAIN : ---
     RPDOMAIN : abc.com

    PROFILE NAME: ns
     RTYPE    : ns          SPARM  : ---         PREF  : ---
     RRDOMAIN : ---
     RPDOMAIN : def.oracle.com

    PROFILE NAME: cname
     RTYPE    : cname       SPARM  : ---         PREF  : ---
     RRDOMAIN : ---
     RPDOMAIN : def.oracle.com

    PROFILE NAME: nap_prof
```

```
     RTYPE    : naptr       SPARM  : tel         PREF  : no
     RRDOMAIN : ---
     RPDOMAIN : ---

    ENUMPROF table is (4 of 1024) 1% full.

;
```

Related Commands

chg-enum-prof, *dlt-enum-prof*, *ent-enum-prof*

rtrv-enum-profsel Retrieve ENUM Profile Selection Table or DN Block Table Entry

Use this command to retrieve an entry from the ENUM Profile Selection Table or the ENUM DN Block Table. The ENUM Profile Selection Table supports the provisioning information related to mapping the Entity Id to the Profile Selection Id. The ENUM DN Block table supports the provisioning information related to mapping the DN Block to the Profile Selection Id.

Parameters

edn (optional)

End Dialed Number

Range:

5-15 digits

entityid (optional)

Network Entity

Range:

1-15 digits

sdn (optional)

Start Dialed Number

Range:

5-15 digits

Example

```
rtrv-enum-profsel:entityid=12345
rtrv-enum-profsel:sdn=11223344
rtrv-enum-profsel:edn=1324566
rtrv-enum-profsel
```

Dependencies

The value specified for the EntityId, SDN, or EDN parameters must already exist in the ENUM Profile Selection Table or the ENUM DN Block Table respectively.

The ENUM Profile Selection Table should be accessible.

The ENUM DN Block Table should be accessible.

Entity Id cannot be specified with SDN or EDN.

Notes

None

Output

This example displays output when entity Id is specified:

`rtrv-enum-profsel:entityid=1234`

```
    tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    rtrv-enum-profsel:entityid=1234
    Command entered at terminal #4.
    RTRV-ENUM-PROFSEL: MASP A - COMPLTD
;

    Entity ID        PRN1       PRN2       PRN3       PRN4
    ------------------------------------------------------------------
    1234             ---        cname      ---        naptr
```

This example displays output when SDN is specified:

`rtrv-enum-profsel:sdn=1234567`

```
    tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    rtrv-enum-profsel:sdn=1234567
    Command entered at terminal #4.
    RTRV-ENUM-PROFSEL: MASP A - COMPLTD
;
    SDN         EDN              PRN1       PRN2       PRN3       PRN4
    ------------------------------------------------------------------
    1234567     1235555          prof1      prof2      Prof3      Prof4
```

This example displays output when EDN is specified:

`rtrv-enum-profsel:edn=1235555`

```
    tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    rtrv-enum-profsel:edn=1235555
    Command entered at terminal #4.
```

```
    RTRV-ENUM-PROFSEL: MASP A - COMPLTD
;

    SDN         EDN              PRN1       PRN2       PRN3       PRN4
    ------------------------------------------------------------------------
    1234567     1235555          prof1      prof2      Prof3      Prof4
```

This example displays output of `rtrv-enum-profsel` without any parameters specified:

`rtrv-enum-profsel`

```
    tekelecstp 14-05-28 15:04:28 EST EAGLE 46.1.0
    rtrv-enum-profsel
    Command entered at terminal #4.
    RTRV-ENUM-PROFSEL: MASP A - COMPLTD
;

    Entity ID        PRN1       PRN2       PRN3       PRN4
    ------------------------------------------------------------------------
    1234             ---        cname      ---        naptr
    12345            ns1        ---        naptr      ---
    12346            ---        ---        ---        naptr


    SDN         EDN              PRN1       PRN2       PRN3       PRN4
    ------------------------------------------------------------------------
    1234567     1235555          prof1      prof2      Prof3      Prof4


    ENUMPRID table is (3 of 1024) 1% full.

    ENUMDNBK table is (1 of 1024) 1% full.
```

Related Commands

chg-enum-profsel, *dlt-enum-profsel*, *ent-enum-profsel*

rtrv-feat

Retrieve Feature

Use this command to show the status of optional features in the system that are controlled with the `chg-feat` command.

Parameters

This command has no parameters.

Example

`rtrv-feat`

Dependencies

None

Notes

This command is not allowed in upgrade mode.

Output

Caution: The following output example may differ from the output shown at your terminal and may include unsupported features. Some optional features must be purchased before you turn the feature on. If you are not sure whether you are entitled to turn a feature on, contact your Oracle Sales Representative or Account Representative. After you turn on a feature with the `chg-feat` command, you cannot turn it off.

`rtrv-feat`

```
    tekelecstp 10-03-10 16:50:04 EST  EAGLE 42.0.0
    EAGLE FEATURE LIST
    GTT      = off     GWS      = off     NRT      = off
    LAN      = off     CRMD     = off     SEAS     = off
    LFS      = off     MTPRS    = off     FAN      = off
    DSTN5000 = off     WNP      = off     CNCF     = off
    TLNP     = off     SCCPCNV  = off     TCAPCNV  = off
    IPISUP   = off     PLNP     = off     NCR      = off
    ITUMTPRS = off     SLSOCB   = off     EGTT     = off
    VGTT     = off     MPC      = off     ITUDUPPC = off
    MEASPLAT = off     TSCSYNC  = off     E5IS     = off
;
```

Legend

- **GTT**—Global Title Translation feature
- **GWS**—Gateway Screening feature
- **NRT**—Network Routing feature
- **LAN**—STPLAN feature
- **CRMD**—Cluster Routing and Management Diversity feature
- **LFS**—Link Fault Sectionalization feature
- **MTPRS**—ANSI MTP Restart feature
- **FAN**—Cooling Fan feature
- **DSTN5000**—DSTN5000 (5000 Routes) feature
- **WNP**—Wireless Number Portability feature
- **CNCF**—Calling Name Conversion Facility with Redirect Capability feature
- **TLNP**—Triggerless Local Number Portability feature
- **IPISUP**—ISUP Routing over IP feature
- **SEAS**—SEAS feature
- **SCCPCNV**—SCCP Conversion feature
- **TCAPCNV**—TCAP Conversion feature
- **PLNP**—PCS 1900 Number Portability feature
- **NCR**—Nested Cluster Routing feature

- **ITUMTPRS**—ITU MTP Restart feature
- **SLSOCB**—Other CIC Bit Used feature
- **EGTT**—Enhanced Global Title Translation feature
- **VGTT**—Variable Length GTT feature
- **MPC**—Multiple Point Code feature
- **ITUDUPPC**—ITU National Duplicate Point Code feature
- **TSCSYNC**—Time Slot Counter Synchronization (TSC) feature
- **E5IS**—EAGLE 5 Integrated Monitoring Support feature
- **MEASPLAT**—Measurements Platform feature

Related Commands

chg-feat

rtrv-frm-pwr

Retrieve Frame Power Threshold

Use this command to retrieve a list of entries for all provisioned frames or the entry for the specified frame from the Frame Power Threshold (FPT) table. The command displays only provisioned entries for provisioned frames.

Parameters

frm (optional)

Frame ID. This parameter displays the FPT table entry for the specified provisioned frame.

Range:

cf00

Control frame

ef00

First extension frame

ef01

Second extension frame

ef02

Third extension frame

ef03

Fourth etension frame

ef04

Fifth extension frame

Example

Retrieve all provisioned Frame Power Threshold table entries.

```
rtrv-frm-pwr
```

Retrieve Frame Power Threshold table entries for the control frame (frm=cf00).

```
rtrv-frm-pwr:frm=cf00
```

Dependencies

The following values are valid for the frm parameter: *CF00, EF00, EF01, EF02, EF03, EF04*.

The frm parameter value must specify a provisioned frame.

The frm parameter value must specify a frame that has a Frame Power Threshold entry provisioned in the FTP table.

Notes

If no parameter is specified in the command, all provisioned FPT table entries are displayed.

If the frm parameter is specified, the FPT entry corresponding to the specified frame is displayed.

Output

This example retrieves all Frame Power Threshold table entries:

```
rtrv-frm-pwr
```

```
    tekelecstp 06-04-11 12:38:01 EST  EAGLE 35.0.0

    Frame              Power Threshold (Amps)
    -----              ----------------------
    cf00                                 56
    ef00                                 36
    ef01                                 40

    FRAME POWER THRESHOLD table is (3 of 10) 30% full;
    RTRV-FRM-PWR: MASP A – COMPLTD
;
```

This example Retrieve the Frame Power Threshold table entry for the control shelf:

```
rtrv-frm-pwr:frm=cf00
```

```
    tekelecstp 06-04-11 12:38:01 EST  EAGLE 35.0.0

    Frame              Power Threshold (Amps)
    -----              ----------------------
    cf00                                 56

    FRAME POWER THRESHOLD table is (3 of 10) 30% full;
    RTRV-FRM-PWR: MASP A – COMPLTD
;
```

Related Commands

chg-frm-pwr, *dlt-frm-pwr*, *ent-frm-pwr*, *rtrv-stp*

rtrv-ftp-serv

Retrieve FTP Server Entry

Use this command to retrieve an entry for an FTP server from the FTP Server table or all entries in the FTP Server table.

Parameters

app (optional)

Application. This parameter specifies the FTP Client application that interfaces with the FTP Server.

Range:

meas

Measurements Platform application

user

FTP-based Table Retrieve Application (FTRA)

db

Database Backup\Restore application

dist

EAGLE Software Release Distribution application

ipaddr (optional)

IP Address of the FTP Server.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

mode (optional)

Full or brief report indicator.

Range:

full

brief

Default:

brief

Example

```
rtrv-ftp-serv
rtrv-ftp-serv:app=meas:ipaddr=1.255.0.100
```

```
rtrv-ftp-serv:mode=brief
rtrv-ftp-serv:app-meas
rtrv-ftp-serv:ipaddr=1.255.0.100
rtrv-ftp-serv:mode=full
```

Dependencies

The app parameter must specify an application that uses the FTP Support feature.

The ipaddr parameter must specify a valid IP address for the FTP server.

The mode parameter allows you to display either the full 100 characters of the path string for each entry (mode=full), or the first 29 characters of the path string for each entry (mode=brief).

Notes

The LOGIN and PATH are displayed in mixed case.

Output

`rtrv-ftp-serv`

```
    tekelecstp 12-09-19 15:15:04 EST 45.0.0-64.42.0
    rtrv-ftp-serv
    Command entered at terminal #4.

     APP       IPADDR           LOGIN      SECU   PRIO   PATH
     --------  ---------------  ---------  ----   ----   ----
     meas      10.248.13.9      root       ON     8      /root
     db        10.248.13.10     root       OFF    4      /root
     user      10.248.13.100    root       ON     4      /root

     FTP SERV table is (3  of 10)  30% full
;
```

The following command displays the output of retrieval command when OAM IP security feature is not activated.

`rtrv-ftp-serv`

```
    tekelecstp 12-09-19 15:15:04 EST 45.0.0-64.42.0
    rtrv-ftp-serv
    Command entered at terminal #4.

     APP       IPADDR           LOGIN      SECU   PRIO   PATH
     --------  ---------------  ---------  ----   ----   ----
     meas      10.248.13.9      root       ----   8      /root
     db        10.248.13.10     root       OFF    4      /root
     user      10.248.13.100    root       ----   4      /root


     FTP SERV table is (3  of 10)  30% full
;
```

Related Commands

chg-ftp-serv, *dlt-ftp-serv*, *ent-ftp-serv*

rtrv-gpl

Retrieve Generic Program Load

Use this command to show the version numbers of the GPLs stored on each fixed disk or drive and the system release table stored on each fixed disk.

Parameters

Note: As of Release 43.0, the BLBEPM, BLBIOS, BLBSMG, BLCPLD, BLDIAG6, BLROM1, BLVXW6, IMTPCI, and PLDPMC1 GPLs are replaced with the BLIXP GPL. The replaced GPLs are used only during upgrade to Release 43 and hardware replacement.

gpl (optional)

Generic program load. The GPL for which to retrieve information.

Range:

xyyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters. Valid GPLs are:

atmhc—Used by E5-ATM and E5-ATM-B cards to allow the card to support up to 3 signaling links

blbepm—Flash GPL containing the BIOS ROM image on E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards

blbios—Flash GPL containing the BIOS ROM image on HC-MIM cards that are used for E1 or T1 signaling links

blbsmg—Flash GPL containing the BIOS ROM image on E5-SM4G and E5-SM48G-B cards

blcpld—Flash GPL containing the bit files for the CPLD on HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards that are used for E1 or T1 signaling links

bldiag6—Flash GPL containing the diagnostic code on E5-E1T1, E5-E1T1-B, HC-MIM, E5-ENET, and E5-ENET-B cards

blixp—Flash GPL containing a tar image with all code required on E5-E1T1, HC-MIM, E5-ATM, E5-IPSM, E5-TSM, E5-ENET, and E5-SM4G cards

blmcap—Flash GPL containing a tar image with all code required on E5-MCAP, E5-E1T1-B, E5-MCPM-B, E5-ATM-B, E5-ENET-B, and E5-SM8G-B cards

blrom1—Flash GPL containing the bootloader code for VxWorks operating system on HC-MIM cards

blvxw6—Flash GPL containing the VxWorks operating system on HC-MIM, E5-ATM/E5-ATM-B, E5-E1T1/E5-E1T1-B, E5-ENET/E5-ENET-B, E5-IPSM, E5-MCPM-B, E5-SM4G/E5-SM8G-B, and E5-TSM cards

cdu—Used in the card manufacturing process

deirhc— Used by E5-SM8G-B cards to support the S13/S13' EIR feature

enumhc— Used by E5-SM8G-B cards to support the ENUM Mobile Number Portability and Tier One Address Resolution application

erthc—Used by E5-ENET and E5-ENET-B cards when the card acts as an STC card (E5-STC card) for EAGLE 5 Integrated Monitoring Support functions

glshc—Used by E5-TSM cards to download gateway screening to LIM and SCCP cards

hipr2—Communication software used on the High Speed IMT Packet Router (HIPR2) card

imtpci—Communication software that operates the IMT bus on HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards

ipghc—Used by E5-ENET and E5-ENET-B cards to support point-to-multipoint IP connectivity for ANSI and ITU point codes

iplhc—Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ANSI and ITU point codes

ipsg—Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA

ipshc—Used by E5-IPSM and E5-ENET-B cards to support the IPS application

mcphc—Used by E5-MCPM-B cards for the Measurements Platform feature

oamhc—Used by E5-MCAP cards for enhanced OAM functions

pldpmc1—Flash GPL used on HC-MIM and E5-E1T1 cards for E1 and T1 signaling links

sccphc—Used by E5-SM4G and E5-SM8G-B cards to support EPAP-based features and the LNP ELAP Configuration features. If no EPAP-based or LNP ELAP Configuration feature is turned on, and an E5-SM4G or E5-SM8G-B card is present, then the GPL processes normal GTT traffic.

siphc— Used by E5-SM8G-B Cards to support the SIP application

slanhc—Used by E5-ENET and E5-ENET-B cards to support the STPLAN application

ss7hc—Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards. Allows the card to support up to 32 (E5-E1T1) or 64 (HC-MIM and E5-E1T1-B) signaling links for E1 and T1 functions.

utility—Used by the factory for testing, and when directed by My Oracle Support

vcdu—Used in the card manufacturing process

Default:

Display all

Example

```
rtrv-gpl
```

```
rtrv-gpl:gpl=hipr2
```

Dependencies

No other activate, change, copy, or retrieve GPL command can be in progress when this command is entered.

The value specified for the gpl parameter must be supported.

Notes

To check the version of the EPAP or ELAP application, use the `rept-stat-mps` command.

If no application is specified, the approved and trial versions for all GPLs are shown, as well as the release table and removable GPL.

The approved GPL is the GPL that resides on the fixed disk and was made the approved version by specifying the GPL version number while executing the `act-gpl` command.

The trial GPL is the version of the GPL that was downloaded from the removable drive, but not activated by the `act-gpl` command.

When the `act-gpl` command is executed, the version specified in the command becomes the approved GPL and the previously approved GPL becomes the trial GPL.

If a GPL is not found, a version of "----------" is shown. This should happen only for the utility and OAM GPL trial versions on the fixed disk and for all GPLs on the removable drive when the removable drive is not inserted.

If the approved GPL version does not match the GPL version shown in the ACTIVE MASP RELEASE column, an alarm is activated.

A minor alarm is shown, and ALM is displayed for each APPROVED GPL (`rtrv-gpl`) and for each RUNNING GPL (`rept-stat-gpl`) that does not match the GPL in the RELEASE column of the `rtrv-gpl` output. The minor alarm is not activated, but ALM is displayed for each GPL that does not match the GPL in the RELEASE column.

ALM is always displayed when the approved version does not match the release version. You cannot turn off *fixed disk auditing*. The auditing state shown here is for the `rept-stat-gpl` command. You can turn on and off *running version auditing*.

A GPL audit cannot be in progress when this command is entered.

Output

This example lists all possible GPLs that can be shown in the output when no GPL is specified. All of these GPLs will not appear in the output for your system, because all GPLs are not valid in the same system.

```
rtrv-gpl
```

```
e1080402 13-03-25 15:16:33 EST  EAGLE 45.1.0
GPL       CARD  RELEASE      APPROVED         TRIAL        REMOVE TRIAL
```

```
    EOAM      1114  128-003-000  128-003-000      128-003-000  128-003-000
    EOAM      1116  128-003-000  128-003-000      -----------  -----------
    SCCP      1114  128-002-000  128-002-000      128-002-000  128-002-000
    SCCP      1116  128-002-000  128-002-000      128-002-000  -----------
    CDU       1114  128-000-000  128-000-000      128-000-000  128-002-000
    CDU       1116  128-000-000  128-000-000      128-002-000  -----------
    STPLAN    1114  128-001-000  128-001-000      125-001-000  128-001-000
    STPLAN    1116  128-001-000  128-001-000      125-001-000  -----------
    ATMANSI   1114  128-002-000  128-002-000      125-002-000  128-002-000
    ATMANSI   1116  128-002-000  128-002-000      128-002-000  -----------
    BPHCAP    1114  128-001-000  128-001-000      128-001-000  128-001-000
    BPHCAP    1116  128-001-000  128-001-000      128-001-000  -----------
    BPDCM     1114  128-001-000  128-001-000      128-001-000  128-001-000
    BPDCM     1116  128-001-000  128-001-000      128-001-000  -----------
    VXWSLAN   1114  128-001-000  128-001-000      128-001-000  128-001-000
    VXWSLAN   1116  128-001-000  128-001-000      128-001-000  -----------
    VSCCP     1114  128-002-000  128-002-000      128-002-000  128-002-000
    VSCCP     1116  128-002-000  128-002-000      128-002-000  -----------
    ATMITU    1114  128-001-000  128-001-000      128-001-000  128-001-000
    ATMITU    1116  128-001-000  128-001-000      128-001-000  -----------
    VCDU      1114  128-000-000  128-000-000      128-000-000  128-002-000
    VCDU      1116  128-000-000  128-000-000      128-002-000  -----------
    BPMPL     1114  128-001-000  128-001-000      128-001-000  128-001-000
    BPMPL     1116  128-001-000  128-001-000      128-001-000  -----------
    SS7ML     1114  128-001-000  128-001-000      128-001-000  128-001-000
    SS7ML     1116  128-001-000  128-001-000      128-001-000  -----------
    BPHMUX    1114  128-001-000  128-005-000      128-005-000  128-005-000
    BPHMUX    1116  128-001-000  128-005-000      128-005-000  -----------
    EROUTE    1114  128-001-000  128-001-000      128-001-000  128-001-000
    EROUTE    1116  125-001-000  128-001-000      128-001-000  -----------
    BPMPLT    1114  002-103-001  002-103-001      002-103-001  128-001-000
    BPMPLT    1116  002-103-001  002-103-001      002-103-001  -----------
    MCP       1114  128-001-000  128-001-000      128-001-000  128-001-000
    MCP       1116  128-001-000  128-001-000      128-001-000  -----------
    BPHCAPT   1114  128-116-003  002-116-003      002-116-003  128-001-000
    BPHCAPT   1116  002-116-003  002-116-003      002-116-003  -----------
    HIPR      1114  128-001-000  128-005-000      125-005-000  128-005-000
    HIPR      1116  128-001-000  128-005-000      125-005-000  -----------
    SS7HC     1114  128-001-000  128-001-000      125-001-000  128-001-000
    SS7HC     1116  128-001-000  128-001-000      125-001-000  -----------
    BLBIOS    1114  128-001-000  128-001-000      125-001-000  -----------
    BLBIOS    1116  128-001-000  128-001-000      125-001-000  128-001-000
    BLCPLD    1114  128-001-000  128-001-000      125-001-000  128-001-000
    BLCPLD    1116  128-001-000  128-001-000      128-001-000  -----------
    IMTPCI    1114  128-001-000  125-001-000      128-001-000  128-001-000
    IMTPCI    1116  128-001-000  125-001-000      128-001-000  -----------
    PLDPMC1   1114  128-001-000  125-001-000      128-001-000  125-001-000
    PLDPMC1   1116  128-001-000  125-001-000      128-001-000  -----------
    IPLHC     1114  097-003-000  097-003-000      028-003-011  097-003-000
    IPLHC     1116  097-003-000  097-003-000      028-003-011  -----------
    IPGHC     1114  097-003-000  097-003-009 ALM  097-003-001  097-003-009
    IPGHC     1116  097-003-000  097-003-009 ALM  097-003-001  -----------
    BLBEPM    1114  126-005-000  126-005-000      126-005-000  -----------
    BLBEPM    1116  126-005-000  126-005-000      126-005-000  126-005-000
    BLVXW6    1114  126-005-000  126-005-000      126-005-000  -----------
    BLVXW6    1116  126-005-000  126-005-000      126-005-000  126-005-000
    BLDIAG6   1114  126-005-000  126-005-000      126-005-000  -----------
    BLDIAG6   1116  126-005-000  126-005-000      126-005-000  126-005-000
    IPSHC     1114  128-001-000  128-001-000      128-001-000  -----------
    IPSHC     1116  128-001-000  128-001-000      128-001-000  128-001-000
    SLANHC    1114  128-002-000  128-002-000      128-002-000  -----------
    SLANHC    1116  128-002-000  128-002-000      128-002-000  128-002-000
    ERTHC     1114  128-002-000  128-002-000      128-002-000  -----------
    ERTHC     1116  128-002-000  128-002-000      128-002-000  128-002-000
```

```
    SCCPHC    1114  128-019-000  128-019-000      128-019-000  -----------
    SCCPHC    1116  128-019-000  128-019-000      128-019-000  128-019-000
    BLBSMG    1114  128-007-000  128-007-000      128-007-000  -----------
    BLBSMG    1116  128-007-000  128-007-000      128-007-000  128-007-000
    HIPR2     1114  128-022-000  128-022-000      128-022-000  128-022-000
    HIPR2     1116  128-022-000  128-022-000      128-022-000  -----------
    BPHCAP    1114  134-000-000  134-000-000      134-000-000  134-000-000
    BPHCAP    1116  134-000-000  134-000-000      134-000-000  -----------
    BPDCM     1114  134-000-000  134-000-000      134-000-000  134-000-000
    BPDCM     1116  134-000-000  134-000-000      134-000-000  -----------
    VXWSLAN   1114  134-000-000  134-000-000      134-000-000  134-000-000
    VXWSLAN   1116  134-000-000  134-000-000      134-000-000  -----------
    VSCCP     1114  134-000-000  134-000-000      134-000-000  134-000-000
    VSCCP     1116  134-000-000  134-000-000      134-000-000  -----------
    ATMITU    1114  134-000-000  134-000-000      134-000-000  134-000-000
    ATMITU    1116  134-000-000  134-000-000      134-000-000  -----------
    VCDU      1114  134-000-000  134-000-000      134-000-000  134-000-000
    VCDU      1116  134-000-000  134-000-000      134-000-000  -----------
    BPMPL     1114  134-000-000  134-000-000      134-000-000  134-000-000
    BPMPL     1116  134-000-000  134-000-000      134-000-000  -----------
    SS7ML     1114  134-000-000  134-000-000      134-000-000  134-000-000
    SS7ML     1116  134-000-000  134-000-000      134-000-000  -----------
    BPHMUX    1114  134-000-000  134-000-000      134-000-000  134-000-000
    BPHMUX    1116  134-000-000  134-000-000      134-000-000  -----------
    EROUTE    1114  134-000-000  134-000-000      134-000-000  134-000-000
    EROUTE    1116  134-000-000  134-000-000      134-000-000  -----------
    BPMPLT    1114  134-000-000  134-000-000      134-000-000  134-000-000
    BPMPLT    1116  134-000-000  134-000-000      134-000-000  -----------
    MCP       1114  134-000-000  134-000-000      134-000-000  134-000-000
    MCP       1116  134-000-000  134-000-000      134-000-000  -----------
    BPHCAPT   1114  134-000-000  134-000-000      134-000-000  134-000-000
    BPHCAPT   1116  134-000-000  134-000-000      134-000-000  -----------
    HIPR      1114  134-000-000  134-000-000      134-000-000  134-000-000
    HIPR      1116  134-000-000  134-000-000      134-000-000  -----------
    SS7HC     1114  134-000-000  134-000-000      134-000-000  134-000-000
    SS7HC     1116  134-000-000  134-000-000      134-000-000  -----------
    IPLHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
    IPLHC     1116  134-000-000  134-000-000      134-000-000  -----------
    IPGHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
    IPGHC     1116  134-000-000  134-000-000      134-000-000  -----------
    IPSHC     1114  134-000-000  134-000-000      134-000-000  -----------
    IPSHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
    SLANHC    1114  134-000-000  134-000-000      134-000-000  -----------
    SLANHC    1116  134-000-000  134-000-000      134-000-000  134-000-000
    ERTHC     1114  134-000-000  134-000-000      134-000-000  -----------
    ERTHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
    SCCPHC    1114  134-000-000  134-000-000      134-000-000  -----------
    SCCPHC    1116  134-000-000  134-000-000      134-000-000  134-000-000
    HIPR2     1114  134-000-000  134-000-000      134-000-000  134-000-000
    HIPR2     1116  134-000-000  134-000-000      134-000-000  -----------
    BLIXP     1114  134-000-000  134-000-000      -----------  -----------
    BLIXP     1116  134-000-000  134-000-000      -----------  -----------
    MCPHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
    MCPHC     1116  134-000-000  134-000-000      134-000-000  -----------
    DEIRHC    1114  134-000-000  134-000-000      134-000-000  134-000-000
    DEIRHC    1116  134-000-000  134-000-000      134-000-000  -----------
    SIPHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
    SIPHC     1116  134-000-000  134-000-000      134-000-000  -----------
    ENUMHC    1114  135-000-000  135-000-000      135-000-000  -----------
    ENUMHC    1116  135-000-000  135-000-000      135-000-000  -----------
;
```

In this example, card location 1115 is the active MASP and the cartridge is inserted.

```
rtrv-gpl:gpl=utility
```

```
    rlghncxa03w 04-01-05 11:34:04 EST  EAGLE 31.3.0
    GPL Auditing  ON

    GPL       CARD  RELEASE      APPROVED         TRIAL        REMOVE TRIAL
    UTILITY   1114  101-016-000  101-016-000      -----------  -----------
    UTILITY   1116  101-016-000  101-016-000      -----------  101-016-000
;
```

This example shows the output with the E5-based control cards feature. A removable drive is in the latched USB port and a plug-in flash drive is in the flush-mounted USB port of the active OAM. A removable drive is not present in the latched USB port of the standby OAM.

```
rtrv-gpl:gpl=oamhc
```

```
    e5oam 08-12-01 12:25:26 EST  EAGLE 40.1.0
    GPL Auditing  ON

    GPL       CARD  RELEASE      APPROVED         TRIAL        REMOVE TRIAL
    OAMHC     1114  030-010-000  030-010-000      030-010-008  -----------
    OAMHC     1116  030-010-000  030-010-000      030-010-008  030-010-008
    OAMHC     1115  -----------  -----------      -----------  030-010-008

;
```

This example shows the output for E5-based control cards. Version information is displayed for three removable drives that are inserted, including the removable drive in the latched USB port of the active OAM, the plug-in flash drive in the flush-mounted USB port of the active OAM, and the removable drive in the latched USB port of the standby OAM.

```
rtrv-gpl
```

```
    e5oam 13-03-25 12:24:57 EST  EAGLE 45.1.0
    GPL Auditing  ON
    GPL       CARD  RELEASE      APPROVED         TRIAL        REMOVE TRIAL
    EOAM      1114  134-000-000  134-000-000      134-000-000  134-000-000
    EOAM      1116  134-000-000  134-000-000      134-000-000  134-000-000
    EOAM      1113  -----------  -----------      -----------  -----------
    CDU       1114  134-000-000  134-000-000      134-000-000  134-000-000
    CDU       1116  134-000-000  134-000-000      134-000-000  134-000-000
    CDU       1113  -----------  -----------      -----------  -----------
    IMT       1114  134-000-000  134-000-000      134-000-000  134-000-000
    IMT       1116  134-000-000  134-000-000      134-000-000  134-000-000
    IMT       1113  -----------  -----------      -----------  -----------
    ATMANSI   1114  134-000-000  134-000-000      134-000-000  134-000-000
    ATMANSI   1116  134-000-000  134-000-000      134-000-000  134-000-000
    ATMANSI   1113  -----------  -----------      -----------  -----------
    BPHCAP    1114  134-000-000  134-000-000      134-000-000  134-000-000
    BPHCAP    1116  134-000-000  134-000-000      134-000-000  134-000-000
    BPHCAP    1113  -----------  -----------      -----------  -----------
    BPDCM     1114  134-000-000  134-000-000      134-000-000  134-000-000
    BPDCM     1116  134-000-000  134-000-000      134-000-000  134-000-000
    BPDCM     1113  -----------  -----------      -----------  -----------
    BLMCAP    1114  134-000-000  134-000-000      134-000-000  134-000-000
    BLMCAP    1116  134-000-000  134-000-000      134-000-000  134-000-000
    BLMCAP    1113  -----------  -----------      -----------  -----------
    OAMHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
    OAMHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
```

```
OAMHC     1113  -----------  -----------      -----------  -----------
HIPR2     1114  134-000-000  134-000-000      134-000-000  134-000-000
HIPR2     1116  134-000-000  134-000-000      134-000-000  134-000-000
HIPR2     1113  -----------  -----------      -----------  -----------
VXWSLAN   1114  134-000-000  134-000-000      134-000-000  134-000-000
VXWSLAN   1116  134-000-000  134-000-000      134-000-000  134-000-000
VXWSLAN   1113  -----------  -----------      -----------  -----------
VSCCP     1114  134-000-000  134-000-000      134-000-000  134-000-000
VSCCP     1116  134-000-000  134-000-000      134-000-000  134-000-000
VSCCP     1113  -----------  -----------      -----------  -----------
ATMITU    1114  134-000-000  134-000-000      134-000-000  134-000-000
ATMITU    1116  134-000-000  134-000-000      134-000-000  134-000-000
ATMITU    1113  -----------  -----------      -----------  -----------
VCDU      1114  134-000-000  134-000-000      134-000-000  134-000-000
VCDU      1116  134-000-000  134-000-000      134-000-000  134-000-000
VCDU      1113  -----------  -----------      -----------  -----------
BPMPL     1114  134-000-000  134-000-000      134-000-000  134-000-000
BPMPL     1116  134-000-000  134-000-000      134-000-000  134-000-000
BPMPL     1113  -----------  -----------      -----------  -----------
SS7ML     1114  134-000-000  134-000-000      134-000-000  134-000-000
SS7ML     1116  134-000-000  134-000-000      134-000-000  134-000-000
SS7ML     1113  -----------  -----------      -----------  -----------
BPHMUX    1114  134-000-000  134-000-000      134-000-000  134-000-000
BPHMUX    1116  134-000-000  134-000-000      134-000-000  134-000-000
BPHMUX    1113  -----------  -----------      -----------  -----------
BPDCM2    1114  134-000-000  134-000-000      134-000-000  134-000-000
BPDCM2    1116  134-000-000  134-000-000      134-000-000  134-000-000
BPDCM2    1113  -----------  -----------      -----------  -----------
EROUTE    1114  134-000-000  134-000-000      134-000-000  134-000-000
EROUTE    1116  134-000-000  134-000-000      134-000-000  134-000-000
EROUTE    1113  -----------  -----------      -----------  -----------
BPMPLT    1114  134-000-000  134-000-000      134-000-000  134-000-000
BPMPLT    1116  134-000-000  134-000-000      134-000-000  134-000-000
BPMPLT    1113  -----------  -----------      -----------  -----------
MCP       1114  134-000-000  134-000-000      134-000-000  134-000-000
MCP       1116  134-000-000  134-000-000      134-000-000  134-000-000
MCP       1113  -----------  -----------      -----------  -----------
BPHCAPT   1114  134-000-000  134-000-000      134-000-000  134-000-000
BPHCAPT   1116  134-000-000  134-000-000      134-000-000  134-000-000
BPHCAPT   1113  -----------  -----------      -----------  -----------
MPLG      1114  134-000-000  134-000-000      134-000-000  134-000-000
MPLG      1116  134-000-000  134-000-000      134-000-000  134-000-000
MPLG      1113  -----------  -----------      -----------  -----------
HIPR      1114  134-000-000  134-000-000      134-000-000  134-000-000
HIPR      1116  134-000-000  134-000-000      134-000-000  134-000-000
HIPR      1113  -----------  -----------      -----------  -----------
SS7HC     1114  134-000-000  134-000-000      134-000-000  134-000-000
SS7HC     1116  134-000-000  134-000-000      134-000-000  134-000-000
SS7HC     1113  -----------  -----------      -----------  -----------
BLBIOS    1114  134-000-000  134-000-000      134-000-000  134-000-000
BLBIOS    1116  134-000-000  134-000-000      134-000-000  134-000-000
BLBIOS    1113  -----------  -----------      -----------  -----------
BLCPLD    1114  134-000-000  134-000-000      134-000-000  134-000-000
BLCPLD    1116  134-000-000  134-000-000      134-000-000  134-000-000
BLCPLD    1113  -----------  -----------      -----------  -----------
BLDIAG    1114  131-002-000  131-002-000      131-002-000  131-002-000
BLDIAG    1116  131-002-000  131-002-000      131-002-000  131-002-000
BLDIAG    1113  -----------  -----------      -----------  -----------
GLSHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
GLSHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
GLSHC     1113  -----------  -----------      -----------  -----------
IMTPCI    1114  134-000-000  134-000-000      134-000-000  134-000-000
IMTPCI    1116  134-000-000  134-000-000      134-000-000  134-000-000
IMTPCI    1113  -----------  -----------      -----------  -----------
```

```
BLVXW     1114  131-006-000  131-006-000      131-006-000  131-006-000
BLVXW     1116  131-006-000  131-006-000      131-006-000  131-006-000
BLVXW     1113  -----------  -----------      -----------  -----------
PLDPMC1   1114  134-000-000  134-000-000      134-000-000  134-000-000
PLDPMC1   1116  134-000-000  134-000-000      134-000-000  134-000-000
PLDPMC1   1113  -----------  -----------      -----------  -----------
IPLHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
IPLHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
IPLHC     1113  -----------  -----------      -----------  -----------
IPGHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
IPGHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
IPGHC     1113  -----------  -----------      -----------  -----------
SS7EPM    1114  130-029-000  130-029-000      130-029-000  130-029-000
SS7EPM    1116  130-029-000  130-029-000      130-029-000  130-029-000
SS7EPM    1113  -----------  -----------      -----------  -----------
BLBEPM    1114  134-000-000  134-000-000      134-000-000  134-000-000
BLBEPM    1116  134-000-000  134-000-000      134-000-000  134-000-000
BLBEPM    1113  -----------  -----------      -----------  -----------
BLVXW6    1114  134-000-000  134-000-000      134-000-000  134-000-000
BLVXW6    1116  134-000-000  134-000-000      134-000-000  134-000-000
BLVXW6    1113  -----------  -----------      -----------  -----------
BLDIAG6   1114  134-000-000  134-000-000      134-000-000  134-000-000
BLDIAG6   1116  134-000-000  134-000-000      134-000-000  134-000-000
BLDIAG6   1113  -----------  -----------      -----------  -----------
PKTGEN    1114  134-000-000  134-000-000      134-000-000  134-000-000
PKTGEN    1116  134-000-000  134-000-000      134-000-000  134-000-000
PKTGEN    1113  -----------  -----------      -----------  -----------
SCCPHC    1114  134-000-000  134-000-000      134-000-000  134-000-000
SCCPHC    1116  134-000-000  134-000-000      134-000-000  134-000-000
SCCPHC    1113  -----------  -----------      -----------  -----------
BLBSMG    1114  134-000-000  134-000-000      134-000-000  134-000-000
BLBSMG    1116  134-000-000  134-000-000      134-000-000  134-000-000
BLBSMG    1113  -----------  -----------      -----------  -----------
SLANHC    1114  134-000-000  134-000-000      134-000-000  134-000-000
SLANHC    1116  134-000-000  134-000-000      134-000-000  134-000-000
SLANHC    1113  -----------  -----------      -----------  -----------
ERTHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
ERTHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
ERTHC     1113  -----------  -----------      -----------  -----------
IPSHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
IPSHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
IPSHC     1113  -----------  -----------      -----------  -----------
ATMHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
ATMHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
ATMHC     1113  -----------  -----------      -----------  -----------
IPSG      1114  134-000-000  134-000-000      134-000-000  134-000-000
IPSG      1116  134-000-000  134-000-000      134-000-000  134-000-000
IPSG      1113  -----------  -----------      -----------  -----------
BLROM1    1114  134-000-000  134-000-000      134-000-000  134-000-000
BLROM1    1116  134-000-000  134-000-000      134-000-000  134-000-000
BLROM1    1113  -----------  -----------      -----------  -----------
PKTGHC    1114  134-000-000  134-000-000      134-000-000  134-000-000
PKTGHC    1116  134-000-000  134-000-000      134-000-000  134-000-000
PKTGHC    1113  -----------  -----------      -----------  -----------
BLIXP     1114  134-000-000  134-000-000      134-000-000  134-000-000
BLIXP     1116  134-000-000  134-000-000      134-000-000  134-000-000
BLIXP     1113  -----------  -----------      -----------  -----------
MCPHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
MCPHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
MCPHC     1113  -----------  -----------      -----------  -----------
SIPHC     1114  134-000-000  134-000-000      134-000-000  134-000-000
SIPHC     1116  134-000-000  134-000-000      134-000-000  134-000-000
SIPHC     1113  ------------ ------------     ------------ -----------
DEIRHC    1114  134-000-000  134-000-000      134-000-000  134-000-000
```

```
    DEIRHC    1116  134-000-000  134-000-000      134-000-000  134-000-000
    DEIRHC    1113  -----------  -----------      -----------  -----------
    ENUMHC    1114  135-000-000  135-000-000      135-000-000  135-000-000
    ENUMHC    1116  135-000-000  135-000-000      135-000-000  135-000-000
    ENUMHC    1113  ------------ ------------     ------------ -----------

;
```

Legend

- **GPL**—GPL associated with each card in the display
- **APPROVED**—GPL version that is the approved GPL.
- **CARD**—Card location.
- **RELEASE**—Version number of each GPL that is required to be installed and approved for a specific release of software for the system.
- **REMOVE TRIAL**—GPL version that is on the removable drive.
- **TRIAL**—GPL version that is the trial GPL.
- **----------**—GPL is not present at the specified location.
- **ALM**—Alarm indicator showing that the system has an approved GPL that is not the GPL required for this software release according to the active MASP system release table.
- **CORRUPTED**—Data audit has determined that the GPL is corrupted.

Related Commands

act-gpl, *chg-gpl*, *copy-gpl*, *rept-stat-gpl*

rtrv-gserv-data

Retrieve G-Port Query for Prepaid Service Data

Use this command to display all values in the GSERV table or to display specific translation type, originating point code, or global title address data. These values are used to determine whether a Send Routing Information (SRI) request should receive G-Port SRI Query for Prepaid service or normal G-Port service.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

display (optional)

Use this parameter to display a specified category of entries in the GSERV table.

Range:

all

Display all entries in the GSERV table.

gta

Display all calling party (CgPA) global title addresses in the GSERV table.

opc

Display all message transfer part (MTP) originating point codes in the GSERV table.

tt

Display all called party (CdPA) translation types in the GSERV table.

gta (optional)

Global title address. Use this parameter to specify a CgPA global title address.

Range:

1 - 21 digits

opc (optional)

ANSI originating point code in the form of *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

opca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24 (optional)

Originating point code. Use these parameters to specify MTP originating point codes.

opci (optional)

ITU international originating point code with subfields *zone-area-id*.

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

tt (optional)

Translation type. Use this parameter to specify a CdPA translation type.

Range: *0 - 255*

Example

```
rtrv-gserv-data:display=all
rtrv-gserv-data:tt=26
rtrv-gserv-data:display=opc
```

Dependencies

The G-Port SRI Query for Prepaid feature must be enabled before this command can be entered.

The G-Port feature must be on before this command can be entered.

The gta, opc/opca/opci/opcn/opcn24, tt, or display parameter must be specified.

The display, tt, opc, and gta parameters cannot be specified together in the command.

Output

`rtrv-gserv-data:display=all`

```
    mystp 06-07-27 20:32:46 EST  EAGLE 35.2.0
     TT     OPC                       GTA
    ============================================
      0
     25
     26
     TT     OPC                       GTA
    ============================================================
            02057          (ITUN)
            002-002-002    (ANSI)
            5-005-5        (ITUI)
            001-001-001    (ANSI)
            006-000-001    (ANSI)
     TT     OPC                       GTA
    ============================================================
                                      9194605500

    num of tt entries is (3 of 256)
    num of opc entries is (5 of 50)
    num of gta entries is (1 of 50)

    GSERV table is (9 of 356) 3% full

;
```

`rtrv-gserv-data:tt=26`

```
    mystp 06-07-27 20:35:57 EST  EAGLE 35.2.0
     TT     OPC                       GTA
    ============================================
     26

;
```

`rtrv-gserv-data:display=opc`

```
    mystp 06-07-27 20:32:46 EST  EAGLE 35.2.0
     TT     OPC                       GTA
    ============================================================
            02057          (ITUN)
            002-002-002    (ANSI)
            5-005-5        (ITUI)
            001-001-001    (ANSI)
            006-000-001    (ANSI)

    GSERV table is (5 of 50) 10% full
```

```
;
```

Related Commands

dlt-gserv-data, *ent-gserv-data*

rtrv-gsm-msg

Retreive Configured GSM Message

Use this command to display the configured GSM test message parameter values.

Parameters

msgn (mandatory)

Message number. The test message number that is retrieved.

Range:

1 - 10

Example

```
rtrv-gsm-msg:msgn=5
```

Dependencies

None

Output

```
rtrv-gsm-msg:msgn=1
```

```
tekelecstp 08-12-02 10:46:51 EST  EAGLE 40.1.0
MSG = 1                ACTIVE = YES

CGPA_GT = 2
CGPA_GT_NAI = 4      CGPA = 919818000001
CDPA_GT = 2

CDPA_GT_NAI = 4      CDPA = 919818000002

CGPN_NAI = 1
CGPN_NP  = 2         CGPN = 919818000007

CDPN_NAI = 1
CDPN_NP  = 2         CDPN = 919818000008
```

```
rtrv-gsm-msg:msgn=2
```

```
tekelecstp 11-10-05 11:33:46 EST EAGLE 44.0.0
MSG = 2                ACTIVE = YES

CGPA_GT = 4
CGPA_GT_NAI = 4    CGPA = 919818000009

CDPA_GT = 4
CDPA_GT_NAI = 4    CDPA = 919818000008

CGPN_NAI = 4
CGPN_NP =  1       CGPN = none

CDPN_NAI = 4
CDPN_NP =  1       CDPN = 919876543201
```

Related Commands

chg-gsm-msg, *tst-msg*

rtrv-gsmmap-scrn — Retrieve GSM MAP Screening Entry

Use this command to retrieve the GSM (Global System for Mobile Telecommunication) MAP (Mobile Application Part) Screening CgPA and CdPA entries and their attributes from the active system database.

Parameters

opname (mandatory)

User-defined name for the operation code. This value references the operation code defined with the `ent-gsms-opcode` command.

Range:

ayyyyyyy

Up to 8 alphanumeric characters

action (optional)

Screening action to take if a message is forbidden as defined by the *forbid* parameter.

Range:

pass

Route the message as normal to the destination.

discard

Discard the MSU.

atierr

Generate an ATI reject message. This option is only valid for ATI MAP operation codes.

route

Route the message as normal to the original destination node; no UIM will be generated. The original destination is the node to which normal GTT would be sent if no GSM MAP actions are taken.

forward

Route the original message to the forward node. The original message will not be sent to the original node. If, however, the forward node is not available for routing, the MSU is routed to the original node.

duplicate

Route the message as normal to the original destination and route a copy of the original message to the duplicate node. If the MSU fails to route to the duplicate node, a UIM is generated indicating the duplicate routing failure.

dupdisc

Route the original message to the duplicate node. The original message will not be sent to the original node. If, however, the duplicate node is not available for routing, the MSU is routed to the original node.

Default:

Display all screening actions

cdsr (optional)

CdPA Screening Reference.

Range:

ayyy

1 alphabetic character followed by up to 3 optional alphanumeric characters

cgsr (optional)

CgPA Screening Reference.

Range:

ayyy

1 alphabetic character followed by up to 3 optional alphanumeric characters

eaddr (optional)

Ending origination address, in association with npv and naiv for the CGPA address to be screened.

Range:

1–15 hexadecimal digits. Valid digits are *0–9, a-f, A-F*

forbid (optional)

Forbidden parameter value. Indicates a forbidden parameter for the entered address. If a forbidden parameter is detected the message is rejected by the action defined by the *action* parameter.

Range:

all

All parameters are forbidden. Take the specified screening action defined by the *action* parameter for messages arriving at the system.

location

Take the specified screening action defined by the action parameter for messages arriving at the system that contain *location* as the forbidden parameter value for the entered address/operation code combination. This value is valid only for GSM ATI messages.

none

None of the parameters are forbidden. Route the message to its destination.

state

Take the specified screening action defined by the action parameter for messages arriving at the system that contain *state* as the forbidden parameter value for the entered address/operation code combination. This value is valid only for GSM ATI messages.

Default:

Display all forbidden parameter values

mapset (optional)

MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

naiv (optional)

Nature of Address value for the address or range of CgPA and CdPA addresses.

Range:

*0 - 127, **

npv (optional)

Numbering Plan value for the address or range of CgPA and CdPA addresses.

Range:

*0 - 15, **

ri (optional)

Routing indicator. This parameter specifies whether a subsequent global title translation is required.

Range:

gt

ssn

saddr (optional)

Starting origination address in association with npv and naiv for the single entry or range of entries of the CGPA address to be screened.

Range:

1 - 15 digits, *

1–15 hexadecimal digits. Valid digits are *0–9, a-f, A-F*

Default:

*

tt (optional)

Translation type. This parameter specifies the value that the CdPA translation type is set to as the result of Enhanced GSM Map Screening.

Range:

0 - 255, none

Default:

Display all translation types

Example

The following example retrieves all CgPA entries for the specified OPNAME:

```
rtrv-gsmmap-scrn:opname=e
```

The following example retrieves the specified CgPA range entry for the specified OPNAME:

```
rtrv-gsmmap-scrn:opname=ati:saddr=919462000000000:eaddr=919463000000000
```

The following example retrieves all CdPA entries for the specified CGSR:

```
rtrv-gsmmap-scrn:opname=xyz:cgsr=fela
```

The following example retrieves the specified CDSR entry for the specified CGSR:

```
rtrv-gsmmap-scrn:opname=xyz:cgsr=fela:cdsr=cal4
```

The following examples retrieves the specified RI for the specified OPNAME:

```
rtrv-gsmmap-scrn:opname=e:ri=ssn
```

```
rtrv-gsmmap-scrn:opname=e:mapset=dflt:ri=gt
```

```
rtrv-gsmmap-scrn:opname=rr:cgsr=au:cdsr=aj
```

```
rtrv-gsmmap-scrn:opname=test4:tt=12
```

Dependencies

The GSM Map Screening feature must be enabled before this command can be entered.

The Enhanced GSM Map Screening (EGMS) feature must be enabled before:

- The cgsr parameter can be specified.

- The cdsr parameter can be specified.
- The saddr=* parameter can be specified.
- The saddr and eaddr parameters can contain hexadecimal digits.

The specified opname parameter value must exist in the GSM Map Op-Code table.

If the eaddr parameter is specified, its value must contain the same number of digits as the saddr parameter value.

If the eaddr parameter is specified, its value must be greater than the saddr parameter value.

If the eaddr parameter is specified, the saddr parameter must be specified.

If the saddr=* parameter is specified, then the eaddr parameter cannot be specified.

If the saddr parameter is specified, the cgsr and cdsr parameters cannot be specified.

The saddr, npv, and naiv parameters must be specified together in the command.

If any of the saddr/eaddr/npv/naiv and cdsr parameters are specified, then the forbid and action parameters cannot be specified.

A value of *state* or *location* cannot be specified for the forbid parameter unless the operation code referenced by the opname parameter is 71. The forbid option is only valid for ATI MAP operation codes, and the opcode=71 parameter signifies an ATI MAP operation code.

The action=atierr parameter cannot be specified unless the operation code referenced by the opname parameter is 71. The atierr option is only valid for ATI MAP operation codes, and the opcode=71 parameter signifies an ATI MAP operation code.

If the cdsr parameter is specified, then the cgsr parameter must be specified.

The specified cgsr parameter value must exist in the database.

The specified cdsr parameter value must exist in the database.

The opname parameter must consist of alphanumeric characters.

The opname parameter must be entered.

The cgsr and cdsr parameters must each begin with an alphabetic character.

The cgsr and cdsr parameters must each consist of 1-4 alphanumeric characters.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must exist.

Notes

None

Output

GSM MAP Screening single entries and range entries shown in separate sections of the output. All single entries are shown first in a summary report; all range entries follow.

```
rtrv-gsmmap-scrn:opname=e
```

```
    tekelecstp 08-08-22 00:33:10 EST  EAGLE 39.2.0

    Single CgPA Entries for OPNAME: e

    ---------------------------------------

    SADDR           NP NAI FORBD ACT      PCA           SSN CGSR RI     TT
    1111            2  3   all   fwd      001-001-002   12  ad   gt     11

    SADDR           NP NAI FORBD ACT      PCI           SSN CGSR RI     TT

    SADDR           NP NAI FORBD ACT      PCN           SSN CGSR RI     TT

    SADDR           NP NAI FORBD ACT      PCN24         SSN CGSR RI     TT

    SADDR           NP NAI FORBD ACT  CGSR

    Range CgPA Entries for OPNAME: e
    ---------------------------------------

    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CGSR

    1234            3452             *  *   all   fwd      001-001-002   12  as
    RI=gt  TT=11

    SADDR           EADDR           NP NAI FORBD ACT      PCI           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN24         SSN CSGR


    SADDR           EADDR            NP NAI FORBD ACT   CGSR

    GSM MAP Screening Table (8 of 4000) is 1% full
;
```

The following example shows the output when the Flexible GTT Load Sharing feature is on.

```
rtrv-gsmmap-scrn:opname=dd
```

```
    tekelecstp 08-08-22 00:45:11 EST  EAGLE 39.2.0

    Single CgPA Entries for OPNAME: dd
    ---------------------------------------

    SADDR           NP NAI FORBD ACT      PCA           SSN CGSR    MAPSET   RI


    SADDR           NP NAI FORBD ACT      PCI           SSN CGSR    MAPSET   RI

    *               *  *   all   fwd      1-221-2       13  ab      DFLT     gt

    TT=11

    SADDR           NP NAI FORBD ACT      PCN           SSN CGSR    MAPSET   RI
```

```
    SADDR           NP NAI FORBD ACT      PCN24         SSN CGSR    MAPSET   RI


    SADDR           NP NAI FORBD ACT  CGSR

    Range CgPA Entries for OPNAME: dd
    -------------------------------------

    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCI           SSN CGSR

    1234            3452             *  *   all   fwd      1-221-2       13  ak
    MAPSET=DFLT RI=gt  TT=11

    SADDR           EADDR           NP NAI FORBD ACT      PCN           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN24         SSN CSGR


    SADDR           EADDR            NP NAI FORBD ACT   CGSR

    GSM MAP Screening Table (14 of 4000) is 1% full
;
```

This example shows the output for a specific MAP set. The Flexible GTT Load Sharing feature is on.

`rtrv-gsmmap-scrn:opname=rr:mapset=1`

```
    tekelecstp 08-01-22 00:59:18 EST  EAGLE 38.0.0

    Single CgPA Entries for OPNAME: rr
    --------------------------------------

    SADDR           NP NAI FORBD ACT      PCA           SSN CGSR    MAPSET   RI


    SADDR           NP NAI FORBD ACT      PCI           SSN CGSR    MAPSET   RI


    SADDR           NP NAI FORBD ACT      PCN           SSN CGSR    MAPSET   RI


    SADDR           NP NAI FORBD ACT      PCN24         SSN CGSR    MAPSET   RI


    Range CgPA Entries for OPNAME: rr
    -------------------------------------

    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CGSR

    1234            3452             *  *   all   fwd      001-001-002   12  au
    MAPSET=1 RI=gt  TT=11

    SADDR           EADDR           NP NAI FORBD ACT      PCI           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN           SSN CGSR
```

```
    SADDR           EADDR           NP NAI FORBD ACT      PCN24         SSN CSGR

    GSM MAP Screening Table (26 of 4000) is 1% full
;
```

This example shows the output for the subsystem number routing indicator.

`rtrv-gsmmap-scrn:opname=e:ri=ssn`

```
    tekelecstp 08-08-21 15:40:00 EST EAGLE 39.2.0

    Single CgPA Entries for OPNAME: e
    -------------------------------------

    SADDR           NP NAI FORBD ACT      PCA           SSN CGSR    RI     TT
    *               *  *   all   fwd      001-001-002   12  ad      ssn    11

    SADDR           NP NAI FORBD ACT      PCI           SSN CGSR    RI     TT

    SADDR           NP NAI FORBD ACT      PCN           SSN CGSR    RI     TT

    SADDR           NP NAI FORBD ACT      PCN24         SSN CGSR    RI     TT

    Range CgPA Entries for OPNAME: e
    -------------------------------------

    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CGSR

    *               *               *  *   all   fwd      001-001-002   12  d

    RI=ssn TT=11

    SADDR           EADDR           NP NAI FORBD ACT      PCI           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN24         SSN CSGR


    SADDR           EADDR           NP NAI FORBD ACT   CGSR

    GSM MAP Screening Table (4 of 4000) is 1% full
;
```

This example shows the output for the global translation routing indicator and a specified mapset:

`rtrv-gsmmap-scrn:opname=e:mapset=dflt:ri=gt`

```
    tekelecstp 08-08-22 00:57:57 EST  EAGLE 39.2.0

    Single CgPA Entries for OPNAME: e
    -------------------------------------

    SADDR           NP NAI FORBD ACT      PCA           SSN CGSR    MAPSET   RI

    1111            2  3   all   fwd      001-001-002   12  ad      DFLT     gt
```

```
    TT=11

    SADDR           NP NAI FORBD ACT      PCI           SSN CGSR    MAPSET   RI

    SADDR           NP NAI FORBD ACT      PCN           SSN CGSR    MAPSET   RI

    SADDR           NP NAI FORBD ACT      PCN24         SSN CGSR    MAPSET   RI

    Range CgPA Entries for OPNAME: e
    ------------------------------------

    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CGSR

    1234            3452             *  *   all   fwd      001-001-002   12  as
    MAPSET=DFLT RI=gt  TT=11

    SADDR           EADDR           NP NAI FORBD ACT      PCI           SSN CGSR

    SADDR           EADDR           NP NAI FORBD ACT      PCN           SSN CGSR

    SADDR           EADDR           NP NAI FORBD ACT      PCN24         SSN CSGR

    GSM MAP Screening Table (26 of 4000) is 1% full
;
```

This example shows the output for called and calling party screening references:

`rtrv-gsmmap-scrn:opname=rr:cgsr=au:cdsr=aj`

```
    tekelecstp 08-08-22 00:58:55 EST  EAGLE 39.2.0
    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CDSR

    1234            3452             *  *   all   fwd      001-001-002   12  aj
    MAPSET=1 RI=gt  TT=11
    GSM MAP Screening Table (26 of 4000) is 1% full
;
```

This example shows the output for a calling party screening reference.

`rtrv-gsmmap-scrn:opname=dd:cgsr=ak`

```
    tekelecstp 08-08-22 00:44:34 EST  EAGLE 39.2.0

    Single CdPA Entries for OPNAME: dd and CGSR: ak
    -------------------------------------------------------

    SADDR           NP NAI FORBD ACT      PCA           SSN CDSR RI     TT

    SADDR           NP NAI FORBD ACT      PCI           SSN CDSR RI     TT
    3476            *  *   all   fwd      1-221-2       13  gu   gt     11

    SADDR           NP NAI FORBD ACT      PCN           SSN CDSR RI     TT

    SADDR           NP NAI FORBD ACT      PCN24         SSN CDSR RI     TT
```

```
    SADDR           NP NAI FORBD ACT   CDSR

    Range CdPA Entries for OPNAME: dd and CGSR: ak
    ------------------------------------------------------

    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CDSR


    SADDR           EADDR           NP NAI FORBD ACT      PCI           SSN CDSR

    1234            3452             *  *   all   fwd      1-221-2       13  gh
    RI=gt  TT=11

    SADDR           EADDR           NP NAI FORBD ACT      PCN           SSN CDSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN24         SSN CDSR


    SADDR           EADDR            NP NAI FORBD ACT   CDSR

    GSM MAP Screening Table (14 of 4000) is 1% full
;
```

This example shows the output for a specified translation type.

`rtrv-gsmmap-scrn:opname=test4:tt=12`

```
    tekelecstp 08-08-18 17:26:42 EST  EAGLE 39.2.0

    Single CgPA Entries for OPNAME: test4
    ---------------------------------------
    SADDR           NP NAI FORBD ACT      PCA           SSN CGSR    RI     TT
    *                *  *   all  fwd      001-001-002   12  ad      ssn    12

    SADDR           NP NAI FORBD ACT      PCI           SSN CGSR    RI     TT

    SADDR           NP NAI FORBD ACT      PCN           SSN CGSR    RI     TT

    SADDR           NP NAI FORBD ACT      PCN24         SSN CGSR    RI     TT

    SADDR           NP NAI FORBD ACT  CGSR

    Range CgPA Entries for OPNAME: test4
    --------------------------------------

    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CGSR

    *               *                *  *   all   fwd      001-001-002   -   d

    RI=ssn TT=12

    SADDR           EADDR           NP NAI FORBD ACT      PCI           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN24         SSN CSGR
```

```
    SADDR           EADDR           NP NAI FORBD ACT   CGSR

    GSM MAP Screening Table (4 of 4000) is 1% full
;
```

This example shows the output for a specified translation type and a specified mapset.

`rtrv-gsmmap-scrn:opname=e:mapset=dflt:tt=12`

```
    tekelecstp 08-01-22 00:57:57 EST  EAGLE 39.2.0

    Single CgPA Entries for OPNAME: e
    ---------------------------------------

    SADDR           NP NAI FORBD ACT      PCA           SSN CGSR    MAPSET   RI

    1111            2  3   all   fwd      001-001-002   12  ad      DFLT     ssn

    TT=12

    SADDR           NP NAI FORBD ACT      PCI           SSN CGSR    MAPSET   RI


    SADDR           NP NAI FORBD ACT      PCN           SSN CGSR    MAPSET   RI


    SADDR           NP NAI FORBD ACT      PCN24         SSN CGSR    MAPSET   RI


    Range CgPA Entries for OPNAME: e
    ---------------------------------------

    SADDR           EADDR           NP NAI FORBD ACT      PCA           SSN CGSR

    1234            3452             *  *   all   fwd      001-001-002   12  as
    MAPSET=DFLT RI=ssn TT=12

    SADDR           EADDR           NP NAI FORBD ACT      PCI           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN           SSN CGSR


    SADDR           EADDR           NP NAI FORBD ACT      PCN24         SSN CSGR


    GSM MAP Screening Table (26 of 4000) is 1% full
;
```

Legend

- **Single Entries/Range Entries**—GSM MAP screening single entries and range entries are output in separate sections of the retrieval report. All single entries are output first during a summary report and then all range entries follow.
- **CgPA**—Calling Party Address entry
- **CdPA**—Called Party Address entry
- **OPNAME**—User-defined MAP operation code name.
- **SADDR**—Start origination address.

- **EADDR**—End origination address. This column is displayed for range entries only.
- **NPV**—Numbering plan value.
- **NAIV**—Nature of address indicator value.
- **FORBID** or**FORBD**—Indicates a forbidden parameter for the entered address. If a forbidden parameter is detected the message is rejected by the action defined by the *action* parameter. (Some values are abbreviated; for example, *locat* means *location* .)
- **ACTION** or**ACT**—Screening action, if forbidden. Possible actions are pass, discard (disc), atierr, route, forward, duplicate (dupl), and dupdisc.
- **PC** or**PCA**—ANSI Point Code
- **PCI**—ITU International Point Code
- **PCN**—ITU National Point Code
- **PCN24**—24-bit ITU National Point Code
- **SSN**—Subsystem Number
- **CGSR**—CgPA Screening Reference
- **CDSR**—CdPA Screening Reference
- **MAPSET**—MAP set
- **RI**—Routing Indicator
- **TT**—Translation Type

Related Commands

chg-gsmmap-scrn, *dlt-gsmmap-scrn*, *ent-gsmmap-scrn*

rtrv-gsmopts

Retrieve GSM System Options

Use this command to display all GSM (Global System for Mobile Telecommunication) system options from the database.

Parameters

This command has no parameters.

Example

```
rtrv-gsmopts
```

Dependencies

None

Notes

None

Output

rtrv-gsmopts

```
    tekelecstp 14-05-30 16:51:49 EST  EAGLE 46.1.0
    GSM OPTIONS
    ----------------------------
    MULTCC           = NONE            MULTCC           = NONE
    MULTCC           = NONE            MULTCC           = NONE
    MULTCC           = NONE            MULTCC           = NONE
    MULTCC           = NONE            MULTCC           = NONE
    MULTCC           = NONE            MULTCC           = NONE
    DEFMAPVR         = 1

    DEFMCC           = NONE            DEFMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE
    CCNC             = NONE            MCCMNC           = NONE

    SRIDN            = TCAP            SRIDNNOTFOUND    = GTT
    CRPTT            = NONE            SRISMGTTRTG      = OFF
    MSRNDIG          = RN              MSRNNAI          = 0
    MSRNNP           = 0               MSISDNTRUNC      = 0
    SRFADDR          = NONE            SRFNAI           = 0
    SRFNP            = 0               MSRNLEN          = 30

    SERVERPFX        = NONE            GSM2IS41         = NONE
    MIGRPFX          = SINGLE          IS412GSM         = NONE

    SPORTTYPE        = NONE            DFLTRN           = NONE

    EIRGRSP          = OFF             EIRRSPTYPE       = TYPE1
    EIRIMSICHK       = OFF             EIRIMSISCRN      = OFF
    EIRLOGWL         = OFF             EIRDFLTIMSISCRN  = OFF
    EIRDFLTIMSILKUP  = RANGE           EIRDFLTIMSIRESP  = WHITELIST

    ENCODECUG        = OFF             ENCODENPS        = ON
    ENCDNPSPTNONE    = OFF             ENCDNPSDNNOTFOUND= OFF

    SRIRDCTENT       = GRN

    G-Flex MLR OPTIONS :
       GFLEXMAPLAYERRTG = NONE

       REGSS       = OFF  ACTSS       = OFF  DACTSS      = OFF
       INTSS       = OFF  AUTHFAILRPT = OFF  RSTDATA     = OFF
       PROCUNSTRQT = OFF  RDYFORSM    = OFF  PURGMOBSS   = OFF
       SRILOC      = OFF

;
```

Related Commands

chg-gsmopts, *chg-gsmsmsopts*, *rtrv-gsmsmsopts*

rtrv-gsms-opcode

Retrieve GSM MAP Screening Operation Code

Use this command to retrieve the concerned GSM (Global System for Mobile Telecommunication) MAP (Mobile Application Part) screening operation codes and the default screening action for the operation code. This command allows the craftsperson to verify a list of all operation codes or a single operation code that the system uses in performing GSM Map Screening.

Parameters

mapset (optional)

MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

opcode (optional)

MAP operation code.

Range:

*0 - 255, **

Default:

Display all MAP operation codes

opname (optional)

User-defined name for the operation code. This value is defined with the `ent-gsms-opcode` command.

Range:

ayyyyyyy

Up to 8 alphanumeric characters

Default:

Display all operation code names

ri (optional)

Routing indicator. This parameter specifies whether a subsequent global title translation is required.

Range:

gt

ssn

tt (optional)

Translation type. The value the CdPA TT is set to as the result of Enhanced GSM Map Screening.

Range:

0 - 255

Default:

Display all translation types

Example

```
rtrv-gsms-opcode
rtrv-gsms-opcode:opname=ati
rtrv-gsms-opcode:ri=gt
rtrv-gsms-opcode:tt=11
```

Dependencies

The GSM Map Screening feature must be enabled before this command can be entered.

The EGMS feature must be enabled and turned on before:

- The opcode=* parameter can be specified.
- An opname parameter can be specified that refers to an opcode=* parameter.

The opcode and opname parameters cannot be specified together in the command.

The value of the opcode parameter must be between 0 - 255 or * .

The specified opname parameter must exist in the GSM MAP Op-Code table.

If the opname parameter is specified, then it must be alphanumeric.

The opname parameter must be no more than 8 characters in length.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must exist.

Notes

None

Output

`rtrv-gsms-opcode`

```
tekelecstp 08-08-22 00:32:17 EST  EAGLE 39.2.0
OPCODE  OPNAME     DFLTACT       PCA            SSN   RI     TT
```

```
     15     d          fwd           001-001-002     12    ssn    11
     16     e          fwd           001-001-002     12    gt     21
     19     f          fwd           001-001-002     12    gt     14
     20     h          fwd           001-001-002     -     gt     11

    OPCODE  OPNAME     DFLTACT       PCI             SSN   RI     TT
     17     dd         fwd           1-221-2         13    gt     244

    OPCODE  OPNAME     DFLTACT       PCN             SSN   RI     TT

    OPCODE  OPNAME     DFLTACT       PCN24           SSN   RI     TT

    OPCODE  OPNAME     DFLTACT
     12     a          disc
     13     b          disc

    GSMMS OPCODE Table (9 of 257) is 4% full
;
```

`rtrv-gsms-opcode:opname=e`

```
    tekelecstp 08-08-22 00:32:45 EST  EAGLE 39.2.0

    OPCODE  OPNAME     DFLTACT       PCA             SSN   RI     TT
     16     e          fwd           001-001-002     12    gt     21

    GSMMS OPCODE Table (9 of 257) is 4% full
;
```

This example inlcudes a spare point code:

`rtrv-gsms-opcode`

```
    tekelecstp 08-08-22 00:54:42 EST  EAGLE 39.2.0

    OPCODE  OPNAME     DFLTACT       PCA             SSN   RI     TT
     15     d          fwd           001-001-002     12    ssn    11
     16     e          fwd           001-001-002     12    gt     21
     19     f          fwd           001-001-002     12    gt     14
     20     h          fwd           001-001-002     -     gt     11
     21     k          fwd           001-001-002     12    gt     11
     22     t          fwd           001-001-002     -     gt     128
     23     u          fwd           001-001-002     12    ssn    11
     39     rr         fwd           001-001-002     12    ssn    11

    OPCODE  OPNAME     DFLTACT       PCI             SSN   RI     TT
     17     dd         fwd           1-221-2         13    gt     244
     31     kk         fwd           1-221-2         13    ssn    11
     44     rf         fwd           1-221-2         13    gt     11

    OPCODE  OPNAME     DFLTACT       PCN             SSN   RI     TT

    OPCODE  OPNAME     DFLTACT       PCN24           SSN   RI     TT

    OPCODE  OPNAME     DFLTACT
     12     a          disc
     13     b          disc

    GSMMS OPCODE Table (13 of 257) is 5% full
;
```

This example shows output when the Flexible GTT Load Sharing feature is on.

`rtrv-gsms-opcode`

```
    tekelecstp 08-08-22 00:54:42 EST  EAGLE 39.2.0

    OPCODE  OPNAME     DFLTACT       PCA             SSN   MAPSET RI     TT
     15     d          fwd           001-001-002     12    DFLT   ssn    11
     16     e          fwd           001-001-002     12    DFLT   gt     21
     19     f          fwd           001-001-002     12    DFLT   gt     14
     20     h          fwd           001-001-002     -     DFLT   gt     11
     21     k          fwd           001-001-002     12    DFLT   gt     11
     22     t          fwd           001-001-002     -     DFLT   gt     128
     23     u          fwd           001-001-002     12    DFLT   ssn    11
     39     rr         fwd           001-001-002     12    1      ssn    11

    OPCODE  OPNAME     DFLTACT       PCI             SSN   MAPSET RI     TT
     17     dd         fwd           1-221-2         13    DFLT   gt     244
     31     kk         fwd           1-221-2         13    DFLT   ssn    11
     44     rf         fwd           1-221-2         13    2      gt     11

    OPCODE  OPNAME     DFLTACT       PCN             SSN   MAPSET RI     TT

    OPCODE  OPNAME     DFLTACT       PCN24           SSN   MAPSET RI     TT

    OPCODE  OPNAME     DFLTACT
     12     a          disc
     13     b          disc

    GSMMS OPCODE Table (13 of 257) is 5% full
;
```

This example shows output for a specific MAP set. The Flexible GTT Load Sharing feature is on.

`rtrv-gsms-opcode:mapset=2`

```
    tekelecstp 08-08-22 00:56:01 EST  EAGLE 39.2.0

    OPCODE  OPNAME     DFLTACT       PCA             SSN   MAPSET RI     TT

    OPCODE  OPNAME     DFLTACT       PCI             SSN   MAPSET RI     TT
     44     rf         fwd           1-221-2         13    2      gt     11

    OPCODE  OPNAME     DFLTACT       PCN             SSN   MAPSET RI     TT

    OPCODE  OPNAME     DFLTACT       PCN24           SSN   MAPSET RI     TT

    GSMMS OPCODE Table (13 of 257) is 5% full
;
```

This example shows the output for the global translation routing indicator.

`rtrv-gsms-opcode:ri=gt`

```
    tekelecstp 08-08-22 00:54:53 EST  EAGLE 39.2.0

    OPCODE  OPNAME     DFLTACT       PCA             SSN   RI     TT
     16     e          fwd           001-001-002     12    gt     21
     19     f          fwd           001-001-002     12    gt     14
     20     h          fwd           001-001-002     -     gt     11
```

```
     21     k          fwd           001-001-002     12    gt     11
     22     t          fwd           001-001-002     -     gt     128

    OPCODE  OPNAME     DFLTACT       PCI             SSN   RI     TT
     17     dd         fwd           1-221-2         13    gt     244
     44     rf         fwd           1-221-2         13    gt     11

    OPCODE  OPNAME     DFLTACT       PCN             SSN   RI     TT

    OPCODE  OPNAME     DFLTACT       PCN24           SSN   RI     TT

    GSMMS OPCODE Table (13 of 257) is 5% full
;
```

This example shows the output for the subsystem number routing indicator. The FGTTLS feature is enabled.

`rtrv-gsms-opcode:ri=ssn`

```
    tekelecstp 08-08-22 00:55:03 EST  EAGLE 39.2.0

    OPCODE  OPNAME     DFLTACT       PCA             SSN   MAPSET RI     TT
     15     d          fwd           001-001-002     12    DFLT   ssn    11
     23     u          fwd           001-001-002     12    DFLT   ssn    11
     39     rr         fwd           001-001-002     12    1      ssn    11

    OPCODE  OPNAME     DFLTACT       PCI             SSN   MAPSET RI     TT
     31     kk         fwd           1-221-2         13    DFLT   ssn    11

    OPCODE  OPNAME     DFLTACT       PCN             SSN   MAPSET RI     TT

    OPCODE  OPNAME     DFLTACT       PCN24           SSN   MAPSET RI     TT

    GSMMS OPCODE Table (13 of 257) is 5% full
;
```

This example shows the output for a specified translation type.

`rtrv-gsms-opcode:tt=11`

```
    tekelecstp 08-08-22 00:54:53 EST  EAGLE 39.2.0

    OPCODE  OPNAME     DFLTACT       PCA             SSN   RI     TT
     15     d          fwd           001-001-002     12    ssn    11
     20     h          fwd           001-001-002     -     gt     11
     21     k          fwd           001-001-002     12    gt     11
     22     t          fwd           001-001-002     -     gt     11
     23     u          fwd           001-001-002     12    ssn    11
     39     rr         fwd           001-001-002     12    ssn    11

    OPCODE  OPNAME     DFLTACT       PCI             SSN   RI     TT
     31     kk         fwd           1-221-2         13    ssn    11
     44     rf         fwd           1-221-2         13    gt     11

    OPCODE  OPNAME     DFLTACT       PCN             SSN   RI     TT

    OPCODE  OPNAME     DFLTACT       PCN24           SSN   RI     TT

    GSMMS OPCODE Table (13 of 257) is 5% full
;
```

Legend

- **OPCODE**—MAP operation code
- **OPNAME**—User-defined name of operation code
- **DFLTACT**—Default screening action
- **PCA**—ANSI Point Code
- **PCI**—ITU International Point Code
- **PCN**—ITU National Point Code
- **PCN24**—24-bit ITU National Point Code
- **SSN**—Subsystem Number
- **MAPSET—**MAP set
- **RI**—Routing Indicator
- **TT**—Translation Type

Related Commands

chg-gsms-opcode, *dlt-gsms-opcode*, *ent-gsms-opcode*

rtrv-gsmsmsopts

Retrieve GSM SMS System Options

Use this command to display all GSM SMS options from the database.

Parameters

This command has no parameters.

Example

```
rtrv-gsmsmsopts
```

Dependencies

None.

Notes

None

Output

```
rtrv-gsmsmsopts
```

```
tekelecstp 10-09-23 11:27:38 EST  EAGLE5 43.0.0
GSM SMS OPTIONS
-------------------------------------
```

```
BPARTYGTTSN  = NONE          MOSMSGTTDIG  = SCCPCDPA
MOSMSTYPE    = SPRN          MOSMSNAI     = INTL
MOSMSSA      = NO            MOSMSFWD     = NO
MOSMSACLEN   = 0             MOSMSGTA     = NONE
MOSMSTCAPSEG = OFF           MOSMSDIGMAT  = EXACT
SPORTTYPE    = NONE          SPFILL       = OFF
DEFRN        = NONE

MTSMSIMSI    = MCCRNDN       MTSMSNNI     = RN
MTSMSTYPE    = RN            MTSMSACKN    = ACK
MTSMSDLTR    = NO            MTSMSDLTRV   = NONE
MTSMSNAKERR  = 1             MTSMSCHKSRC  = NO
MTMMSTYPE    = RN            SRISMDN      = SCCP

MTMMSGTA     = NONE
MTMMSACKN    = ACK           MTMMSENTYLEN = NONE
MTMMSLEN     = NONE

IGMSMSRELAY  = NO            DEFIS41SMSC  = NONE
IS41SMSCGTTSN= NONE
```

Related Commands

chg-gsmopts, *chg-gsmsmsopts*, *rtrv-gsmopts*

rtrv-gsmssn-scrn — Retrieve GSM Subsystem Number Screening Entry

Use this command to retrieve all or single subsystem numbers in the GSM SSN screening table.

Parameters

ssn (optional)

Subsystem number.

Range:

000 - 255

Default:

Display all

type (optional)

Subsystem type.

Range:

orig

Origination SSN

dest

Destination SSN

Default:

Display all

Example

```
rtrv-gsmssn-scrn
```

```
rtrv-gsmssn-scrn:ssn=0:type=dest
```

Dependencies

The GSM Map Screening feature must be enabled before this command can be entered.

A valid value must be specified for the ssn parameter.

A valid value must be specified for the type parameter.

Notes

If specified, the ssn/type parameter combination must exist in the GSM SSN screening table. If the value does not exist, the following message is displayed:

```
SSN ORIG DEST
```

```
No matching entries with the specified criteria found.
```

Output

```
rtrv-gsmssn-scrn:ssn=10:type=orig
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
    SSN  ORIG  DEST
    010  Yes   Yes
    GSMMS SSN table is (256 of 512) 50% full
    RTRV-GSMSSN-SCRN: MASP A - COMPLTD
;
```

```
rtrv-gsmssn-scrn
```

```
    rlghncxa03w 04-02-20 09:07:58 EST  EAGLE 31.3.0
    SSN  ORIG  DEST
    002  Yes   No
    010  Yes   Yes
    GSMMS SSN table is (2 of 512) 1% full
    RTRV-GSMSSN-SCRN: MASP A - COMPLTD
;
```

Legend

- **SSN**—Subsystem number

- **ORIG**—Specifies whether the subsystem type is origination
- **DEST**—Specifies whether the subsystem type is destination

Related Commands

dlt-gsmssn-scrn, *ent-gsmssn-scrn*

rtrv-gta

Retrieve Global Title Address Information

Use this command to display a list of the GTA (global title address) information applicable to the specified GTT set. This list can be filtered using a number of parameters. The report that is displayed contains two records (the percentage full and number-of-cells-used field) that give the total entries in the GTT table without regard to the selector specified.

This command obtains the routing object (destination address and subsystem number), relative cost, and routing indicator assigned to that object for specified GTAs (global title addresses) or ranges of GTAs with a given GTT set.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

gttsn (mandatory)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

acn (optional)

Application context name. The ITU TCAP *acn* field in the incoming MSU.

Range:

*0 - 255, *, none*

The *acn* field supports up to 7 subfields separated by a dash (e.g., *1-202-33-104-54-26-007*).

* —any valid value in the ITU TCAP *acn* field in the incoming MSU

none —there is no ITU TCAP *acn* field in the incoming MSU

actsn (optional)

GTT Action Set Name.

Range:

ayyyyyyyy, none

1 leading alphabetic character and up to 8 following alphanumeric characters

cdssn (optional)

Starting CdPA subsystem number.

Range:

0 - 255

cggtmod (optional)

Calling party global title modification indicator. This parameter displays all translation entries that have the specified value of the calling party GT modification indicator.

Range:

yes

no

cgpc (optional)

ANSI CgPA point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

cgpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

cgpci (optional)

ITU international CgPA point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cgpcn (optional)

ITU national CgPA point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cgpcn24 (optional)

24-bit ITU national CgPA point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

cgpcn16 (optional)

16-bit ITU national CgPA point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

cgpcaction (optional)

This parameter is used to provide the required abilities, indicating what any particular translation needs to do with CgPA PC.

Range:

dflt

protocol will be allowed to perform all the required processing/conversion with CGPC.

ignore

CGPC will be left as it was in incoming MSU.

remove

CGPC will be removed from outgoing MSU.

Default:

dflt

cgssn (optional)

Starting CgPA subsystem number.

Range: *0 - 255*

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

dpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Point Code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national destination point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

ecdssn (optional)

Ending CdPA subsystem number.

Range:

0 - 255

ecgssn (optional)

Ending CgPA subsystem number.

Range:

0 - 255

egta (optional)

End global title address. The end of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

The first gta entry for the given GTT selector

family (optional)

The ANSI TCAP *family* field in the incoming MSU.

Range:

*0 - 255, *, none*

*****

any valid value in the ANSI TCAP *family* field in the incoming MSU

none

there is no value in the ANSI TCAP *family* field in the incoming MSU

force (optional)

Display more than 1000 entries.

Range:

yes

no

Default:

no

gta (optional)

Global title address. The beginning of a range of global title digits.

Range:

1 - 21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F*.

Default:

The first gta entry for the given GTT selector

gtmodid (optional)

Global title modification identifier.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

Default:

displays all GT Modification Indicators for the GTA

loopset (optional)

SCCP loopset name. This parameter retrieves translation entries associated with the specified loopset.

Range:

ayyyyyyy, *none*

1 alphabetic character followed by up to 7 alphanumeric characters.

none —Translation entries with no association to any loopset.

mapset (optional)

MAP set ID. This parameter retrieves GTA information for a specified Mated Application set.

Range:

1 - 36000, dflt

dflt —Default MAP set

Default:

Retrieves GTA information for the default MAP set.

mrnset (optional)

MRN set ID. This parameter retrieves GTA information for a specified Mated Relay Node set.

Range:

1 - 3000, dflt, none

dflt —Default MRN set

none —The GTA translation does not participate in any loadsharing.

num (optional)

Number of entries to display.

Range:

1 - 1000000

Default:

1 —if *gta* is specified

20 —if *gta* is not specified

opc (optional)

ANSI originating point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

opca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

opci (optional)

ITU international originating point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national originating point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU originating point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU originating point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

opcode (optional)

The TCAP *opcode* field in the incoming MSU.

Range:

*0 - 255, *, none*

* —any valid value in the TCAP *opcode* field in the incoming MSU

none —there is no value in the TCAP *opcode* field in the incoming MSU

pc (optional)

ANSI point code in the form of *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pci (optional)

ITU international point code in the form of *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

pctype (optional)

Point code type. This parameter retrieves a single type of point code among mixed types of point code provisioned for a Translation Type.

Range:

ansi

itui

itun

itun16

itun24

ituis

ituns

Default:

Display all point code types

pkgtype (optional)

Package type. The ANSI TCAP and ITU TCAP package type.

Range:

ansiuni

ANSI unidirectional

qwp

Query with Permission

qwop

Query with out Permission

resp

Response

cwp

Conversation with Permission

cwop

Conversation with out Permission

ansiabort

ANSI abort

any

Wildcard value

bgn

Begin

end

End

cnt

Continue

ituabort

ITU abort

ituuni

ITU unidirectional

ANSI TCAP PKGTYPE

ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort, any

ITU TCAP PKGTYPE

bgn, ituabort, ituuni, any, end, cnt

ppmeasreqd (optional)

Per Path Measurement required.

Range:

yes

no

refgttsn (optional)

Referred GTT set name. The GTT Set Name referred in the GT Translation Entry by the optsn, opcsn, and cgcnvsn parameters.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

ssn (optional)

Subsystem number.

Range:

002 - 255

Default:

Display all

testmode (optional)

Test mode. This parameter displays all translation entries that have a specified value of the testmode parameter.

Range:

on

off

Default:

off

xlat (optional)

Translate indicator. This parameter specifies translation actions and routing actions.

Range:

dpc

dpcngt

dpcssn

none

Example

```
rtrv-gta:gttsn=t800:num=65535:force=yes
rtrv-gta:gttsn=t800:pc=8-1-1:ssn=222:gta=9195551212
rtrv-gta:gttsn=t800:ssn=222:gta=9000000000:egta=9762429999:num=65535:force=yes
rtrv-gta:gttsn=ntoa23:pctype=ansi
rtrv-gta:gttsn=setnat003:pcn=s-129-aa
rtrv-gta:gttsn=setnat003:gta=987658321198765432101:pcn=s-128-aa
rtrv-gta:gttsn=tbla
rtrv-gta:gttsn=tbla:pc=1-1-1
rtrv-gta:gttsn=setssn:mapset=6
rtrv-gta:gttsn=setans006:mrnset=1
rtrv-gta:gttsn=setans004:actsn=asetudts1
rtrv-gta:gttsn=setcdgta:testmode=on
rtrv-gta:gttsn=setcdssn:cdssn=15:ecdssn=25
rtrv-gta:gttsn=setcdgta:xlat=none
rtrv-gta:gttsn=setdpc:dpci=1-101-1
rtrv-gta:gttsn=setcdgta:xlat=dpcssn:ssn=10
rtrv-gta:gtmodid=set1
rtrv-gta:gttsn=setcggta:refgttsn=setcgpc
rtrv-gta:gttsn=setcdgta:ppmeasreqd=yes
rtrv-gta:gttsn=setcdgta:xlat=none:mrnset=1:mapset=6
rtrv-gta:gttsn=gtt1:cgpcaction=dflt
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

The ANSI/ITU SCCP Conversion feature must be enabled before the pctype parameter can be specified.

The gttsn parameter must be specified, cannot have a value of *none*, and must match an existing gttsn.

The pc/pca/pci/pcn/pcn24/pcn16, cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, and dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameters must have valid values within the range for each subfield.

The ANSI/ITU SCCP Conversion feature must be enabled before a translated point code that is of a different domain than the GTT set specified by the gttsn parameter can be specified.

If the egta parameter is specified, the gta parameter must be specified. The gta and egta parameters must be the same length, and the value for the egta parameter must be greater than the value for the gta parameter.

If the specified num parameter value is greater than 1000, the force=yes parameter must be specified.

The number of digits in the specified gta parameter must be at least the number of digits provisioned for the GTT set specified by the gttsn parameter. If the VGTT feature is turned on, then up to 10 GTA lengths can exist per GTT set. If the Support for 16 GTT Lengths in VGTT feature is turned on, then up to 16 GTA lengths can exist per GTT set.

If the Flexible GTT Load Sharing feature is not enabled, then the mapset parameter cannot be specified.

At least one entry must be provisioned in the specified MAP set in the MAP table.

If the ecgssn/ecdssn parameter is specified, the cgssn/cdssn parameter must be specified.

If the ecgssn/ecdssn parameter is specified, the cgssn/cdssn parameter must be specified, and the ecgssn/ecdssn parameter must be greater than the cgssn/cdssn parameter.

The OBSR feature must be enabled before the cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16, opc/opca/opci/opcn/opcn24/opcn16, cgssn, or ecgssn parameter can be specified.

The range specified by the cgssn/ecgssn or the cdssn/ecdssn parameters must exist for the specified GTT set.

The Hex Digit Support for GTT feature must be enabled and on before hexadecimal digits can be specified for the gta and egta parameters.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value of the loopset parameter must already exist in the database.

At least one entry must be provisioned in the MRN table for the MRN set that is specified by the mrnset parameter.

The Flexible GTT Load Sharing feature must be enabled before the mrnset parameter can be specified.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The xlat=none parameter must be specified before the mapset and mrnset parameters can be specified together in the command.

A TOBR quantity feature must be turned on before the opcode, pkgtype, acn, or family parameter can be specified.

The opcode, pkgtype, and family parameters must be specified together for ANSI TCAP translations. The opcode, pkgtype, and acn parameters must be specified together for ITU TCAP translations.

The acn and family parameters cannot be specified together in the command.

If the family parameter is specified, then a value of *ansiuni*, *qwp*, *qwop*, *resp*, *cwp*, *cwop*, *ansiabort*, or *any* must be specified for the pkgtype parameter.

If the acn parameter is specified, then a value of *bgn*, *ituabort*, *ituuni*, *any*, *end*, or *cnt* must be specified for the pkgtype parameter.

If the pkgtype=ituabort parameter is specified, then a value of *none* must be specified for the acn and opcode parameters.

If the pkgtype=ansiabort parameter is specified, then a value of *none* must be specified for the family and opcode parameters.

The cgpc, cgssn, gta, opc, cdssn, and opcode parameters cannot be specified together in the command.

If the cgssn and cdssn parameters are both specified in the same command (in any order), then only the value for the last of the two parameters specified is used during processing.

The value specified by the actsn parameter must already exist in the database.

The FLOBR feature must be turned on before the dpc, cdssn, or ecdssn parameter can be specified.

The specified point code must be a full point code.

The value specified for the gtmodid parameter must already exist in the GTMOD table.

A value of *none* cannot be specified for the gttsn and refgttsn parameters.

If the xlat=none parameter is specified, then the pc/pca/pci/pcn/pcn24/pcn16, force, ssn, and ccgt parameters cannot be specified.

The specified GTT set must have a set type of *opcode* (see the `ent-gttset` command) before the opcode/acn/pkgtype or opcode/family/pkgtype parameters can be specified. The specified GTT set must have a set type of *cdssn*, *cgssn*, *cdgta/cgta*, *opc*, or *cgpc* before the cdssn, cgssn, gta, opc, or cgpc parameter, respectively, can be specified.

If the cgssn parameter is specified, then the ecdssn parameter cannot be specified. If the cdssn parameter is specified, then the ecgssn parameter cannot be specified.

If the opc or dpc parameter is specified, then the (e)gta, (e)cgssn, (e)cdssn, and opcode parameters cannot be specified.

Notes

The percentage full and number of cells used report that is provided with the `rtrv-gta` command reflects the total entries in the GTA table without regard to the selector specified.

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If the `rtrv-gta` command is entered with only the gta parameter, a match would be an entry containing the same number of digits, or more digits, for the GTT set. For example, if gta=8005556666 is specified, the six-digit GTT set *800555* would be a match. If the VGTT feature is turned on and the egta parameter is specified, all matching entries regardless of length are displayed.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

The point code domain translation types for EGTT are handled by the EAGLE protocol processing as either ANSI or ITU; therefore, ITU applies to ITU-I, ITU-I Spare, ITU-N, and ITU-N Spare. ITU-I includes ITU-I Spare, and ITU-N includes ITU-N Spare.

When the Origin-based SCCP Routing feature is enabled, its parameters are displayed. If no data is provisioned for these parameters, they are displayed as dashes.

Output

Note: The Start GTA (gta) and End GTA (egta) fields are sized according to the ndgt parameter value. Because all GTAs for a GTT Set are the same size, this helps the appearance of the display. If all 21 digits are used, an entry will not fit on a single line. If two lines per entry are used, the size of the report would double, being inefficient for large reports. It is not anticipated that more than 15 digits will be used in the immediate future, but displaying GTAs longer than 19 digits will cause the line to wrap around to the next line.

This example retrieves all GTAs for the specified GTT Set:

```
rtrv-gta:gttsn=t800:num=65535:force=yes
```

```
    tekelecstp 10-02-04 08:31:05 EST  EAGLE 42.0.0

    GTTSN     NETDOM  NDGT
    t800      ansi    10

    GTA table is (17 of 269999) 1% full.

;
    tekelecstp 10-02-04 08:31:06 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    8005550000 8005551999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005552000 8005553999 DPC    GT     001-254-255
         SSN=255 CCGT=no
         GTMODID=gtmodset1  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005554000 8005555999 DPCNGT GT     001-254-255
         SSN=255 CCGT=no
         GTMODID=gtmodset2  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005556000 8005557999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=no
         GTMODID=--------- TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005558000 8005559999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=yes
         GTMODID=--------- TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9195551212 9195551212 DPCSSN SSN    008-001-001
         SSN=222 CCGT=no
         GTMODID=--------- TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
```

```
    9762428487 9762428487 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=--------- TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9766423277 9766423277 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=--------- TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9769388928 9769388928 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=gtmodset3 TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 9 Entries
;
```

This example retrieves the specific GTAs containing the specified PC/SSN/GTA combination for the specified GTT Set:

```
rtrv-gta:gttsn=t800:pc=8-1-1:ssn=222:gta=9195551212
```

```

    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN     NETDOM  NDGT
    t800      ansi    10

    GTA table is (17 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    9195551212 9195551212 DPCSSN SSN    008-001-001
         SSN=222 CCGT=no
         GTMODID=--------- TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

This example retrieves all GTAs containing the specified SSN and within the specified GTA range for the specified GTT Set:

```
rtrv-gta:gttsn=t800:ssn=222:gta=9000000000:egta=9762429999:num=65535:force=yes
```

```

    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN     NETDOM  NDGT
    t800      ansi    10
    GTA table is (17 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    9195551212 9195551212 DPCSSN SSN    008-001-001
         SSN=222 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9762428487 9762428487 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=---------  TESTMODE=off
```

```
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 2 Entries
;
```

This example retrieves all GTAs for the specified GTT Set when the VGTT feature is turned on:

`rtrv-gta:gttsn=t800:num=65535:force=yes`

```
    tekelecstp 10-02-04 08:31:05 EST  EAGLE 42.0.0

    GTTSN     NETDOM  NDGT
    t800      ansi    10
    GTA table is (17 of 269999) 1% full.
;
    tekelecstp 10-02-04 08:31:06 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    8005550000 8005551999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005552000 8005553999 DPC    GT     001-254-255
         SSN=255 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005554000 8005555999 DPCNGT GT     001-254-255
         SSN=255 CCGT=no
         GTMODID=gtmodset3  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005556000 8005557999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=no
         GTMODID=gtmodset1  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005558000 8005559999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=yes
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9195551212 9195551212 DPCSSN SSN    008-001-001
         SSN=222 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9762428487 9195551212 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=gtmodset4  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9766423277 9195551212 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9769388928 9195551212 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 9 Entries

;
```

This example shows output containing GTMODID values:

```
rtrv-gta:gttsn=ansi:gtmodid=aset32
```

```
    tekelecstp 10-02-04 08:29:15 EST  EAGLE 42.0.0
    GTTSN     NETDOM  NDGT
    ansi      ansi    10

    GTA table is (17 of 1000000) 1% full.
;
    tekelecstp 10-02-04 08:29:16 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    8005550000 8005551999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=no
         GTMODID=aset32     TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005552000 8005553999 DPCNGT GT     001-254-255
         SSN=255 CCGT=no
         GTMODID=aset32     TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005554000 8005555999 DPCNGT GT     001-254-255
         SSN=255 CCGT=no
         GTMODID=aset32     TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005558000 8005559999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=yes
         GTMODID=aset32     TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9195551212 9195551212 DPCSSN SSN    008-001-001
         SSN=222 CCGT=no
         GTMODID=aset32     TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9762428487 9762428487 DPCNGT GT     001-254-255
         SSN=222 CCGT=no
         GTMODID=aset32     TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9766423277 9766423277 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=aset32     TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 7 Entries

;
```

This example shows output when the GTT table can contain up to 1,000,000 entries:

```
rtrv-gta:gttsn=ansi
```

```
    tekelecstp 10-02-04 08:29:15 EST  EAGLE 42.0.0
    GTTSN     NETDOM  NDGT
    ansi      ansi    10

    GTA table is (17 of 1000000) 1% full.
;
    tekelecstp 10-02-04 08:29:16 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    8005550000 8005551999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=no
         GTMODID=gtmodset9  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
```

```
    8005552000 8005553999 DPCNGT GT     001-254-255
         SSN=255 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005554000 8005555999 DPCNGT GT     001-254-255
         SSN=255 CCGT=no
         GTMODID=gtmodset6  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    8005558000 8005559999 DPCSSN SSN    001-254-255
         SSN=255 CCGT=yes
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9195551212 9195551212 DPCSSN SSN    008-001-001
         SSN=222 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9762428487 9762428487 DPCNGT GT     001-254-255
         SSN=222 CCGT=no
         GTMODID=gtmodset4  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9766423277 9766423277 DPCSSN SSN    001-254-255
         SSN=222 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 7 Entries
;
```

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled and the PCTYPE parameter has a value of ANSI:

```
rtrv-gta:gttsn=ntoa23:pctype=ansi
```

```
    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    ntoa23     itu     4

    GTA table is (36 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0
    START GTA END GTA XLAT   RI     PC
    1899      1899    DPCNGT GT     010-002-002
         SSN=--- CCGT=no
         GTMODID=gmansiset  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled and the PCTYPE parameter has a value of ITUI:

```
rtrv-gta:gttsn=atoi22:pctype=itui
```

```
    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    atoi22     ansi    9
```

```
    GTA table is (36 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     ITUI PC
    991001200 991001300 DPCNGT GT     7-001-4
         SSN=--- CCGT=no
         GTMODID=asetitu2   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled and the PCTYPE parameter has a value of ITUN:

`rtrv-gta:gttsn=aton21:pctype=itun`

```
    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    aton21     ansi    2

    GTA table is (36 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0

    START GTA END GTA XLAT   RI     ITUN PC
    80        89      DPCSSN SSN    15441
         SSN=45  CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled and the PCTYPE parameter has a value of ITUN24:

`rtrv-gta:gttsn=ntin24:pctype=itun24`

```
    tekelecstp 10-02-24 08:30:15 EST  EAGLE 42.0.0

    GTTSN     NETDOM  NDGT
    ntin24    itu     10

    GTA table is (36 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:30:16 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     ITUN24 PC
    8006550000 8006551999 DPCSSN SSN    100-120-003
         SSN=255 CCGT=no
         GTMODID=asetitu24  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

```
rtrv-gta:gttsn=setnat003
```

```
    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setnat003  itu     6,11,21

    GTA table is (10 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     PC
    123456                123456                DPCSSN GT   s-00128-aa
         SSN=10  CCGT=no
         GTMODID=asetnat6   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    234567                234567                DPCNGT GT   s-00124-aa
         SSN=--- CCGT=no
         GTMODID=asetnat3   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    234568                234568                DPC    GT   s-00124-aa
         SSN=--- CCGT=no
         GTMODID=asetnat7   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    234569                234569                DPC    GT   s-00124-aa
         SSN=--- CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    12345678901           23456789012           DPCSSN SSN  s-00124-aa
         SSN=10  CCGT=no
         GTMODID=asetnat4   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    334569467213456789012 334569478932012345678 DPC    GT   s-00124-aa
         SSN=--- CCGT=no
         GTMODID=asetnat4   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    987656789012345678901 987657321098765432101 DPCNGT GT   s-00124-aa
         SSN=--- CCGT=no
         GTMODID=asetnat9   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    98765832119876543210 1 98765832119876543210 1 DPCNGT GT   s-00128-aa
         SSN=--- CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    987658321198765432102 990123456789012345678 DPCNGT GT   s-00124-aa
         SSN=--- CCGT=no
         GTMODID=asetnat1   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 9 Entries

;
```

```
rtrv-gta:gttsn=setnat003:pcn=s-129-aa:gtmodid=id5
```

```
    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setnat003  itu     6,11,21

    GTA table is (11 of 269999) 1% full.
```

```
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     PC
    987658321198765432102 987658321198765432102 DPCNGT GT   s-00129-aa
         SSN=--- CCGT=no
         GTMODID=setntt21   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

`rtrv-gta:gttsn=setnat003:ssn=10`

```
    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setnat003  itu     6,11,21

    GTA table is (11 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     PC
    123456                123456                DPCSSN GT   s-00128-aa
         SSN=10  CCGT=no
         GTMODID=gtmod21    TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    12345678901           23456789012           DPCSSN SSN  s-00124-aa
         SSN=10  CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 2 Entries

;
```

`rtrv-gta:gttsn=setnat003:gta=987658321198765432101:pcn=s-128-aa`

```
    tekelecstp 10-02-24 08:29:15 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setnat003  itu     6,11,21

    GTA table is (11 of 269999) 1% full.
;
    tekelecstp 10-02-24 08:29:16 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     PC
    987658321198765432101 987658321198765432101 DPCNGT GT   s-00128-aa
         SSN=--- CCGT=no
         GTMODID=asetnat3   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

This example shows an MRN set. The Flexible GTT Load-Sharing and Intermediate GTT Load Sharing features are on and the GTT Action - Discard feature or GTT Action - Duplicate feature is enabled.

`rtrv-gta:gttsn=setssnn`

```
    tekelecstp 10-02-104 09:49:42 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setssnn    ansi    10

    GTA table is (1 of 269999) 1% full.
;
    tekelecstp 10-02-104 09:49:43 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    1111111111 1111111111 DPC    GT     001-001-003
         MRNSET=1     SSN=---   CCGT=no
         GTMODID=asetans1   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries

;
```

This example shows a MAP set. The Flexible GTT Load Sharing feature is enabled.

`rtrv-gta:gttsn=tbla`

```
    tekelecstp 10-02-04 14:51:59 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    tbla       ansi    6,10

    GTA table is (3 of 269999) 1% full.
;
    tekelecstp 10-02-04 14:52:00 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    234567     234567     DPCSSN GT     001-001-001
         MRNSET=DFLT  SSN=10  CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    9810012345 9850012345 DPCSSN SSN    001-001-001
         MAPSET=DFLT  SSN=10  CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 2 Entries

;
```

This example retrieves a CdPA GTA entry and an Advanced CdPA GTA entry when the OBSR feature is enabled.

`rtrv-gta:gttsn=setcdpa`

```
    tekelecstp 10-03-10 09:49:42 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setcdpa    itu     CDGTA    6
    GTA table is (15 of 269999) 1% full.
;
    tekelecstp 10-02-04 09:49:42 EST  EAGLE 42.0.0
```

```
    START GTA END GTA XLAT    RI     PC
    106399    106489  DPCNGT  GT     1-200-1
         SSN=--- CCGT=no
         GTMODID=modset1    TESTMODE=off
         OPTSN=SETCG1    CGSELID=----- OPCSN=---------
         ACTSN=--------- PPMEASREQD= NO
    306399    306489  DPCNGT  GT     1-200-1
         SSN=--- CCGT=no
         GTMODID=modset3    TESTMODE=off
         OPTSN=CGPCSET01 CGSELID=----- OPCSN=OPCSET001
         ACTSN=--------- PPMEASREQD= NO
    400000    406489  NONE
         GTMODID=---------  TESTMODE=off
         OPTSN=--------- CGSELID=----- OPCSN=---------
         ACTSN=asetudts  PPMEASREQD= NO
    500000    506489  NONE
         GTMODID=---------  TESTMODE=off
         OPTSN=--------- CGSELID=----- OPCSN=---------
         ACTSN=asetdisc  PPMEASREQD= NO
    600001    600009  DPCSSN  SSN    -----------
         SSN=125 CCGT=no
         GTMODID=modset5    TESTMODE=off
         OPTSN=--------- CGSELID=65500 OPCSN=OPCSET001
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 5 Entries

;
```

This example retrieves a CgPA GTA entry when the OBSR feature is enabled.

`rtrv-gta:gttsn=setcgpa`

```
    tekelecstp 10-03-10 09:49:42 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE NDGT
    setcgpa    itu     CGGTA   6
    GTA table is (15 of 269999) 1% full.
;
    tekelecstp 10-02-04 09:49:43 EST  EAGLE 42.0.0

    START GTA END GTA XLAT    RI     PC
    406399    406489  DPCNGT  GT     1-200-1
         SSN=--- CCGT=no
         GTMODID=acdset3    TESTMODE=off
         OPTSN=setcgssn1 CGSELID=-----
         ACTSN=--------- PPMEASREQD= NO
    906399    906489  NONE
         GTMODID=---------  TESTMODE=off
         OPTSN=--------- CGSELID=-----
         ACTSN=asetdisc  PPMEASREQD= NO

    Command Retrieved 2 Entries
;
```

This example retrieves a CgPA PC entry when the Origin Based SCCP Routing feature is enabled:

```
rtrv-gta:gttsn=setcgpc
```

```
    tekelecstp 10-03-10 09:49:42 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setcgpc    ansi    CGPC     -
    GTA table is (5 of 269999) 1% full.
;
    tekelecstp 10-02-24 09:49:42 EST  EAGLE 42.0.0

       CgPA PC                  XLAT   RI     PC
       001-012-255              DPCNGT GT     1-200-1
          SSN=--- CCGT=no
          GTMODID=acgset3    TESTMODE=off
          OPTSN=setcgssn2 CGSELID=-----
          ACTSN=--------- PPMEASREQD= NO
       101-*-*                  DPCNGT GT     1-200-1
          SSN=--- CCGT=no
          GTMODID=acgset3    TESTMODE=off
          OPTSN=setcgssn2 CGSELID=-----
          ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 2 Entries
;
```

This example retrieves an OPC entry when the OBSR feature is enabled:

```
rtrv-gta:gttsn=setopc
```

```
    eagle1 10-05-10 11:14:52 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setopc     ansi    OPC      -

    GTA table is (3 of 269999) 1% full.

       OPCA                     XLAT   RI     PCA
       001-001-001              DPC    GT     001-001-001
         SSN=--- CCGT=no
         GTMODID=set1       TESTMODE=off
         OPTSN=--------- CGSELID=-----
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries

;
```

This example retrieves a CgPA SSN entry when the OBSR feature is enabled and an ITU Point Code is used:

```
rtrv-gta:gttsn=setssnn
```

```
    eagle1 10-05-10 12:01:08 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setcgssn2  itu     CGSSN    -

    GTA table is (5 of 269999) 1% full.

    START SSN            END SSN              XLAT   RI     ITU PC
```

```
    9                    9                    DPCNGT GT     2-002-2
         SSN=--- CCGT=no
         GTMODID=---------  TESTMODE=off
         OPTSN=--------- CGSELID=-----
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

This example shows output when the network domain is set to *cross*:

`rtrv-gta:gttsn=ansiset1`

```
    tekelecstp 10-02-04 15:22:08 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    ansiset1   cross   6

    GTA table is (1 of 269999) 1% full.
;
    tekelecstp 10-02-04 15:22:09 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     PC
    123456    123456    DPCSSN SSN    001-001-002
         SSN=110 CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

This example shows output when the Flexible GTT Load Sharing feature is enabled:

`rtrv-gta:gttsn=tblb`

```
    tekelecstp 10-02-04 15:22:08 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    tblb       ansi    6

    GTA table is (6 of 269999) 1% full.
;
    tekelecstp 10-02-04 15:22:09 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     PCA
    123456    123456    DPC    GT     003-003-003
         MRNSET=DFLT  SSN=--- CCGT=no
         GTMODID=gtmodset1  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    123457    123457    DPCSSN SSN    003-003-003
         MAPSET=DFLT  SSN=2   CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 2 Entries
;
```

This example shows output when the Hex Digit Support for GTT feature is turned on and hexadecimal digits are provisioned in GTA values:

```
rtrv-gta:gttsn=setnat201
```

```
    tekelecstp 10-02-24 13:39:28 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setnat201  itu     6,21

    GTA table is (5 of 269999) 1% full.
;
    tekelecstp 10-02-24 13:39:29 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     PC
    100000                10000d                DPC    GT     00101
         SSN=--- CCGT=no
         GTMODID=anatset2   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    10000e                10000f                DPC    GT     00101
         SSN=--- CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    100010                200000                DPC    GT     00101
         SSN=--- CCGT=no
         GTMODID=anatset4   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    abcdef0123456789abcdf fabcde01234567890afff DPCSSN SSN    00103
         SSN=10  CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    fbcdef0123456789abcdf ffbfde01234567890aaff DPCSSN SSN    00103
         SSN=10  CCGT=no
         GTMODID=anatset5   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 5 Entries

;
```

This example shows output when the SCCP Loop Detection feature is enabled and an associated loopset exists:

```
rtrv-gta:gttsn=setssn:mapset=6
```

```
    tekelecstp 10-02-04 09:50:42 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setssnn    ansi    10

    GTA table is (42 of 269999) 1% full.
;
    tekelecstp 10-02-04 09:50:42 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    1111111111 1111111122 DPCSSN SSN    001-001-003
         MAPSET=6     SSN=2   CCGT=no
         GTMODID=---------  TESTMODE=off
         LOOPSET = loop1
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries

;
```

This example shows output for a specified MRN set when the Flexible GTT Load Sharing feature is enabled:

```
rtrv-gta:gttsn=setans006:mrnset=1
```

```
    tekelecstp 10-02-04 13:03:16 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setans006  ansi    10

    GTA table is (8 of 269999) 1% full.
;
    tekelecstp 10-02-04 13:03:16 EST  EAGLE 42.0.0

    START GTA  END GTA    XLAT   RI     PCA
    1818510090 1918511241 DPC    GT     001-001-003
         MRNSET=1     SSN=--- CCGT=no
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries
;
```

This example shows output when calling party GT modification is requested for a GTT set:

```
rtrv-gta:gttsn=setans004:cggtmod=yes
```

```
    tekelecstp 10-02-24 16:57:00 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setans004  ansi    6

    GTA table is (1 of 269999) 1% full.
;
    tekelecstp 10-02-24 16:57:01 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     PC
    981234    981234    DPCNGT GT     001-001-001
         MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=yes
         GTMODID=aansset4   TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries

;
```

```
rtrv-gta:gttsn=setans001
```

```
    rtrv-gta:gttsn=setans001
    e1040501 10-02-24 14:25:15 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setans001  ansi    CDGTA    3,6

    GTA table is (61 of 269999) 1% full.
;
    e1040501 10-02-04 14:25:16 EST  EAGLE 39.2.0

    START GTA END GTA   XLAT   RI     PCA
    100       100       DPCSSN SSN    001-001-002
```

```
     MAPSET=DFLT  SSN=10  CCGT=no  CGGTMOD=NO
     GTMODID=gtmodset3  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
101       101       DPCSSN SSN    001-001-003
     MAPSET=DFLT  SSN=10  CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
104       104       DPCSSN SSN    001-001-003
     MAPSET=DFLT  SSN=10  CCGT=no  CGGTMOD=NO
     GTMODID=gtmodset1  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
105       105       DPCSSN SSN    001-001-003
     MAPSET=1     SSN=14  CCGT=no  CGGTMOD=NO
     GTMODID=gtmodsetn  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
115       115       DPCSSN SSN    001-001-002
     MAPSET=2     SSN=15  CCGT=no  CGGTMOD=NO
     GTMODID=gtmodset2  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111111    111111    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111112    111112    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=gtmodseti  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111113    111113    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111114    111114    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=gtmodset4  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111115    111115    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111116    111116    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111117    111117    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111118    111118    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=gtmodseti  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111119    111119    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111120    111120    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111121    111121    DPC    GT     001-001-002
     MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
     GTMODID=---------  TESTMODE=off
     ACTSN=--------- PPMEASREQD= NO
111122    111122    DPC    GT     001-001-002
```

```
          MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111123    111123    DPC    GT     001-001-002
          MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111124    111124    DPC    GT     001-001-002
          MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111125    111125    DPC    GT     001-001-002
          MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 20 Entries
;
```

rtrv-gta:gttsn=setans001:pc=1-1-3

```
    e1040501 10-02-04 14:25:57 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setans001  ansi    CDGTA    3,6

    GTA table is (61 of 269999) 1% full.

;

    e1040501 10-02-04 14:25:58 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     PCA
    101       101       DPCSSN SSN    001-001-003
          MAPSET=DFLT  SSN=10  CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    104       104       DPCSSN SSN    001-001-003
          MAPSET=DFLT  SSN=10  CCGT=no  CGGTMOD=NO
          GTMODID=gtmodset5  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    105       105       DPCSSN SSN    001-001-003
          MAPSET=1     SSN=14  CCGT=no  CGGTMOD=NO
          GTMODID=gtmodset4  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111260    111260    DPCSSN SSN    001-001-003
          MAPSET=DFLT  SSN=12  CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111261    111261    DPCSSN SSN    001-001-003
          MAPSET=DFLT  SSN=12  CCGT=no  CGGTMOD=NO
          GTMODID=gtmodset4  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111262    111262    DPCSSN SSN    001-001-003
          MAPSET=DFLT  SSN=12  CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111263    111263    DPCSSN SSN    001-001-003
          MAPSET=DFLT  SSN=12  CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111264    111264    DPCSSN SSN    001-001-003
```

```
          MAPSET=DFLT  SSN=12  CCGT=no  CGGTMOD=NO
          GTMODID=gtmodset7  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111265    111265    DPCNGT GT     001-001-003
          MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111266    111266    DPCNGT GT     001-001-003
          MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO
    111267    111267    DPCNGT GT     001-001-003
          MRNSET=DFLT  SSN=--- CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 11 Entries
;
```

rtrv-gta:gttsn=setans002:ssn=10

```
    e1040501 10-02-04 14:25:57 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setans002  ansi    CDGTA    6

    GTA table is (61 of 269999) 1% full.

;

    e1040501 10-02-04 14:25:58 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     PCA
    222222    222229    DPCSSN SSN    001-001-002
          MAPSET=DFLT  SSN=10  CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          OPTSN=--------- CGSELID=----- CDSELID=-----
          ACTSN=--------- PPMEASREQD= NO
    222232    222239    DPCSSN SSN    001-001-002
          MAPSET=DFLT  SSN=10  CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          OPTSN=--------- CGSELID=----- CDSELID=-----
          ACTSN=--------- PPMEASREQD= NO
    222242    222249    DPCSSN SSN    001-001-002
          MAPSET=DFLT  SSN=10  CCGT=no  CGGTMOD=NO
          GTMODID=---------  TESTMODE=off
          OPTSN=--------- CGSELID=----- CDSELID=-----
          ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 3 Entries

;
```

rtrv-gta:gttsn=cgssnset1

```
    e1040501 10-02-04 14:10:41 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    cgssnset1  ansi    CGSSN    -
```

```
    GTA table is (50 of 269999) 1% full.

;

    e1040501 10-02-04 14:10:42 EST  EAGLE 42.0.0

    START SSN             END SSN               XLAT   RI     PCA
    1                     1                     DPC    SSN    001-001-002
         MAPSET=2     SSN=0   CCGT=no  CGGTMOD=NO
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    34                    34                    DPC    SSN    001-001-002
         MAPSET=2     SSN=0   CCGT=no  CGGTMOD=NO
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    100                   100                   DPC    SSN    001-001-002
         MAPSET=2     SSN=0   CCGT=no  CGGTMOD=NO
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    101                   101                   DPC    SSN    001-001-002
         MAPSET=2     SSN=0   CCGT=no  CGGTMOD=NO
         ACTSN=--------- PPMEASREQD= NO
         GTMODID=---------  TESTMODE=off
    102                   102                   DPC    SSN    001-001-002
         MAPSET=2     SSN=0   CCGT=no  CGGTMOD=NO
         GTMODID=---------  TESTMODE=off
         ACTSN=--------- PPMEASREQD= NO
    103                   103                   NONE
         MAPSET=2      MRNSET=DFLT
         CGGTMOD=NO
         GTMODID=---------  TESTMODE=off
         ACTSN=actudts1  PPMEASREQD= YES
    104                   104                   NONE
         MAPSET=2       MRNSET=DFLT
         CGGTMOD=NO
         GTMODID=---------  TESTMODE=off
         ACTSN=actdisc1  PPMEASREQD= NO

    Command Retrieved 7 Entries

;
```

```
rtrv-gta:gttsn=cgssnset2:actsn=asetdisc1
```

```
    e1040501 10-02-04 14:11:37 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    cgssnset2  ansi    CGSSN    -

    GTA table is (51 of 269999) 1% full.

;

    e1040501 10-02-04 14:11:38 EST  EAGLE 42.0.0

    START SSN             END SSN               XLAT   RI     PCA
    105                   105                   NONE
         MAPSET=2         MRNSET=DFLT
         CGGTMOD=NO
         GTMODID=---------  TESTMODE=off
         ACTSN=actdisc1  PPMEASREQD= NO
```

```
    Command Retrieved 1 Entries

;
```

`rtrv-gta:gttsn=cgssnset3`

```
    e1040501 10-02-04 14:25:57 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    cgssnset3  ansi    CGSSN    -

    GTA table is (51 of 269999) 1% full.

;

    e1040501 10-02-04 14:25:57 EST  EAGLE 42.0.0

    START SSN             END SSN               XLAT   RI     PCA
    Command Retrieved no Entries

;
```

This example shows output when the OBSR feature is enabled and the FLOBR feature is turned on:

`rtrv-gta:gttsn=setans006`

```
    tekelecstp 10-02-04 16:20:44 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setans006  ansi    CDGTA    6

    GTT TABLE IS   1 % FULL (3 of 269999)
;
    tekelecstp 10-02-04 16:20:45 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     PCA
    123456    123456    DPC    GT     001-001-002
         MRNSET=NONE  SSN=--- CCGT=no  CGGTMOD=NO
         GTMODID=gtmod3     TESTMODE=on
         LOOPSET = none     FALLBACK=Yes
         OPTSN=--------- CGSELID=456 CDSELID=----- OPCSN=setopc001
         ACTSN=--------- PPMEASREQD= NO
;
```

This example retrieves a CdPA SSN entry when the FLOBR feature is enabled:

`rtrv-gta:gttsn=setcdssn`

```
    tekelecstp 10-03-10 09:49:42 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setcdssn   itu     CDSSN    -

    GTT TABLE IS   1 % FULL (5 of 269999)
;

    tekelecstp 10-03-10 09:49:42 EST  EAGLE 42.0.0

    START SSN             END SSN               XLAT    RI     PC
```

```
    100                  200                  DPCNGT  GT     1-200-1
         SSN=0   CCGT=no
         GTMODID=gtmod3     TESTMODE=on
         FALLBACK=sysdflt  CGCNVSN=---------
         OPTSN=--------- CGSELID=----- CDSELID=-----
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries

;
```

This example retrieves an OPCODE entry when the TOBR feature is turned on:

`rtrv-gta:gttsn=opcode2`

```
    tekelecstp 10-02-04 23:34:43 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    opcode2    itu     OPCODE   -

    GTA table is (3 of 269999) 1% full.

    FAMILY         OPCODE         PKGTYPE        XLAT   RI     PC

    ACN            OPCODE         PKGTYPE        XLAT   RI     PC
    1-2-3          5              cnt            DPC    GT     3-003-3
         SSN=0   CCGT=no
         GTMODID=---------  TESTMODE=off
         FALLBACK=sysdflt
         OPTSN=--------- CGSELID=----- CDSELID=----- OPCSN=---------
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries

;
```

This example retrieves an OPCODE entry when the TOBR feature is turned on:

`rtrv-gta:gttsn=opcode1`

```
    tekelecstp 10-02-04 00:08:53 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    opcode1    ansi    OPCODE   -

    GTA table is (2 of 269999) 1% full.

    FAMILY         OPCODE         PKGTYPE        XLAT   RI     PC
    7              4              qwp            DPC    GT     002-002-002
         SSN=0   CCGT=no
         GTMODID=---------  TESTMODE=off
         FALLBACK=sysdflt
         OPTSN=--------- CGSELID=----- CDSELID=----- OPCSN=---------
         ACTSN=--------- PPMEASREQD= NO
    ACN            OPCODE         PKGTYPE        XLAT   RI     PC

    Command Retrieved 1 Entries
;
```

This example retrieves a DPC entry when the FLOBR feature is turned on:

rtrv-gta:gttsn=setdpc1

```
    tekelecstp 10-03-08 11:23:49 EST  EAGLE 42.0.0

    GTTSN      NETDOM  SETTYPE  NDGT
    setdpc1    ansi    DPC      -

    GTA table is (2 of 269999) 1% full.

       DPCA                    XLAT   RI     PCA
       001-001-001             DPC    GT     001-001-001
         SSN=--- CCGT=no
         GTMODID=---------  TESTMODE=off
         FALLBACK=sysdflt
         OPTSN=--------- CGSELID=----- CDSELID=-----
         ACTSN=--------- PPMEASREQD= NO

    Command Retrieved 1 Entries

;
```

rtrv-gta:gttsn=setcdgta:xlat=none:gtmodid=gttid1

```
    e1040501 10-02-04 14:25:57 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setcdgta   ansi    6

    GTA table is (1 of 269999) 1% full.
;
    e1040501 10-02-04 14:25:57 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     PC
    981234    981234    NONE
         CGGTMOD=YES
         GTMODID=gttid1     TESTMODE=off
         LOOPSET = none
         ACTSN=actudts1  PPMEASREQD= YES

    Command Retrieved 1 Entries
```

rtrv-gta:gttsn=setcdgta:mapset=1:mrnset=2:xlat=none

```
    tekelecstp 10-05-04 14:25:57 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    setcdgta   ansi    6
    GTA table is (1 of 269999) 1% full.
;
    tekelecstp 10-05-04 14:25:57 EST  EAGLE 42.0.0

    START GTA END GTA   XLAT   RI     PC
    981234    981234    NONE
         MAPSET=1     MRNSET=2
         CGGTMOD=NO
         GTMODID=gttid1     TESTMODE=off
         LOOPSET = none
         ACTSN=actudts1  PPMEASREQD= YES

    Command Retrieved 1 Entries
```

This entry retrieves the 16 bit PC entries and cgpcaction parameter added.

```
rtrv-gta:gttsn=abc:cgpcaction=dflt
```

```
    tekelecstp 13-07-02 13:10:20 EST  45.0.0-64.69.0
    rtrv-gta:gttsn=abc:cgpcaction=dflt
    Command entered at terminal #4.

    GTTSN      NETDOM  SETTYPE  NDGT
    abc        itu     CGPC     -

    GTA table is (1 of 269999) 1% full.


       CGPC(ITU)               XLAT   RI     ITU PC
       001-01-01               dpc    ssn    001-02-03
         MAPSET=dflt  SSN=--- CCGT=no
         GTMODID=---------  TESTMODE=off
         OPTSN=--------- CGSELID=-----
         ACTSN=--------- PPMEASREQD= no
         CGPCACTION=dflt
    Command Retrieved 1 Entries

;
```

Legend

- **GTTSN**—GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.
- **NETDOM**—The network domain.
- **NDGT**—The number of digits required for GTAs associated with this set.
- **START GTA**—The start global title address.
- **END GTA**—The end global title address.
- **XLAT**—The translate indicator.
- **RI**—The routing indicator.
- **PC, PCA, ITU PC, ITUI PC, ITUN PC, ITUN24, ITUN16 PC**—Translated point code.
- **SSN**—The translated subsystem number.
- **CCGT**—The cancel called global title indicator.
- **MRN**—Mated Relay Node
- **MRNSET**—MRN set ID
- **MAPSET**—MAP set ID
- **CGGTMOD**—Calling Party Global Title Modification Indicator
- **ACTSN**—GTT Action Set Name
- **GTMODID**—Global Title Modification Identifier
- **PPMEASREQD**—Per Path Measurement Required
- **OPCODE**—TCAP opcode field
- **ACN**—Application context name. ITU TCAP *acn* field.
- **PKGTYPE**—TCAP package type
- **FAMILY**—ANSI TCAP *family* field
- **TESTMODE**—Invokes a Test Tool to debug the FLOBR/TOBR rules
- **DPC**—Destination point code

- **CGPC**—CgPa point code
- **OPC**—Originating point code

Related Commands

chg-gta, *dlt-gta*, *ent-gta*

rtrv-gtcnv

Retrieve Global Title Conversion

Use this command to display entries in the Default Global Title Conversion table.

Parameters

dir (optional)

Direction of conversion.

Range:

atoi

ANSI to ITU conversion

itoa

ITU to ANSI conversion

both

Conversion in both directions

gtixlat (optional)

Global title indicator conversion. This parameter is expressed in the form of the ANSI GTI and the ITU GTI.

Range:

22

Converts an incoming ANSI GTI 2 to an outgoing ITU GTI 2 or an incoming ITU GTI 2 to an outgoing ANSI GTI 2

24

Converts an incoming ANSI GTI 2 to an outgoing ITU GTI 4 or an incoming ITU GTI 4 to an outgoing ANSI GTI 2

nai (optional)

Nature of address indicator.

Range:

*0 - 63, **

np (optional)

Numbering plan.

Range:

*0 - 15, **

tta (optional)

ANSI translation type.

Range:

*0 - 255, **

tti (optional)

ITU translation type.

Range:

*0 - 255, **

Example

```
rtrv-gtcnv
```

Dependencies

The ANSI/ITU SCCP Conversion feature must be enabled before the command can be entered.

Notes

None

Output

This example displays output containing decimal global title digits:

```
rtrv-gtcnv
```

```
    tekelecstp 06-11-07 13:44:12 EST  EAGLE 35.3.0

    DIR   GTIXLAT  TTA  TTI  NP  NAI  DEL  POS  ADD
    atoi    22     10   5    --- ---  10   pfx  123

    GTCNV    table is (1 of 1000) 1% full.
;
```

This example shows output containing hexadecimal global title digits:

```
rtrv-gtcnv
```

```
    tekelecstp 06-11-07 11:52:58 EST  EAGLE 35.3.0

    DIR   GTIXLAT  TTA  TTI  NP  NAI  DEL  POS  ADD
    atoi    22     1    3    --- ---  ---  pfx  abcdef0123456789abcdf
    itoa    24     5    6    2   1    ---  sfx  abcdef0123456789abcef
```

```
    GTCNV    table is (2 of 1000) 1% full.
;
```

Legend

- **DIR**—Direction of the translation: ANSI to ITU or ITU to ANSI
- **GTIXLAT**—GTI translation
- **TTA**—ANSI translation type
- **TTI**—ITU translation type
- **NP**—Numbering plan
- **NAI**—Nature of address indicator
- **DEL**—Deletion status, listing the number of incoming MSUs that will be deleted prior to translation
- **POS**—Prefix or Suffix
- **ADD**—Global title address

Related Commands

chg-gtcnv, *dlt-gtcnv*, *ent-gtcnv*

rtrv-gtmod

Retrieve GT Modification Data

Use this command to display entries from the GTMOD table. A GTMOD entry consists of a GTMOD ID and GTMOD specific data.

Parameters

Note: Definitions for the feature options specified by theonandoffparameters are located in the Notes section.

cgpassn (optional)

Calling Party Subsystem number. The calling party subsystem address that receives the message.

Range:

002 - 255

gtmodid (optional)

GT Modification Identifier.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

ngti (optional)

New Global Title Indicator. This parameter specifies whether a new GTI translation format is type 2 or type 4.

Range:

2

4

none

nnai (optional)

New nature of address indicator. The value used to replace the received NNAI.

Range:

0 - 127, none

nnp (optional)

New numbering plan. The value used to replace the received numbering plan.

Range:

0 - 15, none

npdd (optional)

Number of prefix digits to be deleted. The number of digits to be deleted from the prefix of the received GT address.

Range:

1 - 21, none

npds (optional)

New prefix digits string. The digits to be prefixed to the received GT address.

Range:

1 - 21 digits, *none*

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9* .

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F* .

Default:

Display all

nsdd (optional)

Number of suffix digits to be deleted. The number of digits to be deleted from the suffix of the received GT address.

Range:

1 - 21, none

nsds (optional)

New suffix digits string. The digits to be suffixed to the received GT address.

Range:

1-21 digits, *none*

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9* .

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9, a-f, A-F* .

ntt (optional)

New Translation Type. The value that is used to replace the received Translation Type.

Range:

0 - 255, none

off (optional)

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

gt0fill

on (optional)

Enables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

gt0fill

refcnt

precd (optional)

Precedence. This parameter specifies whether the prefix or suffix takes precedence when modifying the received GT address

Range:

pfx

sfx

Example

```
rtrv-gtmod:gtmodid=id2
rtrv-gtmod:npdd=5:on=refcnt
rtrv-gtmod:nsdd=10:precd=sfx:nnai=2:nnp=5
rtrv-gtmod:ngti=4:on=gt0fill:cgpassn=12
```

Dependencies

The Hex Digit Support for GTT feature must be turned on before hexadecimal digits can be specified for the npds and nsds parameters.

The gtmodid=none parameter cannot be specified.

If the gtmodid parameter is specified, then the on=refcnt parameter is the only other parameter that can be specified.

The value specified for the gtmodid parameter must already exist in the GTMOD table.

The same value cannot be specified for the on and off parameters.

Notes

on/off options

- *gt0fill* —GT zero fill. Specifies whether the last 0 of the GTA is a treated as a valid digit (OFF) or as filler (ON) during GT Modification for the gti(x)=2 to gti(x)=4 scenario.
- *refcnt* —Reference count. Specifies the number of entries in the GTT Table that references the GTMOD entry. This option is ON only.

Output

`rtrv-gtmod`

```
    tekelecstp 10-02-10 14:43:31 EST  EAGLE 42.0.0

    GTMODID   NTT  NGTI  GT0FILL  NNP  NNAI  NPDD  NSDD  PRECD  CGPASSN
    set1       --    --      OFF    0    --    --    --    PFX      254
          NPDS=                      NSDS=
    set2       --      4       ON   12     3     3    11    SFX       --
          NPDS=01234567890           NSDS=0987654321

    GTMOD table is (2 of 100000) 1% full.
;
```

`rtrv-gtmod:on=refcnt`

```
    tekelecstp 10-02-10 14:43:31 EST  EAGLE 42.0.0
    GTMODID   NTT  NGTI  GT0FILL  NNP  NNAI  NPDD  NSDD  PRECD  CGPASSN  REFCNT

    set1        5     4      OFF    0    --    --    --    PFX      254       5

          NPDS=                      NSDS=
    set2       --     4       ON   12     3     3    11    SFX               0

          NPDS=01234567890           NSDS=0987654321

    GTMOD table is (2 of 100000) 1% full.
;
```

```
rtrv-gtmod:on=gt0fill,refcnt
```

```
    tekelecstp 10-02-18 14:43:31 EST  42.0.0
    GTMODID   NTT  NGTI  GT0FILL  NNP  NNAI  NPDD  NSDD  PRECD  CGPASSN  REFCNT

    id1        --    --       ON    0    --    --    --    PFX                0

          NPDS=                        NSDS=

    GTMOD TABLE IS ( 1 of 100000) 1 % FULL
;
```

Legend

AMGTT—Advanced GT Modification

GT0FILL—Indicates whether a trailing 0 in the GTA is considered as a valid digit or a filler

NGTI—New Global Title Indicator

NNP—New Numbering Plan

NNAI—New Nature of Address Indicator

NPDD—New Prefix Digits to be Deleted

NPDS—New Prefix Digits String

NSDD—New Suffix Digits to be Deleted

NSDS—New Suffix Digits String

PC—Point Code

Related Commands

chg-gtmod, *dlt-gtmod*, *ent-gtmod*

rtrv-gtt

Retrieve Global Title Translation

Use this command to show one or more entries from the GTT Data and the Translation Type tables. The report contains two records (the percentage full and number-of-cells-used field) that give the total entries in the GTT table without regard to the *type* parameter specified.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

cggtmod (optional)

Calling party global title modification indicator. This parameter displays all translation entries that have the specified value of the calling party GT modification indicator.

Range:

yes

no

egta (optional)

End global title address. This parameter specifies the end of a range of global title digits.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

Default:

If the gta parameter is specified, the egta parameter default value is the specified gta parameter value.

force (optional)

This parameter allows the user to display more than 1000 entries. This parameter is used to prevent inadvertent displays of extremely large amounts of information, which could take many hours.

Range:

yes

no

Default:

no

gta (optional)

Global title start address. The beginning of a range of global title digits.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled and on, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

Default:

The first GTT entry for the given translation type.

gtmodid (optional)

Global Title Modification Identifier.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

loopset (optional)

SCCP loopset name. This parameter retrieves translation entries that are associated with the specified loopset.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters.

none —Translation entries with no association to any loopset.

mapset (optional)

MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

mrnset (optional)

MRN set ID. This parameter retrieves GTT information for a specified Mated Relay Node set.

Range:

1 - 3000, dflt, none

dflt —Default MRN set

none —The GTA translation does not participate in any loadsharing.

num (optional)

The number of entries to be shown.

Range:

1 - 1000000

1–1000 —if force=yes is not specified

1–1000000 —if force=yes is specified

Default:

1 —if gta is specified

20 —if gta is not specified

pc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

Default:

Display all

pc/pca/pci/pcn/pcn24 (optional)

Point code.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Default:

Display all

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

Default:

Display all

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

Default:

Display all

pctype (optional)

Point code type. This parameter retrieves a single type of point code among mixed types of point code provisioned for a Translation Type.

Range:

ansi

itui

itun

itun24

ituis

ituns

Default:

Display all

ssn (optional)

Subsystem number. The subsystem address that is to receive the message.

Range:

002 - 255

Default:

Display all

ttn (optional)

Translation name.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

Default:

None given

type/typea/typei/typen/typen24/typeis/typens (optional)

Translation type identifies the translation type and network type. This parameter is the decimal representation of the 1-byte field used in SS7.

The type and typea parameters specify an ANSI network.

The typei parameter specifies an ITU-international network.

The typen parameter specifies an ITU-national network.

The typen24 parameter specifies a 24-bit ITU-national network.

The typeis parameter specifies an ITU-international spare network.

The typens parameter specifies an ITU-national spare network.

A translation type numeric value may be entered as ANSI type (type or typea) and as an ITU type (typei/typen/typen24/typeis/typens). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE protocol processing as either ANSI or ITU; therefore, ITU applies to ITU-I, ITU-I spare, ITU-N, ITU-N spare, and ITU-N24.

Range:

0 - 255

Default:

None given

Example

```
rtrv-gtt:type=5:ttn=lidb1:gta=919555
rtrv-gtt:type=5:gta=919555
rtrv-gtt:type=5:gta=919555:num=2500:force=yes
```

```
rtrv-gtt:typen24=0
rtrv-gtt:typei=7:pctype=ansi
rtrv-gtt:typen=106:pctype=itui
rtrv-gtt:type=55:pctype=itun
rtrv-gtt:type=9:pctype=itun24
rtrv-gtt:typei=4:pci=s-1-24-1
rtrv-gtt:typen=3:pcn=s-124
rtrv-gtt:ttn=tbla
rtrv-gtt:ttn=tbla:mapset=1
rtrv-gtt:type=4:cggtmod=yes
rtrv-gtt:ttn=ituset:gtmodid=set1
rtrv-gtt:typens=5:gta=123456
rtrv-gtt:typeis=5:gta=123456
```

Dependencies

The ANSI/ITU SCCP Conversion feature must be enabled before the pctype parameter can be specified.

If the pcn parameter is specified, its format must match the format that was assigned with the `chg-stpopts:npcfmti` parameter.

The first character of the translation name must be a letter.

The value of the tt parameter must exist in the Translation Type table.

The value specified for the tt parameter must correspond to a value of the type/typea/typei/typen/typen24/typeis/typens parameter (see the `ent/chg-gtt` command).

If the value of the num parameter exceeds 1000, then the force=yes parameter must be specified.

The type or ttn parameter must be specified.

The value of the pc/pca/pci/pcn/pcn24 parameter must be a full point code.

If the egta parameter is specified, the gta parameter must be specified.

If the system is defined as an ANSI system, the pc/pca parameter must be specified as a valid ANSI point code.

The ANSI/ITU SCCP Conversion feature must be enabled before a translated point code and a translation type in different network types can be specified.

The number of digits in the specified gta parameter must be at least the number of digits provisioned for the given translation type. If the VGTT (variable length GTT) feature is turned on, there can be up to 10 GTA lengths per translation type. When the `ent-gtt` command is entered to create entries, the software keeps track of the lengths and allows only ten different lengths.

The value of the tt parameter must not be defined as an alias.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must exist in the database.

The Hex Digit Support for GTT feature must be enabled and on before hexadecimal digits can be specified for the gta and egta parameters.

The value of the num parameter must not exceed the maximum table size.

The length of the egta parameter must equal the length of the gta parameter.

The value of the egta parameter must be greater than the value of the gta parameter.

If the tt parameter is not specified, then the value of the ttn parameter must match the value of a tt parameter in the STP database.

The value of the gta parameter must exist.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value of the loopset parameter must already exist in the database.

The Flexible GTT Load Sharing feature must be enabled before the mrnset parameter can be specified.

At least one entry must be provisioned in the MRN table for the MRN set that is specified by the mrnset parameter.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The mapset and mrnset parameters cannot be specified together in the command.

The GTT set associated with the translation type specified by the ttn parameter must have a set type of *cdgta* (see the `ent-gttset` command).

The value specified for the gtmodid parameter must already exist in the GTMOD table.

The ttn=none parameter cannot be specified.

The network domain of the translation type specified by the ttn parameter cannot be CROSS (see the `ent-gttset` command).

Notes

If the `rtrv-gtt` command is entered with only the gta parameter, a match would be an entry containing the same number of digits, or more digits, for the translation type. For example, if gta=8005556666 is specified, the six-digit translation type *800555* would be a match. If the VGTT feature is turned on and the egta parameter is specified, all matching entries regardless of length are displayed.

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If you do not know either the translation type or the translation type name, use the `rtrv-tt` command to obtain type and name.

Due to the size of these tables (up to 270,000 possible entries), a limit (65,535) is placed on the number of entries that can be printed at one time.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

The number of entries to be shown (the num parameter) can be specified for any valid combination of parameters.

If the gta parameter is not specified, then the first entry in the global title translation table that corresponds to the translation type is the first entry shown.

If the num and gta parameters are not specified, then up to 20 entries are shown.

If the gta parameter is specified, but the num parameter is not specified, then only one entry is shown.

If the num parameter is specified, then the number of entries shown is the lesser of the number of entries in the table from the defined starting point to the end, or the value of the num parameter.

If the gta and egta parameters are specified, then the entry that matches the gta parameter, or is the nearest entry below the gta parameter, is the first entry shown for the specified range.

The `rtrv-gtt` command can retrieve only CdGTA entries that were provisioned through GTA commands when the OBSR or FLOBR feature is turned on.

Output

`rtrv-gtt:type=10:num=65535:force=yes`

```
    tekelecstp 10-02-04 11:43:04 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
      3      c800        10

    GTT table is (9 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    9195551212            9195551212            DPCSSN SSN    008-001-001
         SSN=222  GTMODID=setntt1
    8005550000            8005551999            DPCSSN SSN    001-254-255
         SSN=255  GTMODID=---------
    8005552000            8005553999            DPC    GT     001-254-255
         SSN=255  GTMODID=setntt2
    8005554000            8005555999            DPCNGT GT     001-254-255
         SSN=255  GTMODID=---------
    8005556000            8005557999            DPCSSN SSN    001-254-255
         SSN=255  GTMODID=---------
    8005558000            8005559999            DPCSSN SSN    001-254-255
         SSN=255  GTMODID=---------
    9762428487            9762428487            DPCSSN SSN    001-254-255
         SSN=222  GTMODID=---------
    9766423277            9766423277            DPCSSN SSN    001-254-255
         SSN=222  GTMODID=---------
    9769388928            9769388928            DPCSSN SSN    001-254-255
         SSN=222  GTMODID=---------

    Command Retrieved 9 Entries

;
```

`rtrv-gtt:type=10:dpc=8-1-1:ssn=222:gta=9195551212`

```
    tekelecstp 10-02-24 11:43:04 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     3       c800       10

    GTT table is (9 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
```

```
    9195551212            9195551212            DPCSSN SSN    008-001-001
         SSN=222  GTMODID=---------

    Command Retrieved 1 Entries

;
```

```
rtrv-gtt:typen=10
```

```
    tekelecstp 10-02-24 11:44:04 EST  EAGLE 42.0.0
    TYPEN    TTN        NDGT
     10      --------     6

    GTT table is (9 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     ITU PC
    123456                123456                DPC    GT     0500-1-0-1
         SSN=---  GTMODID=---------

    Command Retrieved 1 Entries

;
```

This example shows a retrieval of all GTTs for a specified translation when the VGTT feature is turned on:

```
rtrv-gtt:type=10:num=65535:force=yes
```

```
    tekelecstp 10-02-24 11:44:04 EST  EAGLE 42.0.0
    TYPEA    TTN      NDGT
     10      c800     6, 8, 10

    GTT table is (17 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    976242                976242                DPCSSN SSN    001-254-255
         SSN=222  GTMODID=---------
    976642                976642                DPCSSN SSN    001-254-255
         SSN=222  GTMODID=---------
    976938                976938                DPCSSN SSN    001-254-255
         SSN=222  GTMODID=---------
    80055500              80055519              DPCSSN SSN    001-254-255
         SSN=255  GTMODID=---------
    80055520              80055539              DPC    GT     001-254-255
         SSN=255  GTMODID=---------
    80055540              80055559              DPCNGT GT     001-254-255
         SSN=255  GTMODID=---------
    80055560              80055579              DPCSSN SSN    001-254-255
         SSN=255  GTMODID=---------
    80055580              80055599              DPCSSN SSN    001-254-255
         SSN=255  GTMODID=---------
    9195551212            9195551212            DPCSSN SSN    008-001-001
         SSN=222  GTMODID=---------
    8005550000            8005551999            DPCSSN SSN    001-254-255
         SSN=255  GTMODID=---------
    8005552000            8005553999            DPC    GT     001-254-255
         SSN=255  GTMODID=---------
    8005554000            8005555999            DPCNGT GT     001-254-255
         SSN=255  GTMODID=---------
    8005556000            8005557999            DPCSSN SSN    001-254-255
```

```
     SSN=255  GTMODID=---------
8005558000           8005559999           DPCSSN SSN    001-254-255
     SSN=255  GTMODID=---------
9762428487           9762428487           DPCSSN SSN    001-254-255
     SSN=222  GTMODID=---------
9766423277           9766423277           DPCSSN SSN    001-254-255
     SSN=222  GTMODID=---------
9769388928           9769388928           DPCSSN SSN    001-254-255
     SSN=222  GTMODID=---------

Command Retrieved 17 Entries

;
```

`rtrv-gtt:type=7:gtmodid=asetansi5`

```
tekelecstp 10-02-24 11:43:04 EST  EAGLE 42.0.0
TYPEA    TTN        NDGT
 7       isvm       3,6,7,10

GTT table is (17 of 269999) 1% full.

START GTA            END GTA              XLAT   RI     PCA
564                  564                  DPCSSN SSN    248-006-015

     SSN=245  GTMODID=asetansi5
641                  641                  DPCSSN SSN    248-006-015
     SSN=245  GTMODID=asetansi5
589234               598744               DPCSSN SSN    248-006-015
     SSN=245  GTMODID=asetansi5
648392               659832               DPCSSN SSN    248-006-015
     SSN=245  GTMODID=asetansi5

Command Retrieved 4 Entries
;
```

This example shows output when the GTT table can contain up to 1,000,000 entries:

`rtrv-gtt:type=7`

```
tekelecstp 10-02-04 11:43:04 EST  EAGLE 42.0.0
TYPEA    TTN        NDGT
 7       isvm       3,6,7,10
GTT table is (17 of 1000000) 1% full.

START GTA            END GTA              XLAT   RI     PCA
564                  564                  DPCNGT GT     248-006-015
     SSN=245  GTMODID=asetansi4
641                  641                  DPCNGT GT     248-006-015
     SSN=245  GTMODID=---------
589234               598744               DPCNGT GT     248-006-015
     SSN=245  GTMODID=asetansi4
648392               659832               DPCSSN SSN    248-006-015
     SSN=245  GTMODID=---------

Command Retrieved 4 Entries
;
```

This example shows output for a 24-bit ITU-N point code translation type of 4:

```
rtrv-gtt:typen24=4
```

```
    tekelecstp 10-02-24 11:43:04 EST  EAGLE 42.0.0
    TYPEN24  TTN        NDGT
     4       --------   6

    GTT table is (1 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     ITU PC
    919833                919833                DPCSSN SSN    008-008-008
         SSN=20  GTMODID=---------

    Command Retrieved 1 Entries

;
```

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled and the pctype=ansi parameter is specified:

```
rtrv-gtt:typei=7:pctype=ansi
```

```
    tekelecstp 10-02-04 11:43:04 EST  EAGLE 42.0.0

    TYPEI    TTN        NDGT
     7       isvm       3,6,7,10

    GTT table is (17 of 1000000) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    564                   564                   DPCNGT GT     002-136-005
         SSN=245  GTMODID=aseti43     CGGTMOD = NO
    648392                659832                DPCSSN SSN    007-006-005
         SSN=245  GTMODID=---------   CGGTMOD = NO

    Command Retrieved 2 Entries

;
```

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled and the pctype=itui parameter is specified:

```
rtrv-gtt:typen=106:pctype=itui:gtmodid=id12
```

```
    tekelecstp 10-02-24 11:43:04 EST  EAGLE 42.0.0
    TYPEN    TTN        NDGT
     106     ntoi43     6

    GTT table is (17 of 1000000) 1% full.

    START GTA             END GTA               XLAT   RI     ITUI PC
    300006                300006                DPCNGT GT     6-002-3
         SSN=---  GTMODID=id12

    Command Retrieved 1 Entries

;
```

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled and the pctype=itun parameter is specified:

```
rtrv-gtt:type=55:pctype=itun
```

```
    tekelecstp 10-02-24 11:43:04 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
    55       aton44     7

    GTT table is (17 of 1000000) 1% full.

    START GTA             END GTA               XLAT   RI     ITUN PC
    6543210               6543210               DPCNGT GT     12341
         SSN=---  GTMODID=amseta4

    Command Retrieved 1 Entries

;
```

This example shows output when the ANSI/ITU SCCP Conversion feature is enabled and the pctype=itun24 parameter is specified:

```
rtrv-gtt:type=9:pctype=itun24
```

```
    tekelecstp 10-02-04 11:43:04 EST  EAGLE 42.0.0
    TYPE     TTN        NDGT
     7       isvm       3,6,7,10

    GTT table is (17 of 1000000) 1% full.

    START GTA             END GTA               XLAT   RI     ITUN24 PC
    764                   864                   DPCNGT GT     002-136-005
         SSN=245  GTMODID=amitu43     CGGTMOD = NO
    668392                689832                DPCSSN SSN    007-006-005
         SSN=245  GTMODID=---------   CGGTMOD = NO

 Command Retrieved 2 Entries

;
```

```
rtrv-gtt:typen=3
```

```
    tekelecstp 10-02-24 11:43:04 EST  EAGLE 42.0.0
    TYPEN    TTN        NDGT
     3       --------   6,21

    GTT table is (6 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     ITU PC
    123456                123456                DPCSSN GT   s-00124-aa
         SSN=10   GTMODID=amnat34
    234567                234567                DPCNGT GT   s-00124-aa
         SSN=---  GTMODID=---------
    234568                234568                DPC    GT   s-00124-aa
         SSN=---  GTMODID=---------
    234569                234569                DPC    GT   s-00124-aa
         SSN=---  GTMODID=amnat22
    334569467213456789012 334569478932012345678 DPC    GT   s-00124-aa
         SSN=---  GTMODID=amnat10

    Command Retrieved 5 Entries
```

```
;
```

```
rtrv-gtt:typen=3:pcn=s-124-aa
```

```
    tekelecstp 10-02-24 11:43:04 EST  EAGLE 42.0.0
    TYPEN    TTN        NDGT
     3       --------   6,21

    GTT table is (6 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     ITU PC
    123456                123456                DPCSSN GT   s-00124-aa
         SSN=10   GTMODID=amsetnat1   CGGTMOD = YES
    234567                234567                DPCNGT GT   s-00124-aa
         SSN=---  GTMODID=---------   CGGTMOD = NO
    234568                234568                DPC    GT   s-00124-aa
         SSN=---  GTMODID=---------   CGGTMOD = NO
    234569                234569                DPC    GT   s-00124-aa
         SSN=---  GTMODID=amsetnat2   CGGTMOD = YES
    334569467213456789012 334569478932012345678 DPC    GT   s-00124-aa
         SSN=---  GTMODID=amsetnat3   CGGTMOD = NO

    Command Retrieved 5 Entries

;
```

```
rtrv-gtt:typen=3:ssn=104
```

```
    tekelecstp 10-02-24 11:43:04 EST  EAGLE 42.0.0
    TYPEN    TTN        NDGT
     3       --------   6

    GTT table is (5 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     ITU PC
    123456                123456                DPCSSN GT   s-00124-aa
         SSN=10   GTMODID=asetnal3

    Command Retrieved 1 Entries

;
```

This example shows output when the Flexible GTT Load Sharing feature is not on:

```
rtrv-gtt:ttn=tbla
```

```
    tekelecstp 10-02-24 15:50:49 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     10      tbla       6

    GTT table is (2 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    123456                123456                DPC    GT     001-001-001
         SSN=---  GTMODID=---------
    234567                234567                DPCSSN SSN    001-001-001
         SSN=2    GTMODID=---------
```

```
    Command Retrieved 2 Entries

;
```

This example shows an MRN set value of NONE. The Flexible GTT Load-Sharing feature and the Intermediate GTT Load Sharing feature are on.

`rtrv-gtt:ttn=tbl1`

```
    tekelecstp 10-02-24 13:54:32 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     1       tbl1       10

    GTT table is (1 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    1234567890            1234567890            DPC    GT     001-001-002
          MRNSET=NONE  SSN=---  GTMODID=mod3

    Command Retrieved 1 Entries

;
```

This example shows output when the Flexible GTT Load Sharing feature and the Origin-based SCCP feature are on:

`rtrv-gtt:ttn=tbla`

```
    tekelecstp 10-02-24 14:51:59 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     6       tbla       6,10

    GTA table is (61 of 269999) 1% full
    e1040501 10-02-24 13:33:10 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     ITU PC
    123456                123456                DPC    GT     1-101-1
         MRNSET=DFLT  SSN=---  GTMODID=---------  CGGTMOD = NO

    Command Retrieved 1 Entries

;
```

This example shows output when the Hex Digit Support for GTT feature is turned on and hexadecimal digits are included in GTA values:

`rtrv-gtt:typen=201`

```
    tekelecstp 10-02-24 13:36:23 EST  EAGLE 42.0.0
    TYPEN    TTN        NDGT
     201     --------   6,21

    GTT table is (5 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PC
    100000                10000d                DPC    GT     00101
         SSN=---  GTMODID=---------
    10000e                10000f                DPC    GT     00101
```

```
          SSN=---  GTMODID=---------
    100010                200000                DPC    GT     00101
          SSN=---  GTMODID=---------
    abcdef0123456789abcdf fabcde01234567890afff DPCSSN SSN    00103
          SSN=10   GTMODID=---------
    fbcdef0123456789abcdf ffbfde01234567890aaff DPCSSN SSN    00103
          SSN=10   GTMODID=asetnal33

    Command Retrieved 5 Entries

;
```

This example shows output when the SCCP Loop Detection feature is enabled and an associated loopset entry exists:

`rtrv-gtt:ttn=setssn:mapset=6`

```
    tekelecstp 10-02-24 12:41:25 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     2       setssn      10

    GTT table is (4 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    2133                  2133                  DPC    GT     001-001-003
          MAPSET=6    SSN=---  GTMODID=asetans  CGGTMOD = NO

    Command Retrieved 1 Entries

;
```

This example shows output for a specified MRN set when the Flexible GTT Load Sharing feature is enabled:

`rtrv-gtt:ttn=tbla:mrnset=1`

```
    tekelecstp 10-02-24 12:41:25 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
    2        tbla       4

    GTT table is (4 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    2133                  2133                  DPC    GT     001-001-003
          MRNSET=1     SSN=---  GTMODID=asetans  CGGTMOD = NO

    Command Retrieved 1 Entries

;
```

This example retrieves all examples of translation type *4* where calling party global title modification is requested:

`rtrv-gtt:type=4:cggtmod=yes`

```
    tekelecstp 10-02-24 16:21:15 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     4       --------   6
```

```
    GTT table is (1 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    981234                981234                DPC    GT     001-001-001
         MRNSET=DFLT  SSN=---  GTMODID=asetans  CGGTMOD = YES
         LOOPSET = none

    Command Retrieved 1 Entries

;
```

rtrv-gtt:type=1:num=22

```
    e1040501 10-02-24 13:14:49 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     1       --------   6

    GTT table is (22 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    111111                111111                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111112                111112                DPC    GT     001-001-002
         SSN=---  GTMODID=gtmo10
    111113                111113                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111114                111114                DPC    GT     001-001-002
         SSN=---  GTMODID=gtmo12
    111115                111115                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111116                111116                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111117                111117                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111118                111118                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111119                111119                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111120                111120                DPC    GT     001-001-002
         SSN=---  GTMODID=gtmo11
    111121                111121                DPC    GT     001-001-002
         SSN=---  GTMODID=gtmo122
    111122                111122                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111123                111123                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111124                111124                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111125                111125                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111126                111126                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111127                111127                DPC    GT     001-001-002
         SSN=---  GTMODID=gtmo121
    111128                111128                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111129                111129                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111130                111130                DPC    GT     001-001-002
         SSN=---  GTMODID=---------
    111131                111131                DPC    GT     001-001-002
```

```
          SSN=---  GTMODID=gtmo34

    Command Retrieved 21 Entries

;
```

rtrv-gtt:type=2

```

    e1040501 10-02-24 13:15:11 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     2       --------   6

    GTT table is (22 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    222222                222229                DPCSSN SSN    001-001-002
         SSN=10   GTMODID=---------

    Command Retrieved 1 Entries

;
```

rtrv-gtt:type=1:gta=111268:egta=222259

```

    tekelecstp 10-02-24 13:31:05 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     1       --------   6

    GTT table is (37 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    111268                111268                DPCNGT GT     001-001-002
         SSN=---  GTMODID=---------  CGGTMOD = NO
    111269                111269                DPCNGT GT     001-001-002
         SSN=---  GTMODID=asetans3   CGGTMOD = YES
    111270                111270                DPCNGT GT     001-001-002
         SSN=---  GTMODID=asetans4   CGGTMOD = NO
    222252                222259                DPCSSN SSN    001-001-002
         SSN=12   GTMODID=---------  CGGTMOD = YES

    Command Retrieved 4 Entries

;
```

rtrv-gtt:type=1:mapset=1

```

    e1040501 10-02-24 13:38:25 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     1       --------   3,6

    GTT table is (41 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    105                   105                   DPCSSN SSN    001-001-003
         MAPSET=1     SSN=14   GTMODID=---------  CGGTMOD = NO

    Command Retrieved 1 Entries

;
```

```
rtrv-gtt:type=1:ssn=10
```

```
    e1040501 10-02-24 13:33:10 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT
     1       --------   3,6

    GTT table is (40 of 269999) 1% full.

    START GTA             END GTA               XLAT   RI     PCA
    100                   100                   DPCSSN SSN    001-001-002
         SSN=10   GTMODID=---------  CGGTMOD = NO
    101                   101                   DPCSSN SSN    001-001-003
         SSN=10   GTMODID=mod3       CGGTMOD = NO
    104                   104                   DPCSSN SSN    001-001-003
         SSN=10   GTMODID=---------  CGGTMOD = NO

    Command Retrieved 3 Entries

;
```

This example retrieves all CdGTA translations which have been provisioned by GTA commands:

```
rtrv-gtt:type=3
```

```
    tekelecstp 10-03-02 13:15:11 EST  EAGLE 42.0.0

    TYPEA    TTN        NDGT
    3        setans003   6

    GTT table is (6 of 269999) 1% full.
;
    tekelecstp 10-03-02 13:15:11 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     PCA
    345678                345680                DPC    GT     001-001-002
         SSN=---  NGT=---

    Command Retrieved 1 Entries
```

```
rtrv-gtt:typeis=5
```

```
    tekelecstp 10-05-01 04:39:18 EST  EAGLE 42.0.0

    TYPEIS   TTN        NDGT
    5        --------   6

    GTT table is (12 of 269999) 1% full.
;

    tekelecstp 10-05-01 04:39:18 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     ITU PC
    123456                123456                DPC    GT   s-1-001-4
         SSN=--- NGT=---

    Command Retrieved 1 Entries

;
```

```
rtrv-gtt:typens=5
```

```
    tekelecstp 10-05-01 04:40:38 EST  EAGLE 42.0.0

    TYPENS   TTN        NDGT
    5        --------   6

    GTT table is (20 of 269999) 1% full.

;

    tekelecstp 10-05-01 04:40:38 EST  EAGLE 42.0.0

    START GTA             END GTA               XLAT   RI     ITU PC
    123456                123456                DPC    GT   s-00111
         SSN=--- NGT=---

    Command Retrieved 1 Entries

;
```

Legend

- **type/typea/typei/typen/typen24/typeis/typens**—Translation type
- **TTN**—Translation name
- **NDGT**—Number of digits
- **GTT TABLE IS 10% FULL**—Relative size of the GTT table
- **x of y**—Number of entries in the table (x) and the maximum number of entries configured for the table (y)
- **START GTA**—Global title start address
- **END GTA**—Global title end address
- **XLAT**—Translate indicator
- **RI**—Route indicator
- **PC, PCA, ITU PC, ITUI PC, ITUN PC, ITUN24 PC**—Point code
- **SSN**—Subsystem number
- **MRN**—Mated Relay Node
- **MRNSET**—MRN set ID
- **MAPSET**—MAP set ID
- **CGGTMOD**—Calling Party GT Modification Indicator
- **GTMODID**—Global Title Modification Identifier

Related Commands

chg-gtt, *dlt-gtt*, *ent-gtt*

rtrv-gttact

Retrieve a GTT Action Entry

Use this command to display entries from the Global Title Translations (GTT) Action table.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

act (optional)

Action. The action applied to the message.

Range:

disc

discard message with no return error

dup

route a copy of the message to a specified duplicate node

fwd

route the original message to a specified forward node instead of the destination indicated by the GTT/ DB data

srvc

apply service (GPORT/GFLEX/SMSMR) on the message.

tcaperr

discard message that has a specified TCAP error

udts

discard message and send udts/xudts

actid (optional)

GTT Action Id.

Range:

ayyyyyyyy

1 leading alphabetic followed by up to 8 alphanumeric characters

atcaperr (optional)

ANSI TCAP Error Cause. The reason for discarding the message containing the ANSI TCAP portion that is associated with the TCAPERR GTT Action.

Range:

0 - 255

cdgtmodid (optional)

Called party global title modification identifier.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

cggtmodid (optional)

Calling party global title modification identifier.

Range:

ayyyyyyyy

1 leading alphabetic character followed by up to 8 alphanumeric characters

cgpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code *(prefix-ni-nc-ncm).*

Synonym:

cgpca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

cgpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

cgpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix*

subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cgpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

cgpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix- un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

cgpcogmsg (optional)

The data that is used as the Calling Party Point Code in the outgoing message.

Range:

cgpicmsg

CgPA PC data from the incoming MSU

dflt

Default. The standard Global Title Translation process provides the CgPA PC.

opcicmsg

OPC data from the incoming MSU

provcgpc

provisioned CGPC/CGPCA/CGPCI/CGPCN/CGPCN24 data in the GTT Action

remove

CGPC will be removed from the outgoing MSU

defactid (optional)

Default Action ID. The Action Id associated with the Forward action.

Range:

disc

GTT Action ID of type *disc*

udts

GTT Action ID of type *udts*

tcaperr

GTT Action ID of type *tcaperr*

fallback

The MSU is routed using routing data in the incoming MSU.

itcaperr (optional)

ITU TCAP Error Cause. The reason for discarding the message containing the ITU TCAP portion that is associated with the TCAPERR GTT Action.

Range:

0 - 255

loopset (optional)

SCCP loopset name. This parameter retrieves action entries that are associated with the specified loopset.

Range:

ayyyyyyy

One alphabetic character followed by up to 7 alphanumeric characters.

none —Action entries with no association to any loopset.

mapset (optional)

MAP Set ID. The Mated Application Set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

mrnset (optional)

MRN Set ID. The Mated Relay Node Set ID.

Range:

1 - 3000, dflt

dflt

Default MRN Set ID

none

The GTT Action table entry with no association to any mrnset.

off (optional)

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

uimreqd

useicmsg

on (optional)

Enables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

refcnt

uimreqd

useicmsg

pc (optional)

ANSI point code in the form of *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The value "none" indicates that the Origin Point Code (OPC) field in the message will be used in place of CGPC.

Synonym:

pca

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

pci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix- un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

ri (optional)

Routing indicator.

Range:

gt

ssn

snai (optional)

The service nature of address indicator.

Range:

ccrndn

Country code, routing number, and national directory number

intl

International number

Natl

National significant number

rnidn

Routing number prefix and international dialed/directory number

rnndn

Routing number prefix and national dialed/directory number

rnsdn

Routing number prefix and subscriber dialed/directory number

Sub

Subscriber number

snp (optional)

The service numbering plan.

Range:

e164

E.164 numbering plan

e212

E.212 numbering plan

e214

E.214 numbering plan

srvcerr (optional)

The action to be taken when the Service triggered by the GTT Action Service fails. The MSU can be processed by either applying the results of the pre-Service GTT, or continuing with the specific Service error processing.

Range:

SRVC

Continue with specific service error

GTT

Apply the result of pre-GTT service

Default:

SRVC

srvcname (optional)

Service to be applied on the MSU when act is set to srvc.

Range:

GFLEX, GPORT, SMSMR

ssn (optional)

Subsystem number.

Range:

2 - 255, none

udtserr (optional)

UDTS error cause. This parameter specifies the reason for discarding the message that is associated with UDTS GTT Action.

Range:

0 - 255

Example

```
rtrv-gttact:actid=disc1
rtrv-gttact:cggtmodid=idda1
rtrv-gttact:cggtmodid=cggt1:cdgtmodid=cdgt2
rtrv-gttact:defactid=fallback
rtrv-gttact:pcn16=1-14-0
rtrv-gttact:act=srvc
rtrv-gttact:srvcname=gflex
```

Dependencies

The specified GTT Action entry must already exist in the database.

If the Flexible GTT Load Sharing feature is not enabled, then the mapset parameter cannot be specified.

The value specified for the pc/pca/pci/pcn/pcn24/pcn16 and cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameters must be a full point code and must have a valid value within the range for each subfield.

The Flexible GTT Load Sharing feature must be enabled before the mrnset parameter can be specified.

The mapset and mrnset parameters cannot be specified together in the command.

A value of *none* or *fallback* cannot be specified for the actid parameter.

A value of *disc, udts*, or *tcaperr* must be specified for the act parameter before a value of *uimreqd* can be specified for the on or off parameter.

A value of *dup* or *fwd* must be specified for the act parameter before the pc, ssn, ri, mrnset, mapset, loopset, cgpc, cgpcogmsg, cggtmodid or cdgtmodid parameters can be specified and before a value of `useicmsg` can be specified for the on or off parameter.

The act=fwd parameter must be specified before the defactid parameter can be specified.

The pc, ssn, ri, mrnset, mapset, loopset, cgpc, cgpcogmsg, and defactid parameters cannot be specified in the same command as the atcaperr, itcaperr, or udtserr parameters.

Values of *useicmsg* and *uimreqd* cannot be specified for the on or off parameters in the same command.

If the actid parameter is specified, then the ri, pc, ssn, mrnset, mapset, loopset, on, off, atcaperr, itcaperr, udtserr, act, cgpc, cgpcogmsg, defactid, cggtmodid, cdgtmodid, snp snai, srvcerr and srvcname parameters cannot be specified.

The act=tcaperr parameter must be specified before the atcaperr or itcaperr parameter can be specified.

The act=udts parameter must be specified before the udtserr parameter can be specified.

The udtserr and srvcerr parameters cannot be specified in the same command.

The atcaperr and itcaperr parameters cannot be specified in the same command.

The pc, ri, ssn, mrnset, mapset, loopset, on/off=useicmsg, cdgtmodid, defactid, cgpc, cgpcogmsg, and cggtmodid parameters cannot be specified in the same command with the on/off=uimreqd, atcaperr, itcaperr, and udtserr parameters.

The srvcname, snp, snai and srvcerr parameters can only be specified when act is set to srvc.

The point code specified for the pc/pci/pcn/pcn24/pcn16 and cgpc/cgpci/cgpcn/cgpcn24/cgpcn16 parameters must be a full point code.

The SCCP Loop Detection feature must be enabled before the loopset parameter can be specified.

The value specified for the loopset parameter must already exist in the database.

The value specified for the cdgtmodid or cggtmodid parameter must already exist in the GTMOD table.

The defactid=none parameter cannot be specified.

The value specified for the pc/pca/pci/pcn/pcn24/pcn16 and cgpc/cgpca/cgpci/cgpcn/cgpcn24/cgpcn16 parameters must have the same domain.

The same value cannot be specified for the on and off parameters.

The specified MAP set must already exist in the MAP table.

The specified MRN set must already exist in the MRN table.

Notes

on/off options

- *uimreqd* —UIM required. Specifies whether a UIM should be generated.
- *useicmsg* —Use Incoming Message. Specifies whether to apply GTT Action data to the message as the message was received (OFF) or after any EPAP or GTT translation/modification data has been applied (ON).

Output

`rtrv-gttact:on=refcnt`

```
tekelecstp 10-02-04 18:21:01 EST  EAGLE 42.0.0

ACTID      ACTION   ATCAPERR ITCAPERR UDTSERR UIMREQD REFCNT
-------------------------------------------------------------
act2       disc     ---      ---      ---     off      0
none1      disc     ---      ---      ---     off      0

ACTID      ACTION     PCA         RI  SSN  MRNSET  MAPSET  REFCNT
-------------------------------------------------------------------------

actdup1    dup      001-001-001   gt  ---  DFLT    -----   2
     CDGTMODID = ---------  CGGTMODID = ---------
     LOOPSET = None
     USEICMSG = off     CGPCOGMSG = dflt       CGPCA = ---
actfwd1    fwd      001-001-001   gt  ---  DFLT    -----   2
     CDGTMODID = ---------  CGGTMODID = ---------
     LOOPSET = None     DEFACTID = Fallback
```

```
          USEICMSG = off     CGPCOGMSG = dflt       CGPCA = ---

    ACTID      ACTION     PCI         RI  SSN MRNSET  MAPSET  REFCNT

    ------------------------------------------------------------------------

    ACTID      ACTION     PCN         RI  SSN MRNSET  MAPSET  REFCNT
    ------------------------------------------------------------------------


    ACTID      ACTION     PCN24       RI  SSN MRNSET  MAPSET  REFCNT
    ------------------------------------------------------------------------


    GTT-ACT  table is (4 of 2000) 1% full.

;
```

rtrv-gttact:cggtmodid=set1

```
    tekelecstp 10-02-04 18:21:01 EST  EAGLE 42.0.0

    ACTID      ACTION PCI             RI  SSN  MRNSET  MAPSET
    ------------------------------------------------------------------
    actdup2    DUP    002-002-002     GT  ---  2000    -----
          CDGTMODID = set2      CGGTMODID = set1


    ACTID      ACTION PCN24           RI  SSN  MRNSET  MAPSET
    ------------------------------------------------------------------------

    actdup6    DUP    111-222-333     SSN 100  ----    3000
          CDGTMODID = id9       CGGTMODID = set1

    GTT Action table is (8 of 2000) 1% full

;
```

rtrv-gttact:pcn16=1-2-3

```
    tekelecstp 13-07-02 15:04:36 EST  45.0.0-64.69.0
    rtrv-gttact:pcn16=1-2-3
    Command entered at terminal #4.


    ACTID      ACTION   PCN16           RI  SSN  MRNSET  MAPSET
    ------------------------------------------------------------------------
    actfwd5    fwd      001-02-03       gt  ---  DFLT    -----
         CDGTMODID = ---------  CGGTMODID = ---------
         DEFACTID = Fallback
         USEICMSG = off     CGPCOGMSG = dflt       CGPCN16 = ---


    GTT-ACT  table is (1 of 2000) 1% full.

;
```

```
rtrv-gttact:srvcname=smsmr:act=srvc
```

```
 eagle1 13-10-27 18:10:25 EST  EAGLE 46.0.0

ACTID      ACTION   SRVCNAME    SRVCERR    SNP    SNAI
-----------------------------------------------------------
actsrvc1   srvc     GFLEX       SRVC       E212   SUB
actsrvc4   srvc     GPORT       SRVC       E164   INTL
actsrvc5   srvc     GPORT       GTT        E164   RNNDN
actsrvc6   srvc     SMSMR       SRVC       E164   INTL
actsrvc7   srvc     SMSMR       GTT        E164   RNNDN
```

Related Commands

chg-gttact, *dlt-gttact*, *ent-gttact*

rtrv-gttapath

Retrieve GTT Action Path Entry

Use this command to retrieve a GTT Action path entry. A GTT Action path consists of pairs of "setname + value" for Opcode/CgGTA/CdGTA. Each "setname + value" pair must already be defined in the GTT translation table.

Parameters

acn (optional)

Application context name. The ITU TCAP *acn* field in the incoming MSU.

Range:

0 - 255, none

none—there is no ITU TCAP *acn* field in the incoming MSU

cdgta (optional)

Called Party Global Title Address.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

cdgttsn (optional)

GTT set name (CDPA type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters

cggta (optional)

Calling Party Global Title Address.

Range:

1-21 digits

If the Hex Digit Support for GTT feature is not enabled, the range is 1 - 21 decimal digits; valid digits are *0-9*.

If the Hex Digit Support for GTT feature is enabled and on, the range is 1 - 21 hexadecimal digits; valid digits are *0-9*, *a-f*, *A-F*.

cggttsn (optional)

GTT set name (CGPA type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

family (optional)

The ANSI TCAP*family* field in the incoming MSU.

Range:

0 - 255, ***, *none*

none —there is no value in the ANSI TCAP *family* field in the incoming MSU

gttpn (optional)

GTT Path name.

Range:

ayyyy

1 leading alphabetic character and up to 4 following alphanumeric characters.

opcode (optional)

The TCAP*opcode* field in the incoming MSU.

Range:

0 - 255, ***, *none*

none —there is no value in the TCAP *opcode* field in the incoming MSU

opgttsn (optional)

GTT set name (Opcode type).

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

pkgtype (optional)

The ANSI and ITU TCAP package type.

Range:

ituuni
ITU unidirectional

qwp
Query with Permission

qwop
Query without Permission

resp
Response

cwp
Conversation with Permission

cwop
Conversation without Permission

any
Wildcard value

bgn
Begin

end
End

cnt
Continue

ituabort
ITU abort

ansiabort
ANSI abort

ansiuni
ANSI unidirectional

ANSI TCAP Package Types—*ansiuni*, *qwp*, *qwop*, *resp*, *cwp*, *cwop*, *ansiabort*, *any*

ITU TCAP Package Types—*bgn*, *ituabort*, *ituuni*, *any*, *end*, *cnt*

Example

```
rtrv-gttapath:opgttsn=opsn2:pkgtype=ansiuni:opcode=124:family=2:cggttsn=cgsn3:
cggta=987654:cdgttsn=cdsn1:cdgta=123456
```

```
rtrv-gttapath:opgttsn=opsn2:pkgtype=ansiuni:opcode=124:family=2
```

```
rtrv-gttapath
```

Dependencies

The acn and family parameters cannot be specified together in the command.

The GTT Action - DISCARD, GTT Action - FORWARD, or GTT Action - DUPLICATE feature must be enabled before this command can be entered.

A value of *none* cannot be specified for the opgttsn, cggttsn, and cdgttsn parameter(s).

The opcode, pkgtype, and family parameters must be specified together for ANSI TCAP translations. The opcode, pkgtype, and acn parameters must be specified together for ITU TCAP translations.

If the family parameter is specified, then a value of *ansiuni*, *qwp*, *qwop*, *resp*, *cwp*, *cwop*, *ansiabort*, or *any* must be specified for the pkgtype parameter.

If the acn parameter is specified, then a value of *bgn*, *ituabort*, *ituuni*, *any*, *end*, or *cnt* must be specified for the pkgtype parameter.

If the pkgtype=ituabort, then a value of *none* must be specified for the acn and opcode parameters.

If the pkgtype=ansiabort is specified then a value of *none* must be specified for the family and opcode parameters.

If the family and opcode parameters are specified in the command, then either both parameters must have a value of *none* or neither parameter can have a value of *none*.

At least one GTT set-value combination must be specified.

The value specified for the gttpn parameter must already exist in the database.

Both Path name and set-value combination(s) cannot be specified together.

The value specified for the gttpn parameter cannot be a reserved word.

Output

`rtrv-gttapath:gttpn=path3`

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0

    GTTPN   OPGTTSN         CGGTTSN         CDGTTSN
    ------------------------------------------------
    path3   opsn2           cgsn3           cdsn1
        OPCODE = 124    PKGTYPE = ansiuni    FAMILY = 2
        CGGTA = 987654                       ECGGTA = 999999
        CDGTA = 123456                       ECDGTA = 234567

    GTT Action Path table is (3 of 10000) 1% full

    Command Completed.
;
```

`rtrv-gttapath:opgttsn=opsn2:pkgtype=ansiuni:opcode=124:family=2`

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0

    GTTPN   OPGTTSN         CGGTTSN         CDGTTSN
    ------------------------------------------------
```

```
    path2   opsn2           cgsn2           ---------
        OPCODE = 124    PKGTYPE = ansiuni    FAMILY = 2
        CGGTA = 45673                        ECGGTA = 45673

    path3   opsn2           cgsn3           cdsn1
        OPCODE = 124    PKGTYPE = ansiuni    FAMILY = 2
        CGGTA = 987654                       ECGGTA = 999999
        CDGTA = 123456                       ECDGTA = 234567

    GTT Action Path table is (3 of 10000) 1% full

    Command Completed.
;
```

`rtrv-gttapath`

```
    tekelecstp 10-02-04 18:29:41 EST  EAGLE 42.0.0

    GTTPN   OPGTTSN         CGGTTSN         CDGTTSN
    ------------------------------------------------
    path1   opsn1           ---------       cdsn1
        OPCODE = 123    PKGTYPE = ituuni     ACN = 111-111-111-111-111-111-111
        CGGTA = 7654                         ECGGTA = 7654

    path2   opsn2           cgsn2           ---------
        OPCODE = 124    PKGTYPE = ansiuni    FAMILY = 2
        CGGTA = 45673                        ECGGTA = 45673

    path3   opsn2           cgsn3           cdsn1
        OPCODE = 124    PKGTYPE = ansiuni    FAMILY = 2
        CGGTA = 987654                       ECGGTA = 999999
        CDGTA = 123456                       ECDGTA = 234567

    GTT Action Path table is (3 of 10000) 1% full

    Command Completed.
;
```

Related Commands

chg-gttapath, *dlt-gttapath*, *ent-gttapath*

rtrv-gttaset

Retrieve a GTT Action Set

Use this command to display entries from the Global Title Translations (GTT) Action Set table.

Parameters

Note: Definitions for the feature options specified by the on and offparameters are located in the Notes section.

actid1 (optional)

GTT Action ID 1. This parameter specifies the first action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid2 (optional)

GTT Action ID 2. This parameter specifies the second action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid3 (optional)

GTT Action ID 3. This parameter specifies the third action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid4 (optional)

GTT Action ID 4. This parameter specifies the fourth action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid5 (optional)

GTT Action ID 5. This parameter specifies the fifth action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actid6 (optional)

GTT Action ID 6. This parameter specifies the sixth action ID associated with the GTT action set.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

actsn (optional)

GTT Action Set Name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters

off (optional)

Disables or turns off the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned off. Up to 8 feature options can be specified in the list.

Range:

testmode

on (optional)

Enables or turns on the specified feature options. This parameter specifies a comma-separated list of feature options that are requested to be turned on. Up to 8 feature options can be specified in the list.

Range:

testmode

refcnt

Example

```
rtrv-gttaset:actid1=disc1
rtrv-gttaset:actsn=asetdisc1:on=refcnt
rtrv-gttaset:on=testmode
```

Dependencies

The specified GTT Action Set must already exist in the database.

The actsn=none parameter cannot be specified.

If the actsn parameter is specified, then the on=refcnt parameter is the only other parameter that can be specified.

A value of *fallback* or *none* cannot be specified for the actid1/actid2/actid3/actid4/actid5/actid6 parameters.

The EGTT feature must be on before this command can be entered.

The action ID specified by the actid1/actid2/actid3/actid4/actid5/actid6 parameter(s) must already exist in the GTT Action table.

The actid1/actid2/actid3/actid4/actid4/actid5/actid6 parameters must each specify a unique GTT Action ID in the command.

Only one Action ID with an action of *disc, udts*, *tcaperr* or *srvc* can be specified.

If an Action ID with an act of *fwd* is specified, then no other Action ID in the Action Set with an act of *disc, udts, tcaperr*, *fwd* or *srvc* can be specified.

If an Action ID associated with an action of *srvc* is specified, then no other Action ID in the same Action Set can be associated with an act of *fwd, disc, udts, tcaperr*, or *srvc.*

If 5 Action IDs with an act of *dup* are specified then the remaining Action ID with an act of *dup* cannot be specified.

The same value cannot be specified for the on and off parameters.

Notes

When only the actidX (where X=1, 2, 3, 4, 5, 6) parameter is specified, and its value matches any action set, then all such matches will be displayed.

on/off options

- *testmode* —Invokes a field-safe Test Tool in order to debug the GTT Action Set rules.
- *refcnt* —Reference Count. Displays the number of GTTs that reference the GTT Action Set. This feature option is ON only.

Output

`rtrv-gttaset`

```
    tekelecstp 10-02-04 18:21:01 EST  EAGLE 42.0.0
    ACTSN      REFCNT   TEST  ActIds
                        MODE
    --------------------------------
    aset1      1        on    dup1      (DUP),dup2      (DUP),dup3      (DUP),
                              disc1     (DISC),------,------

    aset2      5        off   dup2      (DUP),dup1      (DUP),------,
                              ------,------,------

    aset3      10       on    fwd1       FWD),dup4      (DUP),------,
                              ------,------,------

    aset4      0        off   udts1     (UDTS),------,------,
                              ------,------,------

    aset5      0        off   ------,tcaperr1  (TCAPERR),------,
                              ------,------,------

    GTT Action Set table is (5 of 20000) 1% full

;
```

`rtrv-gttaset:actid2=disc2`

```
    tekelecstp 14-03-13 10:53:02 EST  EAGLE 46.0.0
    ACTSN      TEST  ActIds
               MODE
    -------------------------------
    aset3       off   ------,disc2    (DISC),------,
                      ------,------,------
    aset4       off   disc2    (DISC),------,------,
                      ------,------,------
    aset6       off   ------,------,------,
```

```
                      ------,------,disc2    (DISC)


    GTT-ASET table is (3 of 20000) 1% full.

;
```

`rtrv-gttaset`

```
    tekelecstp 13-10-28 17:34:05 EST  46.0.0
    ACTSN   REFCNT   TEST  ActIds
                     MODE
    ------------------------------
    actn1   2        off   srvc1    (SRVC),------,------,
                           ------,------,------,


    GTT-ASET table is (1 of 20000) 1% full.

;
```

Related Commands

chg-gttaset, *dlt-gttaset*, *ent-gttaset*

rtrv-gttsel

Retrieve GTT Selectors

Use this command to display a list of administered global title selector combinations required for a global title entry. The list can be filtered by using various parameter combinations.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

Note: The nature of address indicator parameters (naiv or nai) can be specified using a mnemonic or an explicit value. Either value can be specified: however, both values cannot be specified at the same time for the same parameter. *NAIV/NAI Mapping* shows the mapping between the naiv and the nai parameter values.

Note: The numbering plan parameters (npv or np) can be specified using a mnemonic or an explicit value. Either value can be specified: however, both values cannot be specified at the same time for the same parameter. *NPV/NP Mapping* shows the mapping between the npv and np parameter values.

cdgtasn (optional)

CdPA GTA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

cdgttsn (optional)

CdPA GTT set.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

cggtasn (optional)

CgPA GTA GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

cggttsn (optional)

CgPA GTT set.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

cgpcsn (optional)

CgPA PC GTT set name.

Range:

ayyyyyyyy

1 leading alphabetic character and up to 8 following alphanumeric characters.

cgssn (optional)

CgPA subsystem number.

Range:

0 - 255

eaglegen (optional)

This parameter specifies whether the selector is used by EAGLE generated messages.

Range:

yes

The selector is used by EAGLE generated messages

gti/gtia/gtii/gtin/gtin24/gtiis/gtins/gtin16 (optional)

Global title indicator.

For all EGTT selector commands, the domain is defined as GTI and GTIA (ANSI), GTII (ITU international), GTIN (ITU national), GTIN24 (24-bit ITU national), GTIIS (ITU international spare), and GTINS (ITU national spare) and GTIN16 (16-bit ITU National).

For the selector commands, GTI and GTIA are equivalent. GTT selectors can be provisioned for the same translation type (TT) with different ITU domains. For example, if an entry with gtii=2 and tt=4 already exists, an entry with gtin=2 and tt=4 can be specified.

Range:

0, 2, 4

Supported value for ANSI: gti=0, 2 and gtia=0, 2

Supported values for ITU: gtii/gtin/gtin24/gtiis/gtins/gtin16=0, 2, 4

Default:

display all gti(x) parameter values

gttsn (optional)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

Default:

Display all

lsn (optional)

Linkset name.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

nai (optional)

Nature of Address indicator.

Range:

sub

rsvd

natl

intl

dflt

Default:

Display all

naiv (optional)

Nature of Address indicator value.

Range:

0 - 127

Default:

Display all

np (optional)

Numbering Plan.

Range:

e164

generic

x121

f69

e210

e212

e214

private

dflt

Default:

Display all

npv (optional)

Numbering Plan value.

Range:

0 - 15

Default:

Display all

ovrlapd (optional)

Overlapped GTT Selectors.

Range:

yes

Default:

no

selid (optional)

Selector ID.

Range:

0 - 65534, none

tt (optional)

Translation type.

Range:

0 - 255

Default:

Display all

Example

```
rtrv-gttsel
rtrv-gttsel:gtii=2
rtrv-gttsel:tt=0:np=e164
rtrv-gttsel:gti=2:tt=10
rtrv-gttsel:gttsn=setint000
rtrv-gttsel:gtia=2:tt=21:cggttsn=setcgpc:cdgttsn=setcdgta:cgssn=20:selid=1:
lsn=ls10
rtrv-gttsel:gtia=2:tt=2:lsn=ls1010
rtrv-gttsel:gtia=2:eaglegen=yes
rtrv-gttsel:cdgttsn=setdpc
rtrv-gttsel:ovrlapd=yes
rtrv-gttsel:gtin16=2
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

Only entries that exactly match all specified parameters will be displayed. If no match is found, the following message is displayed in the Scroll Area of the terminal: "No GTT Selectors matching the specified criteria were found."

The np and npv parameters cannot be specified together in the same command.

The nai and naiv parameters cannot be specified together in the same command.

The gti/gtia=4, gti(x)=1, and gti(x)=3 parameters cannot be specified.

If the gti/gtia/gtii/gtin/gtin24/gtiis/gtins/gtin16=2 parameter is specified, then the np/npv and nai/naiv parameters cannot be specified.

If a full GTT selector key is specified by the gti(x), tt, np/npv, nai/naiv, cgssn, selid, and lsn parameters, then the GTT set specified by the cgpcsn, cggtasn, or cggttsn parameters cannot be specified.

The OBSR feature must be enabled before the cggtasn, cgpcsn, cgssn, or cdgtasn parameters can be specified.

The GTT set specified by the cggtasn or cgpcsn parameter must exist in the database before it is assigned to a GTT selector.

The set type of the cggtasn or cgpcsn parameter must match the set type of the corresponding entry in the GTT set table. For example, the cggtasn parameter should be have a set type of *cggta*, and the cgpcsn parameter should have a set type of *cgpc*.

The FLOBR feature must be turned on before the lsn, eaglegen, cdgttsn, or cggttsn parameter can be specified.

If the eaglegen=yes parameter is specified, then the lsn, selid, gttsn, cgssn, cggtasn, and cgpcsn parameters cannot be specified.

The value specified for the cdgtasn or gttsn parameter must match the name of an existing GTT set.

The GTT set specified by the cdgtasn or gttsn parameter must have a set type of *cdgta* (see the `ent-gttset` command).

If the OBSR feature is enabled or the FLOBR feature is turned on, then the gttsn parameter cannot be specified.

The linkset specified by the lsn parameter must already exist in the Linkset table.

The CdPA GTT Set specified by the gttsn, cdgtasn, or cdgttsn parameter must already exist in the GTT Set table.

A value of *dflt* must be specified for the np and nai parameters, or neither value can be *dflt*.

If a full GTT selector key is specified by the gti(x), tt, np/npv, nai/naiv, selid, and lsn parameters, then the GTT set specified by the gttsn, cdgtasn, or cdgttsn parameters cannot be specified.

If the lsn parameter is specified, then the cdgttsn or cggttsn parameter must be specified.

The cggtasn, cgpcsn, and cggttsn parameters cannot be specified together in the command.

The gttsn, cdgtasn, and cdgttsn parameters cannot be specified together in the command.

If the gttsn, cdgttsn, or cdgtasn parameter is specified, then the cgssn parameter cannot be specified.

If the eaglegen=yes parameter is specified, then the lsn, selid, gttsn, cdgtasn, cgssn, cggttsn, cggtasn , or cgpcsn parameters cannot be specified.

If the FLOBR feature is turned on, then the cdgtasn, cggtasn, and cgpcsn parameters cannot be specified.

If a value of *dflt* is specified for the np and nai parameters, then the cggtasn, cgpcsn, cgssn, selid, lsn, cggttsn, and eaglegen parameters cannot be specified.

A value of *none* cannot be specified for the gttsn, cdgtasn, cdgttsn, cggttsn, cggtasn, and cgpcsn parameters.

If the gti(x)=0 parameter is specified, then the eaglegen, tt, np/npv, and nai/naiv parameters cannot be specified.

Notes

There is no J7 FAK dependency on the GTIA/GTIN16/GTIN24 parameters. The command can be entered successfully whether the J7 FAK is enabled or not enabled.

GTT Selector entries configured using GTIN24/GTIN16 parameters shall be treated as ITU-N24 entries if the J7 FAK is disabled and shall be treated as ITU-N16 entries if the J7 FAK is enabled.

Also, if the J7 Support feature is enabled, the rtrv-gttsel output displays the GTIN16 header and if the J7 feature is not enabled, the rtrv-gttsel output displays the GTIN24 header.

Output

This example retrieves all GTT selectors when EGTT is ON:

`rtrv-gttsel`

```
    tekelecstp 10-04-15 13:54:13 EST  EAGLE 42.0.0
    GTIA    TT     NP      NAI  SELID GTTSN
    2       2      --      ---  none  setans002
    2       5      --      ---  none  setans005

    GTII    TT     NP      NAI  SELID GTTSN
    2       4      --      ---  none  setint004
    4       4      dflt    dflt none  setint004

    GTIN    TT     NP      NAI  SELID GTTSN
    2       6      --      ---  none  setnat006
    4       6      dflt    dflt none  setnat006

    GTIN24  TT     NP      NAI  SELID GTTSN

    GTIIS   TT     NP      NAI  SELID GTTSN
    2       10     --      ---  none  setins010
    4       10     dflt    dflt none  setins010

    GTINS   TT     NP      NAI  SELID GTTSN
;
```

This example retrieves all GTT Selectors when the OBSR feature is enabled or the FLOBR feature is turned on:

`rtrv-gttsel`

```
    sccprte 10-04-15 14:31:52 EST  EAGLE 42.0.0
    GTI                  CG                  CDPA            CGPA
    ANSI TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET
    2    5   --      ---  any none  lsa03     opc1     (opc  ) cgssn2   (cgssn)

    2    5   --      ---  202 1234  any       -----    (---  ) cggta1   (cggta

    2    5   --      ---  any none  any       cdgta1   (cdgta) cggta1   (cggta)

    2    15  --      ---  --- none  Eagle-Gen  cdgta2   (cdgta) -----    (---
)
    2    15  --      ---  202 1234  lsa02     -----    (---  ) cgssn1   (cgssn)

    2    101 --      ---  --- none  any       setans101(cdgta) -----    (---
)
    2    102 --      ---  --- none  any       a102     (cdgta) -----    (---
)
    2    202 --      ---  --- none  any       a102     (cdgta) -----    (---
)

    GTI                  CG                  CDPA            CGPA
    INTL TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET
    2    17  --      ---  --- none  Eagle-Gen  icdgta1  (cdgta) -----    (---
```

```
)
    2    101 --      ---  --- none  any        setint101(cdgta) -----    (---
)
    2    102 --      ---  --- none  any        int102   (cdgta) -----    (---
)
    2    222 --      ---  --- none  any        int102   (cdgta) -----    (---
)
    4    101 dflt    dflt --- none  any        setint101(cdgta) -----    (---
)
    4    102 dflt    dflt --- none  any        int102   (cdgta) -----    (---
)
    4    222 dflt    dflt --- none  any        int102   (cdgta) -----    (---
)
    4    253 11      126  102 5678  any        -----    (---  ) icgpc2   (cgpc
)
    4    253 11      15   any 5678  lsint02    icgssn2  (cgssn) iopc2    (opc
)

    GTI                  CG                   CDPA             CGPA
    NATL TT  NP      NAI  SSN SELID LSN        GTTSET           GTTSET
    2    103 --      ---  --- none  any        setnat103(cdgta) -----    (---
)
    2    104 --      ---  --- none  any        n104     (cdgta) -----    (---
)
    2    204 --      ---  --- none  any        n104     (cdgta) -----    (---
)
    4    18  f69     5    --- none  Eagle-Gen  icdgta1  (cdgta) -----    (---
)
    4    103 dflt    dflt --- none  any        setnat103(cdgta) -----    (---
)
    4    104 dflt    dflt --- none  any        n104     (cdgta) -----    (---
)
    4    204 dflt    dflt --- none  any        n104     (cdgta) -----    (---
)

    GTI                  CG                   CDPA             CGPA
    N24  TT  NP      NAI  SSN SELID LSN        GTTSET           GTTSET
    2    2   --      ---  --- none  any        n24      (cdgta) -----    (---
)
    2    124 --      ---  --- none  any        n24      (cdgta) -----    (---
)
    2    224 --      ---  --- none  any        set24n224(cdgta) -----    (---
)
    4    2   dflt    dflt --- none  any        n24      (cdgta) -----    (---
)
    4    19  f69     5    --- none  Eagle-Gen  icdgta1  (cdgta) -----    (---
)
    4    124 dflt    dflt --- none  any        n24      (cdgta) -----    (---
)
    4    224 dflt    dflt --- none  any        set24n224(cdgta) -----    (---
)

    GTI                  CG                   CDPA             CGPA
    INTS TT  NP      NAI  SSN SELID LSN        GTTSET           GTTSET
    2    5   --      ---  --- none  any        setins005(cdgta) -----    (---
)
    2    7   --      ---  --- none  any        ituis7   (cdgta) -----    (---
)
    4    5   dflt    dflt --- none  any        setins005(cdgta) -----    (---
)
    4    7   dflt    dflt --- none  any        ituis7   (cdgta) -----    (---
)

    GTI                  CG                   CDPA             CGPA
```

```
    NATS TT  NP      NAI  SSN SELID LSN        GTTSET           GTTSET
    2    5   --      ---  --- none  any        setnas005(cdgta) -----    (---
)
    2    7   --      ---  --- none  any        ituns7   (cdgta) -----    (---
)
    4    5   dflt    dflt --- none  any        setnas005(cdgta) -----    (---
)
    4    7   dflt    dflt --- none  any        ituns7   (cdgta) -----    (---
)
;
```

This example retrieves all GTT Selectors that have specified GTII and TT values when the OBSR feature is enabled or the FLOBR feature is turned on:

`rtrv-gttsel:gtii=4:tt=253`

```
    sccprte 09-03-16 08:53:31 EST  EAGLE 41.0.0

    GTI                  CG                  CDPA             CGPA
    INTL TT  NP      NAI  SSN SELID LSN       GTTSET           GTTSET
    4    253 11      126  102 5678  any       -----    (---  ) icgpc2   (cgpc
)

    4    253 11      15   any 5678  lsint02   icgssn2  (cgssn) iopc2    (opc
)
;
```

`rtrv-gttsel:gti=0`

```
    tekelecstp 10-05-06 15:43:05 EST  Eagle 42.0.0

    GTI                  CG                  CDPA             CGPA
    ANSI TT  NP      NAI  SSN SELID LSN       GTTSET           GTTSET
    0    --- --      ---  any none  any       acdgta   (cdgta) acdgta   (cdgta)

;
```

This example retrieves all GTT Selectors that have specified GTII and TT values when the FLOBR feature is turned on:

`rtrv-gttsel:gtii=2:tt=4`

```
    tekelecstp 10-02-07 10:51:08 EST  EAGLE 42.0.0

    GTI                  CG                  CDPA             CGPA
    INTL TT  NP      NAI  SSN SELID LSN       GTTSET           GTTSET
    2    4   --      ---  --- none  any       setcdgta  (cdgta ) setdpc  (dpc
)
;
```

This example retrieves all overlapped GTT Selector entries. If a GTTSETT is specified by more than one entry, the entries specifying that GTTSET will be preceded by an asterik (to indicate overlap).

`rtrv-gttsel:ovrlapd=yes`

```
    tekelecstp 10-05-03 17:19:03 EST  EAGLE 42.0.0
```

```
    GTI                  CG                  CDPA            CGPA
    ANSI TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET

    GTI                  CG                  CDPA            CGPA
    INT  TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET
    *2   1   --      ---  --- none  any       set1     (cdgta) -----    (---
)

    GTI                  CG                  CDPA            CGPA
    NAT  TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET
    *2   2   --      ---  --- none  any       set1     (cdgta) -----    (---
)

    GTI                  CG                  CDPA            CGPA
    N24  TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET
    *2   3   --      ---  --- none  any       set1     (cdgta) -----    (---
)

    GTI                  CG                  CDPA            CGPA
    INTS TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET

    GTI                  CG                  CDPA            CGPA
    NATS TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET
;
```

`rtrv-gttsel:gtin16=2`

```
    tekelecstp 13-07-02 15:36:07 EST  45.0.0-64.69.0
    rtrv-gttsel:gtin16=2
    Command entered at terminal #4.

    GTI                  CG                  CDPA            CGPA
    N16  TT  NP      NAI  SSN SELID LSN       GTTSET          GTTSET
     2   10  --      ---  any none  any       -----    (---  ) abc      (cgpc
)

;
```

Legend

- **GTI/GTIA/GTII/GTIN/GTIN24/GTIN16**—Global title indicator
- **TT**—Translation type
- **NP**—Number plan
- **NAI**—Nature of address indicator
- **GTTSN**—GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Related Commands

chg-gttsel, *dlt-gttsel*, *ent-gttsel*

rtrv-gttset

Retrieve GTT Set

Use this command to display a list of administered GTT sets. This list can be filtered by using the parameters shown.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

actsn (optional)

GTT Action Set Name.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

gtmodid (optional)

Global title modification identifier.

Range:

ayyyyyyyy

Default:

Display all

gttsn (optional)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

Range:

ayyyyyyyy

1 leading alphabetic and up to 8 following alphanumeric characters.

netdom (optional)

Network domain. This command does not distinguish between ITU National or ITU International because the Enhanced Global Title Translation feature does not discriminate between the ITU-I and ITU-N translations.

Range:

ansi

itu

cross

Default:

Display all

refcnt (optional)

GTT set reference count. The count of GTT set being referred in GTT Selectors, GTA Translations, BPARTYGTTSN and IS41SMSCGTTSN options in GSMSMSOPTS table and BPARTYGTTSN option in IS41SMSOPTS table.

Range:

yes

setidx (optional)

GTT set index. This parameter allows GTT set information to be retrieved based on the GTT index number.

Range:

0 - 1999

settype (optional)

GTT set type.

Range:

cdgta

cggta

cgpc

cgssn

opc

cdssn

opcode

dpc

Default:

Display all

Example

```
rtrv-gttset
rtrv-gttset:netdom=ansi
rtrv-gttset:gttsn=t800
rtrv-gttset:netdom=ansi:settype=cdssn
rtrv-gttset:settype=opcode
rtrv-gttset:setidx=1
rtrv-gttset:actsn=actdisc1
rtrv-gttset:refcnt=yes
rtrv-gttset:gtmodid=set1
```

Dependencies

The EGTT feature must be turned on before this command can be entered.

If the gttsn parameter is specified, it cannot have a value of *none*, and must match an existing gttsn.

If the netdom parameter is specified, at least one entry must exist that exactly matches the specified value. Otherwise, the following error message appears in the scroll area:

No GTT Sets matching the specified criteria were found.

The netdom=cross parameter is valid only if the settype=cdgta parameter is specified.

If the gttsn parameter is specified then the settype, netdom, actsn, and gtmodid parameters cannot be specified.

The Origin-based SCCP Routing feature must be enabled if the value of the settype parameter is *cggta, cgssn*, *opc*, or *cgpc*.

The ANSI/ITU SCCP Conversion feature must be enabled before the netdom=cross parameter can be specified.

The TOBR feature must be turned on before the opcode=settype parameter can be specified.

If the setidx parameter is specified, then no other parameter can be specified in the command.

The FLOBR feature must be turned on before a value of *cdssn* or *dpc* can be specified for the settype parameter.

The value specified for the gtmodid parameter must already exist in the GTMOD table.

Notes

When the Origin-based SCCP Routing feature is turned on, the settype parameter is displayed regardless of feature key status. If the feature key is not enabled, the settype=cdgta parameter (default value) is displayed.

Output

This example retrieves all GTT sets:

```
rtrv-gttset
```

```
tekelecstp 10-05-04 12:57:51 EST  EAGLE 42.0.0
GTTSN     NETDOM    NDGT
lidb      ansi      10
t800      ansi      6
s_i000    itu       15
imsi      itu       15
abcd1234  itu       12
setins005 itu       6
ituis7    itu       6
setnas005 itu       6
ituns7    itu       6
```

```
    GTT-SET table is (5 of 2000) 1% full.
;
```

This example retrieves a specific GTT set:

```
rtrv-gttset:gttsn=t800
```

```
    tekelecstp 09-08-14 13:46:14 EST  EAGLE 41.1.0
    GTTSN     NETDOM    NDGT
    t800      ansi      6

    GTT-SET table is (3 of 2000) 1% full.
;
```

This example retrieves all GTT sets when the VGTT feature is turned on:

```
rtrv-gttset
```

```
    tekelecstp 09-08-14 13:46:56 EST  EAGLE 41.1.0
    GTTSN     NETDOM  NDGT
    lidb      ansi    3,7,10
    t800      ansi    4,6
    s_i000    itu     10,15
    imsi      itu     10,15
    abcd1234  itu     12

    GTT-SET table is (5 of 2000) 1% full.
;
```

This example retrieves GTT sets for a specified GTT set type when the Origin-based SCCP Routing feature is turned on:

```
rtrv-gttset:settype=cgpc
```

```
    tekelecstp 09-08-14 12:59:19 EST  EAGLE 41.1.0
    GTTSN     NETDOM  SETTYPE  NDGT
    pc00      ansi    CGPC     -
    pc01      ansi    CGPC     -
    pc02      itu     CGPC     -
    pc03      ansi    CGPC     -
    pc04      ansi    CGPC     -
    pc05      ansi    CGPC     -

    GTT-SET table is (8 of 2000) 1% full.
;
```

This example retrieves all GTT sets when the Origin-based SCCP Routing feature is turned on.

```
rtrv-gttset
```

```
    rlghncxa03w 09-08-14 08:10:20 EST  EAGLE 41.1.0
    GTTSN     NETDOM  SETTYPE  NDGT
    Pc10      cross   CDGTA    6,8,10,17
    Pc11      ansi    CGGTA    10
    Pc12      itu     CGPC     -
    Pc13      itu     CGSSN    -
    Pc14      ansi    OPC      -
```

```
    Pc15      ansi    CGPC     -

    GTT-SET table is (6 of 2000) 1% full.
;
```

Retrieve all GTT sets when the ANSI/ITU SCCP Conversion feature is enabled:

`rtrv-gttset`

```
    rlghncxa03w 09-08-13 08:29:15 EST  EAGLE 41.1.0
    GTTSN     NETDOM  NDGT
    lidb      ansi    10
    t800      ansi    6
    s_i000    itu     15
    imsi      itu     15
    abcd1234  cross   12

   GTT-SET table is (5 of 2000) 1% full.
;
```

This example retrieves all GTT sets when the Support for 16 GTT Lengths in VGTT feature is turned on:

`rtrv-gttset`

```
    rlghncxa03w 09-08-13 08:16:15 EST  EAGLE 41.1.0
    GTTSN     NETDOM  NDGT
    lidb      ansi    1,3,5,6,7,8,9,10,11,12,13,14,18,21
    t800      ansi    4,6
    s_i000    itu     10,15

    GTT-SET table is (3 of 2000) 1% full.
;
```

This example retrieves all GTT sets when the TOBR feature is turned on:

`rtrv-gttset`

```
    rlghncxa03w 09-08-14 08:10:20 EST  EAGLE 41.1.0
    GTTSN     NETDOM  SETTYPE  NDGT
    Pc10      cross   CDGTA    6,8,10,17
    Pc11      ansi    CGGTA    10
    Pc12      itu     CGPC     -
    Pc13      itu     CGSSN    -
    Pc14      ansi    OPC      -
    Pc15      ansi    CGPC     -
    Pc16      itu     CDSSN    -
    Pc17      -       OPCODE   -

    GTT-SET table is (8 of 2000) 1% full.
;
```

This example retrieves the GTT set entry on the basis of set index:

`rtrv-gttset:setidx=1`

```
    tekelecstp 09-08-13 10:57:14 EST  EAGLE 41.1.0
```

```
    Command entered at terminal #4.

    GTTSN      NETDOM  SETTYPE  NDGT
    setcggta   ansi    CGGTA    0

    GTT-SET table is (3 of 2000) 1% full.

;
```

This example retrieves GTT sets for DPC set type when the FLOBR feature is turned on:

```
rtrv-gttset:settype=dpc
```

```
    tekelecstp 10-03-14 08:10:20 EST  EAGLE 42.0.0
    GTTSN     NETDOM  SETTYPE  NDGT
    Setdpc    ansi    DPC      -
    Setdpc1   ansi    DPC      -

    GTT-SET table is (8 of 2000) 1% full.

;
```

This example retrieves GTT set entries and the corresponding reference counts:

```
rtrv-gttset:refcnt=yes
```

```
    tekelecstp 10-05-04 12:11:59 EST  Eagle 42.0.0
    GTTSN      NETDOM  REFCNT   NDGT
    lidb       ansi    0        10
    t800       ansi    2        6
    s_i000     itu     1        15
    imsi       itu     1        15
    abcd1234   itu     0        12

    GTT-SET table is (5 of 2000) 1% full.

;
```

```
rtrv-gttset:gtmodid=set1
```

```
    tekelecstp 10-01-10 12:13:21 EST  EAGLE 42.0.0

    GTTSN      NETDOM  NDGT
    abc        ansi    6

    GTT-SET table is (1 of 2000) 1% full.

;
```

Legend

- **GTTSN**—GTT set name
- **NETDOM**—Network domain
- **SETTYPE**—GTT set type
- **REFCNT**—Reference count

- **NDGT**—Number of digits required for GTAs associated with this set

Related Commands

chg-gttset, *dlt-gttset*, *ent-gttset*

rtrv-gtw-stp

Retrieve Gateway STP Parameters

Use this command to display the level 3 ANSI transfer control status (TFCSTAT) parameter. This value is the level 3 control status used on a TFC message received from an ITU node destined for an ANSI node.

Parameters

This command has no parameters.

Example

```
rtrv-gtw-stp
```

Dependencies

None

Notes

None

Output

```
rtrv-gtw-stp
```

```
    rlghncxa03w 03-03-11 11:34:04 EST  EAGLE 31.3.0
    TFCSTAT
    1
;
```

Related Commands

chg-gtw-stp

rtrv-gtwy-acthresh

Retrieve the Gateway Screening Activity Threshold

Use this command to display the current values for the SS7 message rejection thresholds occurring because of the gateway screening process.

Parameters

lsn (optional)

Linkset name.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Default:

Display all

Example

```
rtrv-gtwy-acthresh:lsn=wy644368
rtrv-gtwy-acthresh
```

Dependencies

The specified linkset must exist in the gateway linkset entity set of the requesting system.

The linkset specified must exist in the active database.

At least one optional parameter must be specified.

Notes

None

Output

This example shows the thresholds of all linksets:

```
rtrv-gtwy-acthresh
```

```
    rlghncxa03w 04-02-18 08:50:12 EST  EAGLE 31.3.0
    LSN       REJ    RECV    INTRVL
    WY644368  10     1000    10
    WY234456  25     2000    20
    LN123445  -      -       -
    LN123556  25     2500    30
    OP239900 -       5       5
;
```

This example shows linkset WY644368 rejection thresholds:

`rtrv-gtwy-acthresh:lsn=wy644368`

```
    rlghncxa03w 04-02-18 08:50:12 EST  EAGLE 31.3.0
    LSN       REJ    RECV    INTRVL
    wy644368  10     1000    10
:
```

Legend

- **LSN**—Linkset name
- **REJ**—Reject threshold
- **RECV**—Received message threshold
- **INTRVL**—Monitor interval

Related Commands

set-gtwy-acthresh

rtrv-gtwy-prmtrs

Retrieve Gateway Parameters

Use this command to display the STP values that limit the display of certain notification messages that could become excessive. Only the values set by the `set-scrrej-prmtrs` command are displayed.

Parameters

This command has no parameters.

Example

`rtrv-gtwy-prmtrs`

Dependencies

None

Notes

None

Output

`rtrv-gtwy-prmtrs`

```
    rlghncxa03w 04-02-18 08:50:12 EST  EAGLE 31.3.0
```

```
    LIMIT INTRVL
    1000  15
;
```

Legend

- **LIMIT**—The threshold not to be exceeded.
- **INTRVL**—Monitor interval. The examination period, in minutes, during which the gateway screening activity thresholds are to be tested.

Related Commands

set-scrrej-prmtrs

rtrv-gws-actset

Retrieve Gateway Screening Stop Action Sets

Use this command to display the values defined for gateway screening stop actions.

Parameters

actid (optional)

The identification number of the gateway screening stop action.

Range:

4 - 16

Default:

Display all

actname (optional)

The name of the gateway screening stop action set.

Range:

ayyyyy

One alphabetic character followed by up to five alphanumeric characters.

Default:

Display all

Example

```
rtrv-gws-actset
rtrv-gws-actset:actname=cr
rtrv-gws-actset:actid=6
```

Dependencies

Either actname or actid can be specified, but not both.

Notes

If neither actname nor actid are specified, all gateway screening stop actions are displayed.

Output

`rtrv-gws-actset:actname=cr`

```
    tekelecstp 13-10-24 12:05:05 EST  46.0.0-65.3.0
    rtrv-gws-actset:actname=cr
    Command entered at terminal #4.
    ACT  ACT    ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT
    ID   NAME   1     2     3     4     5     6     7     8     9     10
    --   ------ ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
     3   cr     copy  rdct  ----- ----- ----- ----- ----- ----- ----- -----

    GWS action set table is (6 of 16) 38% full

;
```

`rtrv-gws-actset`

```
    tekelecstp 13-10-24 11:56:11 EST  46.0.0-65.3.0
    rtrv-gws-actset
    Command entered at terminal #4.
    ACT  ACT    ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT
    ID   NAME   1     2     3     4     5     6     7     8     9     10
    --   ------ ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
     1   copy   copy  ----- ----- ----- ----- ----- ----- ----- ----- -----
     2   rdct   rdct  ----- ----- ----- ----- ----- ----- ----- ----- -----
     3   cr     copy  rdct  ----- ----- ----- ----- ----- ----- ----- -----
     4   dup1   dup   rdct  ----- ----- ----- ----- ----- ----- ----- -----
     5   dup2   copy  dup   ----- ----- ----- ----- ----- ----- ----- -----
     6   strip  strip ----- ----- ----- ----- ----- ----- ----- ----- -----

    GWS action set table is (6 of 16) 38% full

;
```

`rtrv-gws-actset:actname=dup1`

```
    tekelecstp 13-10-24 12:04:21 EST  46.0.0-65.3.0
    rtrv-gws-actset:actname=dup1
    Command entered at terminal #4.
    ACT  ACT    ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT   ACT
    ID   NAME   1     2     3     4     5     6     7     8     9     10
    --   ------ ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
     4   dup1   dup   ----- rdct  ----- ----- ----- ----- ----- ----- -----

    GWS action set table is (6 of 16) 38% full
```

```
;
```

Related Commands

chg-gws-actset

rtrv-gws-redirect — Retrieve Gateway Screening Redirect

Use this command to display the provisioning data for the redirect function. The parameters and values that are retrieved using this command are stored in the Redirect table, and they are used to setthe variable fields of the MSUs being redirected.

Parameters

This command has no parameters.

Example

`rtrv-gws-redirect`

Dependencies

None

Notes

None

Output

The second column in the output displays the type of point code used:

- ANSI—DPCA
- International—DPCI
- ITU National—DPCN
- ITU National 24—DPCN24
- ITU National 16---DPCN16

`rtrv-gws-redirect`

```
   rlghncxa03w 09-04-10 11:43:04 EST EAGLE 41.0.0
   ENABLED    DPCA            RI   SSN  TT   GTA
   off        003-033-003     GT   0    0    1
;
```

This example shows output when the gateway screening redirect function is not enabled:

```
rtrv-gws-redirect
```

```
  rlghncxa03w 09-04-10 11:43:04 EST EAGLE 41.0.0
   ENABLED    DPCA           RI   SSN  TT   GTA
   Redirect function data is not provisioned
;
```

```
rtrv-gws-redirect
```

```
    tekelecstp 13-07-02 15:48:55 EST  45.0.0-64.69.0
    rtrv-gws-redirect
    Command entered at terminal #4.
    ENABLED    DPCN16         RI   SSN  TT   GTA
    on         001-02-03      GT   10   100  5
;
```

Related Commands

chg-gws-actset

rtrv-home-smsc

Retrieve HOME SMSC Address

Use this command to retrieve HOME SMSC specific addresses currently used to identify Short Message Service Centers in the database. This command reads the HOME SMSCADDR table.

Parameters

force (optional)

Display more than 50 entries.

Range:

yes

no

Default:

no

num (optional)

Number of entries to display. The force parameter must also be specified to display more than 50 entries.

Range:

1 - 500

Default:

50

smsc (optional)

Short Message Service Center address.

Range:

1-21 hexadecimal digits

Example

```
rtrv-home-smsc
```

```
rtrv-home-smsc:smsc=552611646
```

```
rtrv-home-smsc:num=100:force=yes
```

Dependencies

One of the following features must be enabled

- MO SMS IS41-to-GSM Migration
- MO-based GSM SMS NP
- MO-based IS41 SMS NP
- MT-Based GSM SMS NP
- MT-Based IS41 SMS NP
- Portability Check for Mobile Originated SMS

When the specified num parameter value is greater than 50, the force=yes parameter must also be specified.

The HOME SMSCADDR table must be accessible.

The GSM DBMM table must be accessible.

Notes

None

Output

`rtrv-home-smsc`

```
    rlghncxa03w 03-03-28 08:50:12 EST  EAGLE 31.3.0
    SMSC ADDRESS

    13214564894498
    55231465465434
    5465455655656456

    HOME SMSC ADDRESS TABLE IS   1 % FULL    (3 of 500)

;
```

Related Commands

dlt-home-smsc, *ent-home-smsc*

rtrv-homern

Retrieve Home Routing Number Prefix List

Use this command to retrieve a list of routing number prefixes that belong to the operating network.

Parameters

This command has no parameters.

Example

```
rtrv-homern
```

Dependencies

The HOMERN table must be accessible.

Notes

None

Output

`rtrv-homern`

```
    rlghncxa03w 03-03-28 08:50:12 EST  EAGLE 31.3.0
    RN
    ---------------
    216780909087654
    76345098
    abc
    abc1234
    c10234567
    cabade

    HOMERN table is (6 of 100) 6% full
;
```

Legend

- **RN**—Routing Number

Related Commands

dlt-homern, *ent-homern*

rtrv-inpopts

Retrieve INP Options

Use this command to retrieve INP-specific options.

Parameters

This command has no parameters.

Example

```
rtrv-inpopts
```

Dependencies

None.

Notes

If no DRANAI value or DRANAIV value has been provisioned, the command output displays the DRANAIV default value of 126.

If either the DRANAI value or DRANAIV value has been provisioned, the DRANAI mnemonic string for the provisioned value is displayed.

If no DRANP value or DRANPV value has been provisioned, the command output displays the DRANP default mnemonic value of E164.

If either the DRANP value or DRANPV value has been provisioned, the DRANP mnemonic string for the provisioned value is displayed.

The command output displays each CDPNPFX value with its associated DLTPFX setting.

The command output displays each CDPNNAI value with its associated SNAI value.

If no NEC value has been provisioned, a value of *none* is diplayed.

If a RELCAUSE value was not provisioned, then the default value of 31 is displayed.

Output

This example shows output with default INP options:

```
rtrv-inpopts
```

```
rlghncxa03w 10-03-17 15:35:05 EST  EAGLE 42.0.0
INP OPTIONS
-----------------------
```

```
    NEC         = NONE
    DRANAIV     = 126
    DRANP       = E164
    DRA         = RNDN
    SPRESTYPE   = CONTINUE
    RELCAUSE    = 31
    SPORTTYPE   = NONE
    DEFRN       = NONE
    CUTNPASTE   = OFF

    CDPNPFX            DLTPFX
    ---------------    ---

    CDPNNAI            SNAI
    ---                ----

;
```

This example shows output with some INP options provisioned.

`rtrv-inpopts`

```
    rlghncxa03w 10-03-17 15:35:05 EST  EAGLE 42.0.0
    INP OPTIONS
    -----------------------
    NEC         = abc1d
    DRANAIV     = 126
    DRANP       = E164
    DRA         = CCRNDN
    SPRESTYPE   = CONTINUE
    RELCAUSE    = 30
    SPORTTYPE   = ALL
    DEFRN       = 99887
    CUTNPASTE   = ON

    CDPNPFX            DLTPFX
    ---------------    ---

    CDPNNAI            SNAI
    ---                ----
    127                unknown

;
```

Legend

- **ASD**—Additional Subscriber Data
- **CDPNNAI**—Called Party Number Nature of Address Indicator
- **CDPNPFX**—Called Party Number Prefix
- **DLTPFX**—Delete Prefix
- **DRA**—Destination Routing Address.
- **DRANAI**—Nature of Address Indicator for the Destination Routing Address
- **DRANPV**—Numbering Plan Value for the Destination Routing Address
- **GRN**—Generic Routing Number.
- **NEC**—National Escape Code
- **SNAI**—Service Nature of Address Indicator

- **SPRESTYPE**—INP option to send a "Connect" message or a "Continue" message when IDP messages are received for INP services, the DN digits match, and the HLR ID is present
- **SPORTTYPE**—Service Portability Type
- **DEFRN**—Default Routing Number
- **RELCAUSE**—INP CRP option, specifying the reason for releasing the call when an INP Circular Route is detected
- **CUTNPASTE**—Specifies whether the CutAndPaste parameter is included in an INP CONNECT response message

Related Commands

chg-inpopts

rtrv-ip-card

Retrieve Internet Protocol Card

Use this command to retrieve IP networking parameters for a given card.

Parameters

loc (optional)

Card location. The unique identifier of a specific application subsystem located in the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

Example

```
rtrv-ip-card:loc=1211
```

```
rtrv-ip-card
```

Dependencies

The value specified for the loc parameter must correspond to the location of a card that can run an IP application (other than the EROUTE application, which is not supported by this command).

Notes

None

Output

`rtrv-ip-card:loc=1211`

```
rlghncxa03w 13-09-24  15:35:05 EST  EAGLE 46.0.0
    LOC 1211
      SRCHORDR  LOCAL
      DNSA      150.123.123.123
      DNSB      ---------------
      DEFROUTER ---------------
      DOMAIN    NC.TEKELEC.COM
      SCTPCSUM  adler32
      DSCP      4

;
```

`rtrv-ip-card`

```
rlghncxa03w 13-09-24  15:35:05 EST EAGLE 46.0.0
    LOC 1211
      SRCHORDR  LOCAL
      DNSA      150.1.1.1
      DNSB      ---------------
      DEFROUTER ---------------
      DOMAIN    NC.TEKELEC.COM
      SCTPCSUM  adler32
      DSCP      9

    LOC 1213
      SRCHORDR  LOCAL
      DNSA      150.1.1.1
      DNSB      ---------------
      DEFROUTER 150.1.1.25
      DOMAIN    NC.TEKELEC.COM
      SCTPCSUM  adler32
      DSCP      15

    LOC 1301
      SRCHORDR  SRVRONLY
      DNSA      150.1.1.10
      DNSB      150.1.1.28
      DEFROUTER ---------------
      DOMAIN    NC.TEKELEC.COM
      SCTPCSUM  adler32
      DSCP      20

;
```

This example displays the output when an E5-SM4G or E5-SM8G-B card is used:

`rtrv-ip-card`

```
rlghncxa03w 13-09-24 22:12:42 EST  EAGLE 46.0.0
    LOC 1105
      SRCHORDR  LOCAL
      DNSA      ---------------
      DNSB      ---------------
      DEFROUTER ---------------
      DOMAIN    ---------------
```

```
      SCTPCSUM  crc32c
      BPIPADDR  192.168.124.2
      BPSUBMASK 255.255.255.0
      DSCP      9

    LOC 1107
      SRCHORDR  LOCAL
      DNSA      ---------------
      DNSB      ---------------
      DEFROUTER ---------------
      DOMAIN    ---------------
      SCTPCSUM  crc32c
      BPIPADDR  192.168.124.4
      BPSUBMASK 255.255.255.0
      DSCP      8


    LOC 1111
      SRCHORDR  LOCAL
      DNSA      ---------------
      DNSB      ---------------
      DEFROUTER ---------------
      DOMAIN    ---------------
      SCTPCSUM  crc32c
      BPIPADDR  192.168.124.3
      BPSUBMASK 255.255.255.0
      DSCP      15
;
```

Legend

- **LOC**—Card location
- **SRCHORDR**—Host table search order. LOCAL indicates that the Local Host table is searched first. SRVR indicates that the Domain server is searched first. SRVRONLY indicates that only the Domain server is searched.
- **DNSA**—IP address of Domain Server A
- **DNSB**—IP address of Domain Server B
- **DEFROUTER**—IP address for the default router
- **DOMAIN**—TDomain name of the Domain server
- **SCTPCSUM**—SCTP checksum algorithm type
- **BPADDR**—Bonded port IP address
- **BPSUBMASK**—Bonded port IP submask
- **DSCP**---Subfield in IP header. Applicable to SIGTRAN-based cards only

Related Commands

chg-ip-card

rtrv-ip-conn

Retrieve IP Connection

Use this command to retrieve SIP or ENUM connection entries. The IPCONN table supports the provisioning information related to the SIP or ENUM connections.

Parameters

cname (optional)

Connection name. This parameter specifies the unique logical name assigned to each SIP or ENUM connection.

Range:

zzzzzzzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and upto 15 characters in length. Valid values are a..z, A..Z, 0..9.

lhost (optional)

Local host name. This parameter specifies the local host name as defined in the IP Host table.

Special characters, such as hyphens, can be used in the host name if the host name is enclosed in double quotes (" ").

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 60 characters in length. Valid values are a..z, A..Z, 0..9, '-', or '.' .

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 – 6118

open (optional)

This parameter specifies which of the SIP or ENUM connections are allowed to receive SIP or ENUM traffic and which are not.

Range:

yes

SIP or ENUM connection is allowed to receive SIP or ENUM traffic.

no

SIP or ENUM connection is not allowed to receive SIP or ENUM traffic.

prot (optional)

Underlying SIP or ENUM connection protocol.

Range:

tcp

Transmission Control Protocol.

udp
User Datagram Protocol.

Note: For ENUMHC, only udp is supported.

Example

```
rtrv-ip-conn
rtrv-ip-conn:cname=conn1101a
rtrv-ip-conn:loc=1101
rtrv-ip-conn:prot=tcp
rtrv-ip-conn:lhost=lss1
rtrv-ip-conn:open=yes
```

Dependencies

SIPNP Feature must be enabled before retrieving any SIP connection entry.

At least one ENUM card must be provisioned before entering any ENUM connection information.

IPCONN table should be accessible.

The value specified for the HOST parameter must begin with an alphabetic character and can contain a..z, A..Z, 0..9, - (hyphen), or . (period).

The specified card location must be equipped.

The location specified with this command should be of a SIP or ENUM card.

Notes

If optional parameters are specified, only the entries that match the entered parameters are displayed.

If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

Output

This example displays output when no parameter is specified:

```
rtrv-ip-conn
```

```
tekelecstp 12-06-25 16:14:24 EST EAGLE 45.0.0
rtrv-ip-conn
Command entered at terminal #4.

    CNAME              PROT    LPORT    RPORT    OPEN
    -------------------------------------------------
    connection1        TCP      1555    1555     No
```

```
    connection2        TCP      1234    1234     Yes
    connection3        TCP      1202    ----     No
    connection4        TCP      1203    1203     No
    connection5        TCP      1569    ----     No
;
```

This example displays the output when CNAME parameter is specified:

`rtrv-ip-conn:cname=connection3`

```
tekelecstp 12-09-04 11:26:30 EST EAGLE 45.0.0
    rtrv-ip-conn:cname=connection3
    Command entered at terminal #4.

    CNAME   connection3
            PROT    TCP
            LHOST   hss3
            RHOST   ----
            LPORT   1202        RPORT   ----
            OPEN    No
;
```

This example displays the output when PROT parameter is specified:

`rtrv-ip-conn:prot=tcp`

```
tekelecstp 12-09-24 17:24:32 EST EAGLE 45.0.0
    rtrv-ip-conn:prot=tcp
    Command entered at terminal #4.

    CNAME              PROT    LPORT    RPORT    OPEN
    ------------------------------------------------------
    conn7              TCP     2022     2023     No
    conn5              TCP     2021     2021     No
;
```

This example displays the output when LOC parameter is specified:

`rtrv-ip-conn:loc=1101`

```
  tekelecstp 12-09-24 17:25:14 EST EAGLE 45.0.0
    rtrv-ip-conn:loc=1101
    Command entered at terminal #4.

    CNAME              PROT    LPORT    RPORT    OPEN
    ------------------------------------------------------
    conn7              TCP     2022     2023     No
    conn5              TCP     2021     2021     No
    conn1              TCP     1555     ----     No
    conn2              TCP     1555     1567     No
    conn3              TCP     1107     ----     No
;
```

This example displays the output when LHOST parameter is specified:

`rtrv-ip-conn:lhost=lss1`

```
    tekelecstp 12-09-24 17:26:00 EST EAGLE 45.0.0
```

```
    rtrv-ip-conn:lhost=lss1
    Command entered at terminal #4.

    CNAME              PROT    LPORT    RPORT    OPEN
    ---------------------------------------------------
    conn7              TCP     2022     2023     No
    conn5              TCP     2021     2021     No
    conn1              TCP     1555     ----     No
    conn2              TCP     1555     1567     No
    conn3              TCP     1107     ----     No
;
```

This example displays the output when OPEN parameter is specified:

`rtrv-ip-conn:open=no`

```
    tekelecstp 12-09-24 17:26:00 EST EAGLE 45.0.0
    rtrv-ip-conn:open=no
    Command entered at terminal #4.

    CNAME              PROT    LPORT    RPORT    OPEN
    ---------------------------------------------------
    conn7              TCP     2022     2023     No
    conn5              TCP     2021     2021     No
    conn1              TCP     1555     ----     No
    conn2              TCP     1555     1567     No
    conn3              TCP     1107     ----     No
;
```

Related Commands

dlt-ip-conn, *ent-ip-conn*, *chg-ip-conn*

rtrv-ip-host

Retrieve Internet Protocol Hostname

Use this command to retrieve the IP Host table. The IP Host table defines local host names for IP addresses.

Parameters

display (optional)

This parameter displays the provisioned local or remote IP Host entries.

Range:

all

displays all provisioned local and remote IP Host entries.

detail

displays the IP host and realm of all the provisioned local and remote IP Host entries.

host (optional)

Host name. The logical name of the device associated with the indicated IP address.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

Any string of characters beginning with a letter and comprising up to 60 characters in length. Valid characters are a–z, A–Z, 0–9, - (dash), . (period)

ipaddr (optional)

The IP address associated with the hostname. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.126.100.5*, where *192.126.100* is the network number and *5* is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

num (optional)

The number of IP Host entries displayed in the command output.

Range:

1 - 4096

System Default:

50

realm (optional)

Domain name from which the message can be sent or received for a particular IP Host.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of characters, beginning with a letter and comprising up to 60 characters in length. Valid values are a..z, A..Z, 0..9, -(dash), .(period).

type (optional)

This parameter specifies whether to retrieve entries for local or remote IPs.

Range:

local

host name and address of the IP card for the local system

remote

host name and address of the IP card for a remote system

Example

```
rtrv-ip-host:host=gw100-nc.tekelec.com:ipaddr=150.1.1.1
rtrv-ip-host:host=gw100.nc.tekelec.com
rtrv-ip-host:ipaddr=150.1.1.1
```

```
rtrv-ip-host
rtrv-ip-host:display=all
rtrv-ip-host:num=10
rtrv-ip-host:type=local:num=3
rtrv-ip-host:display=detail
rtrv-ip-host:realm=abc.com
```

Dependencies

A valid value must be specified for the host parameter. If the host name contains a hyphen, then the host name must be enclosed within quotation marks.

A valid value must be specified for the realm parameter. If the realm contains a hyphen, then the host name must be enclosed within quotation marks.

Display=all and realm parameter must not be specified together.

Notes

If optional parameters are specified, only the entries that match the entered parameters are retrieved.

Realm is mandatory for all the IP hosts associated with diameter connections.

Output

If this command is entered without any parameters, then the command displays up to a maximum of 50 entries. The display=all parameter must be specified to display all entries in the IP Host table.

This example displays output when no other parameter is specified:

```
rtrv-ip-host
```

```
tekelecstp 12-07-24 10:22:08 EST  EAGLE 45.0.0
LOCAL IPADDR     LOCAL HOST
192.168.63.51    tekelecdmz11.com
192.168.63.115   tekelecdmz5.com
192.168.73.116   tekelecdmz7.com
192.168.63.52    tekelecdmz13.com
192.168.63.54    tekelecdmz14.com
192.168.63.55    hss4

REMOTE IPADDR    REMOTE HOST
192.168.63.235   tekelecdmz21.com
127.1.1.1        tekelec0.com
192.168.63.245   client
192.168.63.57    tekelec1.com
192.168.63.58    tekelec2.com
192.168.63.59    tekelec3.com
192.168.63.60    tekelec4.com
192.168.63.61    tekelec5.com
192.168.63.62    tekelec6.com
192.168.63.63    tekelec7.com
```

```
    192.168.63.64    tekelec8.com
    192.168.63.65    tekelec9.com
    192.168.63.66    tekelec10.com
    192.168.63.67    tekelec11.com
    192.168.63.68    tekelec12.com
    192.168.63.69    tekelec13.com
    192.168.63.70    tekelec14.com
    192.168.63.71    tekelec15.com
    192.168.63.72    tekelec16.com
    192.168.63.73    tekelec17.com
    192.168.63.74    tekelec18.com
    192.168.63.75    tekelec19.com
    192.168.63.76    tekelec20.com
    192.168.63.77    tekelec21.com
    192.168.63.78    tekelec22.com
    192.168.63.79    tekelec23.com
    192.168.63.80    tekelec24.com
    192.168.63.81    tekelec25.com
    192.168.63.82    tekelec26.com
    192.168.63.83    tekelec27.com
    192.168.63.84    tekelec28.com
    192.168.63.85    tekelec29.com
    192.168.63.86    tekelec30.com
    192.168.63.87    tekelec31.com
    192.168.63.88    tekelec32.com
    192.168.63.89    tekelec33.com
    192.168.63.90    tekelec34.com
    192.168.63.91    tekelec35.com
    192.168.63.92    tekelec36.com
    192.168.63.93    tekelec37.com
    192.168.63.94    tekelec38.com
    192.168.63.95    tekelec39.com
    192.168.63.96    tekelec40.com
    192.168.63.97    tekelec41.com

    IP-HOST  table is (68 of 4096) 2% full.

;
```

This example displays the output when the output is filtered:

`rtrv-ip-host:type=local:num=3`

```
    tekelecstp 12-07-24 10:22:09 EST  EAGLE 45.0.0
    LOCAL IPADDR     LOCAL HOST
    192.168.63.51    tekelecdmz11.com
    192.168.63.115   tekelecdmz5.com
    192.168.73.116   tekelecdmz7.com

    IP-HOST  table is (68 of 4096) 2% full.

;
```

This example displays the output when all entries are requested:

`rtrv-ip-host:display=all`

```
    tekelecstp 12-07-24 10:22:09 EST  EAGLE 45.0.0
    LOCAL IPADDR     LOCAL HOST
    192.168.63.51    tekelecdmz11.com
```

```
    192.168.63.115   tekelecdmz5.com
    192.168.73.116   tekelecdmz7.com
    192.168.63.52    tekelecdmz13.com
    192.168.63.54    tekelecdmz14.com
    192.168.63.55    hss4

    REMOTE IPADDR    REMOTE HOST
    192.168.63.235   tekelecdmz21.com
    127.1.1.1        tekelec0.com
    192.168.63.245   client
    192.168.63.57    tekelec1.com
    192.168.63.58    tekelec2.com
    192.168.63.59    tekelec3.com
    192.168.63.60    tekelec4.com
    192.168.63.61    tekelec5.com
    192.168.63.62    tekelec6.com
    192.168.63.63    tekelec7.com
    192.168.63.64    tekelec8.com
    192.168.63.65    tekelec9.com
    192.168.63.66    tekelec10.com
    192.168.63.67    tekelec11.com
    192.168.63.68    tekelec12.com
    192.168.63.69    tekelec13.com
    192.168.63.70    tekelec14.com
    192.168.63.71    tekelec15.com
    192.168.63.72    tekelec16.com
    192.168.63.73    tekelec17.com
    192.168.63.74    tekelec18.com
    192.168.63.75    tekelec19.com
    192.168.63.76    tekelec20.com
    192.168.63.77    tekelec21.com
    192.168.63.78    tekelec22.com
    192.168.63.79    tekelec23.com
    192.168.63.80    tekelec24.com
    192.168.63.81    tekelec25.com
    192.168.63.82    tekelec26.com
    192.168.63.83    tekelec27.com
    192.168.63.84    tekelec28.com
    192.168.63.85    tekelec29.com
    192.168.63.86    tekelec30.com
    192.168.63.87    tekelec31.com
    192.168.63.88    tekelec32.com
    192.168.63.89    tekelec33.com
    192.168.63.90    tekelec34.com
    192.168.63.91    tekelec35.com
    192.168.63.92    tekelec36.com
    192.168.63.93    tekelec37.com
    192.168.63.94    tekelec38.com
    192.168.63.95    tekelec39.com
    192.168.63.96    tekelec40.com
    192.168.63.97    tekelec41.com
    192.168.63.98    tekelec42.com
    192.168.63.99    tekelec43.com
    192.168.63.20    tekelec44.com
    192.168.63.21    tekelec45.com
    192.168.63.22    tekelec46.com
    192.168.63.23    tekelec47.com
    192.168.63.24    tekelec48.com
    192.168.63.25    tekelec49.com
    192.168.63.26    tekelec50.com
    192.168.63.27    tekelec51.com
    192.168.63.28    tekelec52.com
    192.168.63.29    tekelec53.com
    192.168.63.30    tekelec54.com
```

```
    192.168.63.31    tekelec55.com
    192.168.63.32    tekelec56.com
    192.168.63.33    tekelec57.com
    192.168.63.34    tekelec58.com
    192.168.63.35    tekelec59.com

    IP-HOST  table is (68 of 4096) 2% full.
;
```

This example displays the output when the display=detail parameter is specified:

`rtrv-ip-host:display=detail`

```
tekelecstp 13-03-12 10:22:09 EST  EAGLE 45.1

REMOTE IPADDR     REMOTE HOST
                  REALM
1.1.1.13          a13
                  abc.com

1.1.1.12          a12

1.1.1.14          a14
               abc.com


LOCAL IPADDR      LOCAL HOST
                  REALM
10.248.141.165    local11
               xyz.com

IP-HOST table is (68 of 2048) 3% full.
;
```

This example displays the output when the realm parameter is specified:

`rtrv-ip-host:realm=abc.com`

```
tekelecstp 13-03-12 10:22:09 EST  EAGLE 45.1

REMOTE IPADDR    REMOTE HOST
1.1.1.13         a13
1.1.1.14         a14

IP-HOST   table is (68 of 2048) 3% full.
;
```

This example displays the output when the ipaddr parameter is specified:

`rtrv-ip-host:ipaddr=1.1.1.13`

```
tekelecstp 13-03-12 10:22:09 EST  EAGLE 45.1

REMOTE IPADDR    REMOTE HOST
                 REALM
1.1.1.13         a13
             abc.com
```

```
IP-HOST table is (68 of 2048) 3% full.
;
```

This example displays the output when the host parameter is specified:

`rtrv-ip-host:host=a13`

```
tekelecstp 13-03-12 10:22:09 EST  EAGLE 45.1

REMOTE IPADDR    REMOTE HOST
                 REALM
1.1.1.13         a13
             abc.aricent.com

IP-HOST   table is (68 of 2048) 3% full.
;
```

This example displays the output when the output is filtered:

`rtrv-ip-host:type=local:num=3`

```
tekelecstp 13-03-25 10:22:09 EST  EAGLE 45.1.0
LOCAL IPADDR     LOCAL HOST
                 REALM
192.168.63.51    tekelecdmz11.com

192.168.63.115   tekelecdmz5.com
                 test.com

192.168.73.116   tekelecdmz7.com

IP-HOST  table is (68 of 2048) 3% full.

;
```

Related Commands

dlt-ip-host, *ent-ip-host*

rtrv-ip-lnk

Retrieve Internet Protocol Link

Use this command to retrieve the IP link table.

Parameters

loc (optional)

Card location. The unique identifier of a specific application subsystem located in the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 -

4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

Default:

All card location link data are displayed.

port (optional)

Ethernet interface port ID.

Range:

a, b

Default:

All IP link port data associated with all ports on the card are displayed.

Example

```
rtrv-ip-lnk:loc=1211:port=a
```

```
rtrv-ip-lnk:loc=1211
```

```
rtrv-ip-lnk
```

Dependencies

The value specified for the loc parameter must correspond to the location of a card that can run an IP application (other than the EROUTE application, which is not supported by this command).

The card in the location specified by the loc parameter must support the port specified by the port parameter.

Notes

None

Output

```
rtrv-ip-lnk
```

```
tekelecstp 14-06-05 11:18:06 MST  EAGLE5 46.0.0-65.20.0
    LOC   PORT IPADDR          SUBMASK         DUPLEX  SPEED MACTYPE AUTO MCAST

    1102  A    10.255.1.2      255.255.255.0   ----    ---   DIX     YES  NO

    1102  B    --------------- --------------- FULL    100   DIX     NO   NO

    1103  A    192.168.53.52   255.255.255.0   ----    ---   DIX     YES  NO

    1103  B    --------------- --------------- FULL    100   DIX     NO   NO
```

```
    1106  A    192.168.53.50   255.255.255.0   FULL    100   DIX     NO   YES
    1106  B    --------------- --------------- HALF    10    DIX     NO   NO
    1107  A    192.168.120.2   255.255.255.0   HALF    100   DIX     NO   YES
    1107  B    192.168.121.2   255.255.255.0   HALF    10    DIX     NO   YES
    1111  A    192.168.120.1   255.255.255.0   HALF    100   DIX     NO   YES
    1111  B    192.168.121.1   255.255.255.0   HALF    10    DIX     NO   YES
    1113  A    192.168.53.92   255.255.255.0   ----    ---   DIX     YES  NO
    1115  A    192.168.53.93   255.255.255.0   ----    ---   DIX     YES  NO

    IP-LNK   table is (12 of 512) 2% full.

;
```

rtrv-ip-lnk:loc=1211

```
   rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
   LOC   PORT IPADDR           SUBMASK          DUPLEX SPEED MACTYPE AUTO MCAST

   1211  A    150.123.123.123  255.255.255.0    HALF   10    DIX     NO   NO
   1211  B    150.123.123.124  255.255.255.0    HALF   10    DIX     NO   NO
;
```

rtrv-ip-lnk:loc=1211:port=a

```
   rlghncxa03w 04-02-17 15:35:05 EST  EAGLE 31.3.0
   LOC   PORT IPADDR           SUBMASK          DUPLEX SPEED MACTYPE AUTO MCAST

   1211  A    150.123.123.123  255.255.255.0    HALF   10    DIX     NO   NO
;
```

rtrv-ip-lnk:loc=1113

```
rlghncxa03w 10-04-01 21:20:37 GMT EAGLE5 42.0.0
   LOC  PORT IPADDR            SUBMASK          DUPLEX SPEED MACTYPE AUTO MCAST

   1113 A    150.1.1.1         255.255.255.0    FULL   100   DIX     NO   YES
   1113 B    ---------------   ---------------  FULL   10    DIX     NO   NO
;
```

rtrv-ip-lnk:loc=1115

```
rlghncxa03w 10-04-01 21:20:37 GMT EAGLE5 42.0.0
   LOC  PORT IPADDR            SUBMASK          DUPLEX SPEED MACTYPE AUTO MCAST

   1115 A    150.1.2.2         255.255.255.0    FULL   100   DIX     NO   YES
   1115 B    ---------------   ---------------  FULL   10    DIX     NO   NO
;
```

Legend

- **LOC**—Card location
- **PORT**—Ethernet interface port ID
- **IPADDR**—IP address for the specified port
- **SUBMASK**—Subnet mask of the IP interface
- **DUPLEX**—Mode of operation of the interface
- **SPEED**—Bandwidth for the interface in megabits per second
- **MACTYPE**—Media Access Control Type of the interface. 802.3 indicates the IEEE standard number 802.3 for Ethernet 1, and DIX indicates the Digital/Inter/Xerox de facto standard for Ethernet 2.
- **AUTO**—Whether to automatically determine duplex and speed. If YES, duplex and speed are automatically determined. If NO, duplex and speed are not automatically determined.
- **MCAST**—Multicast Control. Enables or disables multicast support for the interface. This parameter is necessary for INP, G-Port, and G-Flex to establish the connection from the Service Module card to the MPS system.

Related Commands

chg-ip-lnk

rtrv-ip-node

Retrieve IP Node

Use this command to display one or more nodes that are directly connected to a IP data link. This command can display a connection, an application on a node, or an entire node. No parameters are required to display an entire node. An application can be specified by giving either the application name or its IP port on the node.

Parameters

ipaddr (optional)

Remote host IP address. This address is expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where *192.126.100* is the network number and *5* is the machine's host number.

Range:

1-223, *0-255*

4 numbers separated by dots

1-223—first number

0–255—the other three numbers

Default:

Display all

ipappl (optional)

IP application supported by the node.

Range:

stplan

ipport (optional)

Logical IP port that addresses the application on the node.

Range: ***1024 - 5000***

Default:

Display all

iprte (optional)

Default router IP address. This address is expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.126.100.5*, where *192.126.100* is the network number and *5* is the machine's host number.

Range:

1-223, *0-255*

4 numbers, separated by dots

1-223-first number

0-255-the other three numbers

Default:

Display all

loc (optional)

The card location as stenciled on the shelf of the system that contains the link that will be directly connected to the node.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

Display all

Example

```
rtrv-ip-node
rtrv-ip-node:ipappl=stplan
rtrv-ip-node:ipaddr=193.4.201.50
rtrv-ip-node:ipaddr=193.4.201.50:ipport=1024
```

```
rtrv-ip-node:loc=1201
```

Dependencies

Only one of the ipappl, ipport, or loc parameters can be specified in the command.

The ipaddr parameter must be specified before the ipport parameter can be specified.

The shelf and card must be equipped.

If the loc parameter is specified, the card location must be equipped with an IP data link.

If the iprte parameter is not specified, then all IP nodes meeting the display criteria are displayed. If the IP node has no IP router assigned to it, dashes are displayed in the IPRTE field.

Notes

None

Output

`rtrv-ip-node`

```
    rlghncxa03w 04-02-04 21:16:43 EST  EAGLE 31.3.0
    IPADDR           IPPORT  IPAPPL  LOC   CAP  IPRTE
    193.4.201.50     1024    stplan  1201  10%  --
    193.4.201.50     1024    stplan  1202  10%  --
    193.4.201.50     1024    stplan  1203  20%  --
    193.4.202.30     2000    stplan  1204  40%  193.4.201.1
    194.5.198.74     3000    stplan  1205  40%  193.4.201.1
    197.4.217.39     4000    stplan  1206  40%  197.4.216.1
;
```

`rtrv-ip-node:ipappl=stplan`

```
    rlghncxa03w 04-02-04 21:16:43 EST  EAGLE 31.3.0
    IPADDR           IPPORT  IPAPPL  LOC   CAP  IPRTE
    193.4.201.50     1024    stplan  1201  10%  --
    193.4.201.50     1024    stplan  1202  10%  --
    193.4.201.50     1024    stplan  1203  20%  --
    193.4.202.30     2000    stplan  1204  40%  193.4.201.1
    194.5.198.74     3000    stplan  1205  40%  193.4.201.1
    197.4.217.39     4000    stplan  1206  40%  197.4.216.1
;
```

`rtrv-ip-node:ipaddr=193.4.201.50`

```
    rlghncxa03w 04-02-04 21:16:43 EST  EAGLE 31.3.0
    IPADDR           IPPORT  IPAPPL  LOC   CAP  IPRTE
    193.4.201.50     1024    stplan  1201  10%  --
    193.4.201.50     1024    stplan  1202  10%  --
    193.4.201.50     1024    stplan  1203  20%  --
;
```

```
rtrv-ip-node:ipaddr=193.4.201.50:ipport=1024
```

```
    rlghncxa03w 04-02-04 21:16:43 EST  EAGLE 31.3.0
    IPADDR           IPPORT  IPAPPL  LOC   CAP  IPRTE
    193.4.201.50     1024    stplan  1201  10%  --
    193.4.201.50     1024    stplan  1202  10%  --
    193.4.201.50     1024    stplan  1203  20%  --
;
```

```
rtrv-ip-node:loc=1201
```

```
    rlghncxa03w 04-02-04 21:16:43 EST  EAGLE 31.3.0
    IPADDR           IPPORT  IPAPPL  LOC   CAP  IPRTE
    193.4.201.50     1024    stplan  1201  10%  --
;
```

```
rtrv-ip-node:ipaddr=193.4.201.50:ipport=1022
```

```
    rlghncxa03w 04-02-04 21:16:43 EST  EAGLE 31.3.0
    IPADDR           IPPORT  IPAPPL  LOC   CAP  IPRTE
    IPPORT on Node not connected to any TCP/IP link.
;
```

```
rtrv-ip-node:ipaddr=193.4.111.55
```

```
    rlghncxa03w 04-02-04 21:16:43 EST  EAGLE 31.3.0
    IPADDR           IPPORT  IPAPPL  LOC   CAP  IPRTE
    IPADDR not connected to any TCP/IP Link.
;
```

Legend

- **IPADDR**—Remote host's IP address
- **IPPORT**—Logical IP port to address the application on the node
- **IPAPPL**—IP application supported by the node
- **LOC**—Card location as stenciled on the shelf of the system that contains the TCP/IP link that will be directly connected to the node
- **CAP**—Maximum percentage of ethernet capacity for this node connection
- **IPRTE**—Default router's IP address

Related Commands

dlt-ip-node, *ent-ip-node*

rtrv-ip-rte

Retrieve IP Route

Use this command to display all static IP route entries in the Static IP Route table, entries for a specific card, entries for a specific destination IP address, or entries for a specific gateway IP address.

Parameters

dest (optional)

Destination IP Address. The IP Address of a remote destination host or network.

Range:

gtwy (optional)

Gateway IP Address. The IP address assigned to the gateway router that will properly forward IP datagrams with the destination IP address (dest) to the next-hop gateway router or final destination host.

Range:

4 numbers separated by dots, with each number in the range of 0-255.

The IP address 0.0.0.0 is not valid.

loc (optional)

Card location. The unique identifier of a specific IP card in the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
rtrv-ip-rte
rtrv-ip-rte:loc=1301
rtrv-ip-rte:dest=128.252.10.5
rtrv-ip-rte:gtwy=140.190.15.3
```

Dependencies

Only one optional parameter can be specified in a single command.

The value specified for the loc parameter must not correspond to an E5 TDM-A or TDM-B

The specified destination IP address (dest parameter):

- Must not be the default route (*0.0.0.0*)
- Must not correspond to any loopback address (i.e. *127.X.X.X*)

The specified gateway IP address (gtwy parameter):

- Must not be the default route (*0.0.0.0*)
- Must not correspond to any loopback address (i.e. *127.X.X.X*)

Notes

None

Output

`rtrv-ip-rte`

```
    rlghncxa03w 12-07-23 09:50:17 EST  EAGLE 45.0.0
    LOC   DEST             SUBMASK          GTWY
    1301  128.252.10.5     255.255.255.255  140.188.13.33
    1301  128.252.0.0      255.255.0.0      140.188.13.34
    1301  150.10.1.1       255.255.255.255  140.190.15.3
    1303  192.168.10.1     255.255.255.255  150.190.15.23
    1303  192.168.0.0      255.255.0.0      150.190.15.24

    IP Rte  (5 of 2048) 1%
;
```

`rtrv-ip-rte:loc=1301`

```
    rlghncxa03w 12-07-23 09:50:17 EST  EAGLE 45.0.0
    LOC   DEST             SUBMASK          GTWY
    1301  128.252.10.5     255.255.255.255  140.188.13.33
    1301  128.252.0.0      255.255.0.0      140.188.13.34
    1301  150.10.1.1       255.255.255.255  140.190.15.3

    IP Rte (5 of 2048) 1%
;
```

Related Commands

ent-ip-rte

rtrv-is41-msg

Retreive Configured IS41 Message

Use this command to display the configured IS41 test message parameter values.

Parameters

msgn (mandatory)

Message number. The test message number that is retrieved.

Range:

1 - 10

Example

`rtrv-is41-msg:msgn=5`

Dependencies

None.

Output

`rtrv-is41-msg:msgn=1`

```
tekelecstp 08-12-02 10:47:51 EST  EAGLE 40.1.0
MSG = 1                ACTIVE = YES

CGPA_GT = 2
CGPA_GT_NAI = 4      CGPA = 919818000001

CDPA_GT = 2
CDPA_GT_NAI = 4      CDPA = 919818000002

CGPN_NAI = 1         CGPN_NP = 2
CGPN_ES  = 1         CGPN = 919818000007

CDPN_NAI = 1         CDPN_NP = 2
CDPN_ES  = 1         CDPN = 919818000008
```

`rtrv-is41-msg:msgn=2`

```
tekelecstp 11-10-05 11:48:46 EST EAGLE 44.0.0
MSG = 2               ACTIVE = YES

CGPA_GT = 4
CGPA_GT_NAI = 4    CGPA = 919818000009

CDPA_GT = 4
CDPA_GT_NAI = 4    CDPA = 919818000005

CGPN_NAI = 1       CGPN_NP = 2
CGPN_ES =  1       CGPN = none

CDPN_NAI = 1       CDPN_NP = 2
CDPN_ES =  1       CDPN = 919818000003
```

Related Commands

chg-is41-msg, *tst-msg*

rtrv-is41opts

Retrieve IS41 Options

Use this command to retrieve the IS41 option indicators maintained in the IS41OPTS table.

Parameters

This command has no parameters.

Example

```
rtrv-is41opts
```

Dependencies

The APORT or IGM feature must be enabled before this command can be entered.

Output

```
rtrv-is41opts
```

```
    tekelecstp 10-03-15 12:49:20 EST  EAGLE 42.0.0

    IS41 OPTIONS
    ------------------------
    SMSREQBYPASS    = NO
    LOCREQDN        = SCCP
    IEC             = NONE
    NEC             = NONE
    RSPCGPARI       = FRMSG
    RSPCGPAPCP      = FRMSG
    RSPCDPARI       = FRMSG
    RSPCDPAPCP      = OFF
    RSPCGPANAI      = NONE
    RSPCGPANP       = NONE
    RSPCGPATT       = NONE
    MTPLOCREQNAI    = FRMSG
    RSPPARM         = TLIST
    RSPDIG          = RNDN
    RSPNON          = NONE
    RSPNP           = 2
    RSPMIN          = HOMERN
    MSCMKTID        = 0
    MSCSWITCH       = 0
    ESNMFG          = 0
    ESNSN           = 0
    RSPDIGTYPE      = 6
    LOCREQRMHRN     = NO
    TCAPSNAI        = FRMSG
    MTPLOCREQLEN    = 15
    SPORTTYPE       = IS41
    DFLTRN          = 3
    LOCREQRSPND     = OFF

;
```

Related Commands

chg-is41opts, *chg-is41smsopts*, *rtrv-is41smsopts*

rtrv-is41smsopts

Retrieve IS41 SMS System Options

Use this command to display all IS41 SMS options from the database.

Parameters

This command has no parameters.

Example

```
rtrv-is41smsopts
```

Dependencies

None.

Notes

None

Output

```
rtrv-is41smsopts
```

```
    tekelecstp 09-06-20 11:49:00 EST  EAGLE 41.1.0
    IS41 SMS OPTIONS
    ----------------------
    BPARTYGTTSN   = NONE         MODAPARAM     = DA
    MOIGMPFX      = IS412GSM     MOSMSACLEN    = 0
    MOSMSDIGMAT   = EXACT        MOSMSNAI      = NAT
    MOSMSGTTDIG   = SCCPCDPA     MOSMSTYPE     = ALL
    SPORTTYPE     = GSM          SPFILL        = ON
    DEFRN         = abcdef123456789

    MTSMSACKN     = ACK          MTSMSCHKSRC   = NO
    MTSMSDNFMT    = RN           MTSMSDLTR     = NO
    MTSMSDLTRV    = NONE         MTSMSDIGTYPE  = 6
    MTSMSNAKERR   = 5            MTSMSPARM     = DIGIT
    MTSMSESN      = NO           MTSMSSSN      = 6
    MTSMSTYPE     = RN

;
```

Related Commands

chg-is41opts, *chg-is41smsopts*, *rtrv-is41opts*

rtrv-isup-msg

Retrieve ISUP Message

Use this command to display one ISUP test message or all ISUP test messages from the TESTMSG table. The TIF Test Tool processes ISUP test messages to verify the TIF and NPP provisioned configuration in the system.

Parameters

msgn (optional)

ISUP Test Message number. The ISUP test message number for which parameter values are displayed.

Range:

1 - 10

Dependencies

None.

Example

`rtrv-isup-msg`

Output

`rtrv-isup-msg`

```
tekelecstp 08-10-30 14:55:45 EST  EAGLE 40.0.0
MSG = 1           ACTIVE = NO
     CGPN_NAI = 4         CGPN = 01234567890abcdef
     CDPN_NAI = 4         CDPN = 01234567890abcdef

     CGPN_CAT = 0

     NMBITS = 0
MSG = 2           ACTIVE = YES
     CGPN_NAI = 4         CGPN = 01234567890abcdef
     CDPN_NAI = 4         CDPN = 01234567890abcdef

     CGPN_CAT = 0

     NMBITS = 0
MSG = 3           ACTIVE = NO
     CGPN_NAI = 4         CGPN = 01234567890abcdef
     CDPN_NAI = 4         CDPN = 01234567890abcdef
     CGPN_CAT = 0
     NMBITS = 0
MSG = 4           ACTIVE = NO
     CGPN_NAI = 4         CGPN = 01234567890abcdef
     CDPN_NAI = 4         CDPN = 01234567890abcdef

     CGPN_CAT = 0

     NMBITS = 0
MSG = 5           ACTIVE = NO
     CGPN_NAI = 4         CGPN = 01234567890abcdef
     CDPN_NAI = 4         CDPN = 01234567890abcdef

     CGPN_CAT = 0
```

```
          NMBITS = 0
    MSG = 6           ACTIVE = NO
          CGPN_NAI = 4         CGPN = 01234567890abcdef
          CDPN_NAI = 4         CDPN = 01234567890abcdef

          CGPN_CAT = 0

          NMBITS = 0
    MSG = 7           ACTIVE = NO
          CGPN_NAI = 4         CGPN = 01234567890abcdef
          CDPN_NAI = 4         CDPN = 01234567890abcdef

          CGPN_CAT = 0

          NMBITS = 0
    MSG = 8           ACTIVE = NO
          CGPN_NAI = 4         CGPN = 01234567890abcdef
          CDPN_NAI = 4         CDPN = 01234567890abcdef

          CGPN_CAT = 0

          NMBITS = 0
    MSG = 9           ACTIVE = NO
          CGPN_NAI = 4         CGPN = 01234567890abcdef
          CDPN_NAI = 4         CDPN = 01234567890abcdef

          CGPN_CAT = 0

          NMBITS = 0
    MSG = 10          ACTIVE = NO
          CGPN_NAI = 4         CGPN = 01234567890abcdef
          CDPN_NAI = 4         CDPN = 01234567890abcdef

          CGPN_CAT = 0

          NMBITS = 0
;
```

```
rtrv-isup-msg:msgn=10
```

```

    tekelecstp 08-10-30 14:57:07 EST  EAGLE 40.0.0
    MSG = 10          ACTIVE = NO
          CGPN_NAI = 4         CGPN = 01234567890abcdef
          CDPN_NAI = 4         CDPN = 01234567890abcdef

          CGPN_CAT = 0

          NMBITS = 0
;
```

Legend

MSG—ISUP Test Message number

ACTIVE—Indicates whether the ISUP test message will be sent to the network card in the test (0=NO, 1=YES)

CGPN_NAI—Calling Party Number Nature of Address Indicator

CGPN_CAT—CgPN Category

CGPN—Calling Party Number Digits

CDPN_NAI—Called Party Number Nature of Address Indicator

CDPN—Called Party Number Digits

NMBITS—Nm Bits that indicate whether a number portability lookup has already been performed in the network

Related Commands

chg-isup-msg, *tst-msg*

rtrv-j1 Retrieve J1 Interface

Use this command to retrieve information for a specified J1 interface or for all J1 interfaces that have been defined by the ent-j1 command.

Parameters

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

All T1 card locations having J1 interfaces configured are listed.

j1port (optional)

J1 port number. The value must be a J1 port that has already been configured with a J1 interface on the specified J1 card having application as CCS7ITU.

Range:

1-8

Default:

If not specified, all T1 card locations having J1 interfaces configured are listed.

Example

```
rtrv-j1
rtrv-j1:loc=1101:j1port=1
```

Dependencies

The loc and j1port parameters must be specified together, if any parameters are specified for the command.

The J1 interface of the J1 card specified by the loc parameter must already be defined before this command can be entered.

The card specified by the loc parameter must be a LIMT1 card type and the application must be CCS7ITU.

The Card (IMT) table must be accessible.

The J1 table must be accessible.

The port specified by the j1port parameter on the card specified by the loc parameter must already be equipped with a J1 interface.

The following card locations (loc parameter) are not valid for this command: 1113 - 1118 and all *xy*09 and *xy*10 locations (where *x* is the frame and *y* is the shelf).

The j1port parameter must be in the range from 1 to 8.

Notes

None.

Output

`rtrv-j1`

```
    tekelecstp 13-12-20 13:16:13 EST  46.0.0-65.3.0
    rtrv-j1
          J1
    LOC   PORT  ENCODE  J1TSEL    LL
    1101  3     B8ZS    LINE      133
    1102  1     B8ZS    LINE      133
    1102  2     B8ZS    LINE      133
    1102  3     B8ZS    LINE      133
;
```

`rtrv-j1:loc=1101:j1port=1`

```
    tekelecstp 13-12-20 13:16:13 EST  46.0.0-65.3.0
    rtrv-j1
          J1
    LOC   PORT  ENCODE  J1TSEL    LL
    1101  3     B8ZS    LINE      133


    TS1  1101,A    TS9   1101,B    TS17  ------
    TS2  1101,A1   TS10  ------    TS18  ------
    TS3  1101,B1   TS11  ------    TS19  ------
    TS4  1101,B3   TS12  1102,B3   TS20  ------
    TS5  1102,A    TS13  ------    TS21  ------
    TS6  ------    TS14  ------    TS22  ------
    TS7  1103.A    TS15  ------    TS23  ------
    TS8  1104.A    TS16  ------    TS24  ------
;
```

Legend

- LOC-- J1 card location in the shelf.
- J1PORT--Number of the J1 port provisioned on the card in the specified location.
- ENCODE--Indicator for use of B8ZS or AMI encoding/decoding.
- J1TSEL-- J1 timing source indicator (external = master timing source, line= slave timing source).

Related Commands

chg-j1, *dlt-j1*, *ent-j1*, *tst-j1*

rtrv-l2t

Retrieve Level 2 Timers

Use this command to display the values of the SS7 MTP Level 2 timers. The timers are organized in 40 timer sets of 10 timer values each. The timer sets are grouped and system default values are initialized by specification (ANSI, ITU, High Speed for China, High Speed for Q.703 Annex A, JT Q703, and High Speed for Unchannelized T1). Each timer set is administered individually by the `chg-l2t` command. The ent-slk command is used to assign an SS7 signaling link to any of the timer sets. Each assigned link is associated with a timer set.

Parameters

l2tset (optional)

Level 2 timer set identifer, or timer set number. Up to 40 different SS7 MTP Level 2 timer sets can be defined.

Range:

1 - 40

Default:

Displays all timer sets

Example

```
rtrv-l2t
```

```
rtrv-l2t:l2tset=36
```

Dependencies

None.

Notes

The timer values are shown in the output for this command in seconds, even though they were specified in milliseconds in the `chg-l2t` command.

Output

The timer values are shown in the output for this command in seconds.

`rtrv-l2t`

```
    tekelecstp 02-01-02 18:39:27 MST  EAGLE 46.0.0-65.9.0
    rtrv-l2t
    Command entered at terminal #3.
;
```

```
    tekelecstp 02-01-02 18:39:27 MST  EAGLE 46.0.0-65.9.0
    LEVEL 2 TIMERS (IN SECONDS)
     L2TSET  T1     T2     T3   T4NPP T4EPP   T5    T6   T7  NODATA TE
     1       9.0    9.0    9.0   2.3   0.60  0.09   4.0  0.3  0.10  --
     2      13.0   11.5   11.5   2.3   0.60  0.10   4.0  1.5  0.10  --
     3      13.0   11.5   11.5   2.3   0.60  0.10   4.0  1.5  0.10  --
     4      13.0   11.5   11.5   2.3   0.60  0.10   4.0  1.5  0.10  --
     5       9.0    9.0    9.0   2.3   0.60  0.10   4.0  0.3  0.10  --
     6      13.0   11.5   11.5   2.3   0.60  0.10   4.0  1.5  0.10  --
     7      13.0   11.5   11.5   2.3   0.60  0.10   4.0  1.5  0.10  --
     8      13.0   11.5   11.5   2.3   0.60  0.10   4.0  1.5  0.10  --
     9       9.0    9.0    9.0   2.3   0.60  0.10   4.0  0.3  0.10  --
    10      13.0   11.5   11.5   2.3   0.60  0.10   4.0  1.5  0.10  --
    11      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    12      49.0   49.0    2.0   8.2   0.50  0.10   4.0  2.0  0.10  --
    13      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    14      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    15      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    16      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    17      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    18      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    19      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    20      40.0   30.0    2.0   8.2   0.50  0.10   4.0  1.5  0.10  --
    21     150.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    22      90.0   90.0    2.0  30.0   0.50  0.10   5.0  2.0  0.10  --
    23     150.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    24     150.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    25     150.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    26     300.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    27     300.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    28     300.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    29     300.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    30     300.0  130.0    1.0  30.0   0.50  0.10   5.0  0.8  0.10  --
    31     151.0   14.0   14.0  30.0   3.00  0.08   3.0  0.5  0.10  --
    32     151.0   14.0   14.0  30.0   3.00  0.08   3.0  0.5  0.10  --
    33     151.0   14.0   14.0  30.0   3.00  0.08   3.0  0.5  0.10  --
    34     151.0   14.0   14.0  30.0   3.00  0.08   3.0  0.5  0.10  --
    35      70.0    7.0    7.0  30.0   3.00  0.12   3.0  2.0  0.10  --
    36      15.0    5.0    3.0  --     3.00  0.20   5.0  2.0  0.10  0.024
    37      15.0    5.0    3.0  --     3.00  0.20   5.0  2.0  0.10  0.024
    38      15.0    5.0    3.0  --     3.00  0.20   5.0  2.0  0.10  0.024
    39      15.0    5.0    3.0  --     3.00  0.20   5.0  2.0  0.10  0.024
    40      15.0    5.0    3.0  --     3.00  0.20   5.0  3.0  0.10  0.024

;
```

This example displays timer values for a specified timer set:

```
rtrv-l2t:l2tset=36
```

```
tekelecstp 02-01-02 18:42:26 MST  EAGLE 46.0.0-65.9.0
LEVEL 2 TIMERS (IN SECONDS)
 L2TSET  T1     T2     T3   T4NPP T4EPP   T5    T6   T7  NODATA TE
36      15.0    5.0    3.0  --     3.00  0.20   5.0  2.0  0.10  0.024
```

Legend

- **L2TSET**—SS7 MTP Level 2 timer set identifer or number
- **T1**—Aligned ready
- **T2**—Not aligned
- **T3**—Aligned
- **T4NPP**—Proving period normal
- **T4EPP**—Proving period Emergency
- **T5**—Sending SIB
- **T6**—Remote congestion
- **T7**—Excessive delay of acknowledgment
- **NODATA**—Amount of time with no data
- **TE**— Error rate monitoring

Related Commands

chg-l2t, *ent-slk*, *rtrv-slk*

rtrv-l3t

Retrieve Level 3 Timers

Use this command to show values of the SS7 level 3 timers. The timers are grouped into sets that are assigned to linksets.

Parameters

l3tset (optional)

Level 3 timer set table. Only one level 3 timer set table can be defined. The timer set can then be assigned to a linkset using the `ent-ls` or `chg-l3t` command.

Range:

1

Default:

Display table

Example

```
rtrv-l3t:l3tset=1
```

Dependencies

Only one timer set is supported in this release.

Notes

The timer output for this command is in seconds, even though it could have been entered in milliseconds in the `chg-l3t` command.

Output

`rtrv-l3t:l3tset=1`

```
    rlghncxa03w 04-02-17 16:03:12 EST  EAGLE 31.3.0
    LEVEL 3 TIMERS (IN SECONDS)
         L3TSET   T1      T2      T3      T4      T5      T6      T7
           1      0.8     1.4     0.8     0.8     0.8     0.8     1.0

                  T8      T9      T10     T11     T12     T13     T14
                  0.8     --     30.0    30.0     0.8     0.8     2.0

                  T15     T16     T17     T18     IT18    T19     IT19
                  3.0     1.4     0.8    10.0     19.0   480.0    67.0

                T20/IT22  IT20   T21/IT23 IT21     T22     T23     T24
                  90.0    59.0    90.0    63.0    10.0     10.0    10.0

                  T25     T26     T27     T28     T29     T30     T31
                 30.0    12.0     --      3.0    60.0    30.0    60.0

                  T32
                 60.0
;
```

Legend

- **L3TSET**—Level 3 timer set table.
- **T1**—Delay, in seconds, to avoid message missequencing on changeover. Also used as the ITU MTP restart isolation timer.
- **T2**—Amount of time, in seconds, to wait for changeover acknowledgment
- **T3**—Time controlled diversion – the delay, in seconds, to avoid missequencing on changeback
- **T4**—Amount of time, in seconds, to wait for changeback acknowledgment, first attempt
- **T5**—Amount of time, in seconds, to wait for changeback acknowledgment, second attempt
- **T6**—Delay, in seconds, to avoid message missequencing on controlled rerouting
- **T7**—Amount of time, in seconds, to wait for signaling data link connection acknowledgment
- **T8**—Transfer-prohibited inhibited timer (transient solution)
- **T10**—Amount of time, in seconds, to wait before repeating the signaling-route-set-test message
- **T11**—Transfer-restricted timer
- **T12**—Amount of time, in seconds, to wait for uninhibit acknowledgment
- **T13**—Amount of time, in seconds, to wait for force uninhibit

- **T14**—The amount of time, in seconds, to wait for inhibition acknowledgment
- **T15**—Amount of time, in seconds, to wait before repeating the signaling-route-set-congestion test
- **T16**—Amount of time, in seconds, to wait for route-set-congestion status update
- **T17**—Delay, in seconds, to avoid oscillation of initial alignment failure and link restart
- **T18**—Repeat TFR once by response method timers
- **IT18**—Timer within an STP whose MTP restarts to supervise the receipt of routing information and the activation of the link and link set. The amount of time, in seconds, to wait for links to align and to receive TRAs from all adjacent nodes.
- **T19**—Failed link craft referral timer
- **IT19**—Amount of time, in seconds, for the supervision timer to wait during MTP restart to avoid ping-pong of TFP, TFR1, and TRA messages
- **T20/IT22**—Amount of time, in seconds, to wait before repeating the local inhibit test
- **IT20**—Amount of time, in seconds, to wait overall for the MTP restart at the signaling point whose MTP restarts
- **T21/IT23**—Amount of time, in seconds, to wait before repeating the remote inhibit test
- **IT21**—Overall MTP restart timer at a signaling point adjacent to one whose MTP restarts
- **T22**—Timer at the restarting STP. The amount of time, in seconds, to wait for signaling links to become available
- **T23**—Timer at the restarting STP. Starting after T22, the amount of time, in seconds, to wait to receive all TRA messages.
- **T24**—Timer at the restarting STP with transfer function. Starting after T23, the amount of time, in seconds, to wait to broadcast all TRA messages.
- **T25**—Timer at the adjacent and restarting STPs. The amount of time, in seconds, to wait for a TRA message (may be started at level 2).
- **T26**—Timer at the restarting STP. The amount of time, in seconds, to wait to repeat a TRW message.
- **T28**—Timer at the STP adjacent to the restarting STP. The amount of time, in seconds, to wait for a TRW message.
- **T29**—Timer started when a TRA message is sent in response to an unexpected TRA or TRW. Also, the timer started when traffic is resumed without receipt of a TRA message.
- **T30**—Timer used to limit the sending of TFPs/TFRs in response to an unexpected TRA or TRW message
- **T31**—False link congestion detection timer
- **T32**—Link oscillation timer–Procedure A

Related Commands

chg-l2t, *chg-l3t*, *ent-ls*, *rtrv-l2t*, *rtrv-ls*

rtrv-lbp

Retrieve Loopback Point Attributes

Use this command to retrieve the current value of a far-end loopback point maintained in the link fault sectionalization table.

Parameters

lbp (optional)

Loopback point ID. A far-end loopback point that lies along an SS7 signaling link path between the STP and the target device (up to and including the target device).

Range:

1 - 32

Default:

Display all

link (optional)

SS7 signaling link. The SS7 signaling link that is to be tested.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

Default:

Display all

loc (optional)

Card location. The unique identifier of a specific application subsystem located in the STP.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 531, 6101 - 6108, 6111 - 6118

Default:

All card locations.

Example

```
rtrv-lbp
rtrv-lbp:loc=1202
rtrv-lbp:loc=1202:link=a
rtrv-lbp:loc=1202:link=a:lbp=3
```

Dependencies

The Link Fault Sectionalization (LFS) feature must be on before this command can be entered.

The card location specified in the loc parameter cannot be reserved by the system.

If the link parameter is specified, the loc parameter must be specified. If the lbp parameter is specified, the loc and link parameters must be specified.

The card location (loc parameter) must identify a provisioned HC-MIM, E5-E1T1, or E5-E1T1-B card, provisioned with the LIMT1 card type, configured with either the SS7ANSI or CCS7ITU application.

The card location specified in the loc parameter must be equipped.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

This example displays the attributes for the loopback points for SS7 links assigned to the STP:

`rtrv-lbp`

```
    rlghncxa03w 04-02-17 16:02:05 EST  EAGLE 31.3.0
    LOC   PORTLINK  LBP  RLE  REP CLLI                      LFST
    1101  A     1    DS0  0   ------------------------  LLT
                7    OCU  0   ------------------------  NLT
                9    NEI  0   ------------------------  LLT

    1102  A     2    DS0  0   ------------------------  LLT
                3    DS0  4   ------------------------  LLT
                4    NEI  0   ------------------------  LLT

    1102  B     1    DS0  0   ------------------------  LLT
                6    NEI  0   ------------------------  LLT

    1215  A     1    DS0  0   ------------------------  LLT
                3    DS0  4   ------------------------  LLT
                5    DS0  5   ------------------------  LLT
                7    DS0  8   ------------------------  LLT
                9    NEI  0   ------------------------  LLT
;
```

This example displays the attributes for the loopback points for the SS7 links A and B of the LIM card residing in the first frame, first shelf, and second slot of the STP:

`rtrv-lbp:loc=1102`

```
    rlghncxa03w 04-02-17 16:02:05 EST  EAGLE 31.3.0
    LOC   LINK  LBP  RLE  REP CLLI                      LFST
    1102  A     2    DS0  0   ------------------------  LLT
                3    DS0  4   ------------------------  LLT
                4    NEI  0   ------------------------  LLT

    1102  B     1    DS0  0   ------------------------  LLT
                6    NEI  0   ------------------------  LLT
;
```

This example displays the attributes for the loopback points for the SS7 link A of the LIM card residing in the first frame, first shelf, and second slot of the STP:

```
rtrv-lbp:loc=1102:link=a
```

```
    rlghncxa03w 04-02-17 16:02:05 EST  EAGLE 31.3.0
    LOC   LINK  LBP  RLE  REP CLLI                     LFST
    1102  A     2    DS0  0   ------------------------ LLT
                3    DS0  4   ------------------------ LLT
                4    NEI  0   ------------------------ LLT
;
```

This example displays the attributes for loopback point 3 for the SS7 link A of the LIM card residing in the first frame, first shelf, and second slot of the STP:

```
rtrv-lbp:loc=1102:link=a:lbp=3
```

```
    rlghncxa03w 04-02-17 16:02:05 EST  EAGLE 31.3.0
    LOC   LINK  LBP  RLE  REP CLLI                     LFST
    1102  A     3    DS0  4   ------------------------ LLT
;
```

This example displays the attributes for the loopback points for the SS7 link A of the LIM card residing in the first frame, first shelf, and second slot of the STP. No loopback points have been provisioned.

```
rtrv-lbp:loc=1102:link=a
```

```
    rlghncxa03w 04-02-17 16:02:05 EST  EAGLE 31.3.0
    LOC   LINK  LBP  RLE  REP CLLI                     LFST

    No loopback points meeting the requested criteria were found
;
```

Related Commands

act-lbp, *chg-lbp*, *dact-lbp*, *dlt-lbp*, *ent-lbp*

rtrv-lnp-serv

Retrieve LNP Service

Use this command to retrieve all LNP services. This command displays the assigned translation type, translation type name, service type, LNP digit validity indication, and TT aliases.

Parameters

This command has no parameters.

Example

```
rtrv-lnp-serv
```

Dependencies

The LNP feature must be turned on before this command can be entered.

Notes

None

Output

This example shows output when EGTT is ON.

`rtrv-lnp-serv`

```
    rlghncxa03w 10-11-11 13:45:15 EST  EAGLE 43.0.0
    SERV   TT   TTN       DV    ALIAS  GTTRQD  SELID   DFLTACT
    CNAM   1    cnam1     SCCP  ---    On      10      fallback
                          8     On      20      discact
    LIDB   2    lidb1     SCCP  ---    Off     None    discact
                          19    On      None    falltogtt
    AIN    3    ain       TCAP  ---    Off     None    fallback
    UDF1   22   udf1      TCAP  ---    ---     ---     ---

    LNP-SERV TABLE IS 2% FULL (6 of 256)
;
```

`rtrv-lnp-serv`

```
    rlghncxa03w 10-11-11 14:42:38 EST  EAGLE 43.0.0
    SERV   TT   TTN       DV    ALIAS   GTTRQD   SELID   DFLTACT
    AIN    15   AINGTE    TCAP  ---     On       None    discact
    LIDB   20   LIDB      SCCP  ---     Off      None    fallback
                          5     On       10      discact
    WNP    22   WNP       TCAP  ---     Off      20      fallback
    LNPQS  11   LNPQS     TCAP  ---     On       None    fallback
    PCS    12   PCS       TCAP  ---     On       54      discact
    CLASS  25   CLASSGTE  SCCP  ---     Off      88      falltogtt
    UDF1   201  UDF1      SCCP  ---     ---      ---     ---

    LNP-SERV TABLE IS 3% FULL (8 of 256)
;
```

This example shows output when the LNP SMS feature is turned on and provisioned:

`rtrv-lnp-serv`

```
    rlghncxa03w 10-11-11 14:42:38 EST  EAGLE 43.0.0
    SERV   TT   TTN       DV    ALIAS    GTTRQD   SELID   DFLTACT
    AIN    15   AINGTE    TCAP  ---      On       None    fallback
                          236   Off      None     discudts
    LIDB   20   LIDB      SCCP  ---      On       10      discact
    WNP    22   WNP       TCAP  ---      On       87      fallback
    LNPQS  11   LNPQS     TCAP  ---      On       100     fallback
    PCS    12   PCS       TCAP  ---      Off      None    discudts
```

```
    CLASS  25   CLASSGTE  SCCP  ---      On       34      falltogtt
    WSMSC  55   WSMSC     SCCP  ---      On       52      discudts
    UDF1   201  UDF1      SCCP  ---      ---      ---     ---

    LNP-SERV TABLE IS 3% FULL (9 of 256)
;
```

This example shows output when the LNP SMS feature is not turned on but is provisioned:

`rtrv-lnp-serv`

```
    rlghncxa03w 10-11-11 14:42:38 EST  EAGLE 43.0.0
    SERV   TT   TTN       DV    ALIAS   GTTRQD   SELID   DFLTACT
    AIN    15   AINGTE    TCAP  ---     Off      None    discudts
                          236     On       None    fallback
    LIDB   20   LIDB      SCCP  ---     On       10      discact
    WNP    22   WNP       TCAP  ---     Off      105     fallback
    LNPQS  11   LNPQS     TCAP  ---     On       None    discact
    CLASS  25   CLASSGTE  SCCP  ---     On       30      discudts
    WSMSC* 55   WSMSC     SCCP  ---     Off      None    fallback
    UDF1   201  UDF1      SCCP  ---     ---      ---     ---
                          235     ---      ---     ---
    LNP-SERV TABLE IS 3% FULL (9 of 256)
;
```

This example shows output when an entry is provisioned for the LRNQT feature.

`rtrv-lnp-serv`

```
    rlghncxa03w 10-11-11 14:42:38 EST  EAGLE 43.0.0
    SERV   TT   TTN       DV    ALIAS   GTTRQD  SELID   DFLTACT
    LNPQS  11   LNPQS     TCAP  ---     Off     None    falltogtt
    PCS    12   PCS       TCAP  ---     On      33      discact
    AIN    15   AINGTE    TCAP  ---     On      None    fallback
                          236     Off     39      discact
    LIDB   20   LIDB      SCCP  ---     On      20      falltogtt
    WNP    22   WNP       TCAP  ---     Off     None    fallback
    CLASS  25   CLASSGTE  SCCP  ---     On      50      discact
    UDF1   201  UDF1      SCCP  ---     ---     ---     ---
    LRNQT  239  LRNQT     TCAP  ---     On      None    fallback

    LNP-SERV TABLE IS 3% FULL (9 of 256)
;
```

This example shows output when Dual ExAP Config is enabled.

```
   exap 12-07-10 18:33:00 MST EAGLE 45.0.0-64.37.0
   SERV  TT  TTN    DV      ALIAS   RQDTBLNOP GTTRQD SELID     DFLTACT
   LIDB  1   lidb   SCCP    -----   DISC
                             4       UDTS
                             225     DISC

   LNP-SERV table is 1% full (3 of 256)
;
```

Legend

- **SERV**—Reserved service type name

- **TT**—Translation type
- **TTN**—Translation type name
- **DV**—Digits valid
- **ALIAS**—Alias translation type
- **SELID**—GTT Selector ID
- **GTTRQD**—GTT Required
- **DFLTACT**—Default GTT Action ID

Related Commands

chg-lnp-serv, *dlt-lnp-serv*, *ent-lnp-serv*

rtrv-lnpopts

Retrieve LNP System Options

Use this command to display all the LNP-specific system options from the database.

Parameters

This command has no parameters.

Example

```
rtrv-lnpopts
```

Dependencies

The LNP feature or AINPQ feature must be turned on before this command can be entered.

Notes

None

Output

The JIPPROV and JIPDIGITS fields appear in the output only when the Triggerless LNP feature is turned on.

```
rtrv-lnpopts
```

```
    AMASLPID    = 123456789
    INCSLP      = yes
    AMACTYPE    = 003
    AMAFEATID   = 010
    CIC         = 1369
    AUD         = on
    SP          = a123
    ADMHIPRI    = yes
```

```
    GTWYSTP     = yes
    JIPPROV     = yes
    JIPDIGITS   = 919460
    CCP         = no
    SERVPORT    = no
    WQREDRCT    = off
    WSMSC10DIG  = yes
;
```

Legend

- **AMASLPID**—AMA slip ID
- **INCSLP**—Whether the AMA slip ID included in the response
- **AMACTYPE**—AMA call type
- **AMAFEATID**—AMA feature ID
- **CIC**—Carrier identification code
- **AUD**—Audit indicator
- **SP**—Service provider ID
- **ADMHIPRI**—LNP database administration has the highest priority of all administration
- **GTWYSTP**—LNP system is configured as a Gateway STP
- **JIPPROV**—Add a Jurisdictional Information Parameter value to the IAM
- **JIPDIGITS**—Jurisdictional Information Parameter value
- **CCP**—Copy Charge Parameters
- **SERVPORT**—Service Portability
- **WQREDRCT**—Wireless queries directed to default GTT
- **WSMS10DIG**—SCCP GTA length indicator for 10 or 11 digtis

Related Commands

chg-lnpopts

rtrv-log

Display Records from the Log

Use this command to retrieve records from the active or standby Alarm and UIM logs generated by the Maintenance system. This command selects these records based on a span of time or a specific log file index.

Parameters

dir (optional)

Direction in which to obtain entries from within the log (forward or backward) for displaying. See the Dependencies and Notes sections for usage information.

Range:

fwd

Display entries from nearer the beginning of the log toward entries at the end of the log

bkwd

Display entries from nearer the end of the log toward entries at the beginning of the log

Default:

fwd

edate (optional)

End date. Report only log entries that were created on or before the specified date (dir=fwd), or only log entries that were created on or after the specified date (dir=bkwd). See the Notes section for usage information.

Range:

000101 - 991231

(in the form *yymmdd*, where *yy* is year, *mm* is month, and *dd* is day)

Default:

Report log entries regardless of their creation date

enum (optional)

Ending Message Reference Number (MRN) for which to display entries. The ending Alarm or UIM number if specifying a range.

Range:

1 - 1499

1-999 —Alarms (UAMs)

1000-1499 —UIMs

Default:

If enum is not specified and:

If snum is specified, the default enum value is the same as the specified snum value.

If snum is not specified and type is *alarm* or not specified, the default enum value is *999*.

If snum is not specified and type is *all* or *uim*, the default enum value is *1499.*

etime (optional)

End time. Report only log entries that were created on or before the specified time (dir=fwd), or only log entries that were created on or after the specified time (dir=bkwd). See the Notes section for usage information.

Range:

000000 - 235959

(in the form *hhmmss*, where *hh*=hours (00-23), *mm*=minutes (00-59), *ss*=seconds (00-59)) y)

The time must be specified with 6 digits in a 24-hour format. For example, enter 1:05:03 P.M. as *130503*.

Default:

Report log entries regardless of their creation time

mode (optional)

Log display mode; display all information or just summary information from each log entry.

Note: If the entry is only one line, the same information (one line) is displayed in brief and full mode for that entry.

Range:

brief

Display only the first "Summary" line of the log entry

full

Display all information available in the log entry

Default:

full

next (optional)

Number of additional records to display using the same direction (dir) and filtering criteria of outgrp, type, slog, and mode that were used for the previous successful `rtrv-log` command at the same terminal.

Range:

1 - 65500

num (optional)

Number of records that can be displayed before the report is stopped.

Range:

1 - 65500

Default:

15

outgrp (optional)

Output Group to sort or filter the Alarms (UAMs) and/or UIMs on.

Range:

all

Retrieve information for all Output Groups

appserv

Application Server

appss

Application Subsystem

card
Card

clk
Clock

db
Database

dbg
Debug

gtt
GTT Maintenance

gws
GWS Maintenance

link
Link Maintenance

meas
Measurements Maintenance

mon
Monitoring (Sentinel or IMF) Maintenance

mps
MPS Maintenance

pu
Program Update

sa
System Administration

seas
SEAS (Sentinel or IMF)

slan
SLAN Maintenance

sys
System Maintenance

traf
Traffic

Default:

If the next parameter is not specified, the default is *all*.

If the next parameter is specified, the output is the same as the immediately previous successful `rtrv-log` command that was entered at the same terminal (and no `rtrv-log` command was entered at another terminal).

sdate (optional)

Start date. Report only log entries that were created on or after the specified date (dir=fwd), or only log entries that were created on or before the specified date (dir=bkwd). See the Notes section for usage information.

Range:

000101 - 991231

(in the form *yymmdd*, where *yy* is year, *mm* is month, and *dd* is day)

Default:

Report log entries regardless of their creation date

slog (optional)

Source of log. The OAM Maintenance log to access.

Range:

act

Active OAM

stb

Standby OAM

Default:

act

snum (optional)

A single Alarm or UIM Message Reference Number (MRN), or the starting Alarm or UIM MRN if specifying a range. This parameter cannot be specified when the outgrp parameter is specified.

Range:

1 - 1499

1-999 —Alarms (UAMs)

1000-1499 —UIMs

Default:

All entries for the specified type are displayed.

If type=all, alarm, or not specified, the default value is *1*.

If type=uim, the default value is *1000*.

stime (optional)

Start time. Report only log entries that were created on or after the specified time (dir=fwd), or only log entries that were created on or before the specified time (dir=bkwd). See the Notes section for usage information.

Range:

000000 - 235959

(in the form *hhmmss*, where *hh*=hours (00-23), *mm*=minutes (00-59), *ss*=seconds (00-59))

The time must be specified with 6 digits in a 24-hour format. For example, enter 1:05:03 P.M. as *130503*.

Default:

Report log entries regardless of their creation time

type (optional)

Type of Maintenance log to access for the report.

Range:

all

UAMs and UIMs

alarm

UAMs

uim

UIMs

Default:

alarm

Example

```
rtrv-log:sdate=960715:stime=220000:num=50
rtrv-log:sdate=960715:stime=220000:num=50:snum=106
rtrv-log:sdate=960715:stime=220000:num=50:snum=106:enum=350
rtrv-log:sdate=960715:stime=220000:num=50:outgrp=slan:type=all
rtrv-log:next=100
```

Dependencies

No other `rtrv-log` command can already be in progress on the same OAM.

The initialization of the ELOG and UIM logs must be complete in the system before the `rtrv-log` command can be entered.

If the sdate and edate parameters are specified:

- In the forward direction, the sdate value must be less than or equal to the edate value.
- In the backward direction, the sdate value must be greater than or equal to the edate value.

The month component of the sdate and edate parameters must be in the range 1–12.

The day component of the sdate and edate parameters must be in the range 1–31 and must accurately reflect the number of days in the month and year indicated (see Notes section).

The seconds component of the stime and etime parameters must be in the range 00–59.

The minutes component of the stime and etime parameters must be in the range 00–59.

If the sdate parameter value is equal to the edate parameter value,

- In the forward direction, the stime value must be less than or equal to the etime value.
- In the backward direction, the stime value must be greater than or equal to the etime value.

The sdate parameter value plus the stime parameter value must be less than the current time and date combination.

If dir=bkwd is specified with a date and time range, sdate/stime must be greater than edate/etime.

When the enum parameter is specified, the snum parameter must be specified with a value less than or equal to the specified enum value.

The specified enum parameter value and the specified snum value must be within the same range: 1-999 for Alarms (UAMs) and 1000-1499 for UIMs.

The type parameter and the snum/enum parameters cannot be specified together in the command.

The `rtrv-log:next=` command must be entered on the same terminal where the previous successful `rtrv-log` command was entered in the system. No other parameters can be entered with the next parameter in the command.

The `rtrv-log:next=` command cannot be entered following a `rtrv-log` command that contained the type=all parameter. A `rtrv-log` command without the type=all parameter must be entered before the `rtrv-log::next=` command can be entered.

Because entries can be overwritten between the entry of a `rtrv-log` command without the next parameter and the entry of a `rtrv-log:next=` command, the `rtrv-log:next:` command might not execute successfully. Another `rtrv-log` command without the next parameter must be entered before the `rtrv-log:next:` command can be entered again,

The values specified for the edate with the stime parameter combination must be valid.

The values specified for the edate with stime and etime parameter combination must be valid.

When an enum parameter is specified, it requires an snum as its mated parameter.

No other parameters can be entered with the next parameter in the command.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

To accommodate the year 2000 and beyond, the two-digit year portion of dates is interpreted to be in the indicated century as follows:

- years 95–99 = 1995 through 1999
- years 00–94 = 2000 through 2094

This means that date 000101 (Jan. 1, 2000) is greater than 991231 (Dec. 31, 1999).

The day portion of any sdate/edate value entered must be in agreement with the month and year. The system issues error message E2252 if the day is found to be not valid (for example, 960631 is not a valid date). The system software and date/time hardware properly handle leap years and leap centuries. The year 2000 is a leap year.

When no date or time parameters are specified, the log display depends on the specified or default values of the num and dir parameters. The num parameter determines the maximum number of entries to display, and the dir parameter determines whether entries are displayed from the oldest end (dir=fwd or not specified) or the newest end (dir=bkwd).

When sdate is specified and edate is not specified in the forward direction, edate is defaulted to be the end of the log.

When edate is specified and sdate is not specified in the forward direction, sdate is defaulted to be the beginning of the log.

When sdate is specified and edate is not specified in the backward direction, edate is defaulted to be the beginning of the log.

When edate is specified and sdate is not specified in the backward direction, sdate is defaulted to be the end of the log.

When stime is specified and etime is not specified in the forward direction, etime is defaulted to 235959.

When etime is specified and stime is not specified in the forward direction, stime is defaulted to 000000.

When stime is specified and etime is not specified in the backward direction, rtime is defaulted to 000000.

When etime is specified and stime is not specified in the backward direction, stime is defaulted to 235959.

When stime or etime is specified but neither the sdate or edate parameters are specified, sdate and edate are each defaulted to the value *today*.

The num parameter is used to control the maximum number of entries to be displayed by one command.

The dir parameter is used to control whether preceding (older) or following (newer) records are displayed. In either output format, records are displayed in time order regardless of the retrieval control of the dir parameter.

Because logging does not stop while records are displaying, old records that were displayed can be overwritten before they are accessed again.

After the date or time is changed in the system, output records can show anomalies in the date-time stamp. An example of this occurs when the time is changed back—in this case records may show that an earlier time follows a later time in the log.

When no Output Group (outgrp) is specified, no sorting based on Output Groups and no additional Alarm/UIM breakdown into Output Group categories is done for the report. The log entries will be shown only in the forward or reverse chronological ordering of the logs.

When a unique Output Group is specified, the report is separated into Alarm and UIM categories, and the entries for the specified Output Group are shown in each category.

When outgrp=all is specified, the report is separated into Alarm and UIM categories, and the available entries in each category are listed by Output Group.

The next parameter is used to display a specified number of additional log records after the previous `rtrv-log` entry at the terminal. New records that are logged after the previous `rtrv-log` command was entered will not be displayed when the `rtrv-log:next=` command is entered. The next parameter is valid only under the following conditions:

- The `rtrv-log:next=` command is entered at the same terminal from which the previous `rtrv-log` command was entered. The previous `rtrv-log` command must not include the type=all parameter.
- No other terminal has issued a `rtrv-log` command after the `rtrv-log` command entered at the terminal form which the `rtrv-log:next=` command is entered.
- The next parameter is the only parameter specified in the `rtrv-log` command.
- There are still logs present that match the conditions (except time/date/num) specified in the previous `rtrv-log` command.

When either a single snum or range of snum/enum is specified, only those Alarms or UIMs within the specified range are displayed.

When snum is specified and enum is not specified, the enum value defaults to the specified snum value.

When enum is specified, an snum value must be specified that is less than or equal to the specified enum value.

If an snum is specified within the range 1-999, its corresponding enum must be greater than or equal to the snum and also within the range of 1-999.

If an snum is specified within the range 1000-1499, its corresponding enum must be greater than or equal to the snum and also within the range of 1000-1499.

When enum is not specified and the specified snum Alarm or UIM does not exist (is not currently used in the system), a scroll area message indicates that the snum value is out of range.

If snum and enum are specified and one or both specified Alarms and/or UIMs do not exist (are not currently used in the system), the report lists all existing Alarms and/or UIMs that exist within the specified range.

The Alarm log only stores minimal information about each alarm. Only a few alarms support multiple-line formats that would be displayed when mode=full is used. The majority of alarms display the same information when either mode=full or mode=brief is used.

Output

In this example, the sequence numbers that are replaced by the dashes (----) represent the UIMs that were discarded due to the UIM thresholding feature:

```
rtrv-log:type=uim:sdate=960715:stime=220000:num=50
```

```
rlghncxa03w 04-02-16 10:15:29 EST  EAGLE 31.3.0
Card 1113; SYS REL= Rel 31.3.0; STP CLLI= ncralstp0001; Timezone= EST

**** Logged 99-07-16  01:03:09****
0001.1005    CARD 1105,B  INFO  GWS rcvd OPC that is not allowed
                 SIO=01   OPC=001-001-001  DPC=002-002-002
                 H0H1=000  AFTPC=003-003-003
                 TEST MODE
                 SR=scrb  LSN=A1234567
               Report Date: 99-07-16  Time: 01:00:01
**** Logged 99-07-16  01:03:34****
----.1004    CARD 1205,B  INFO  MTP rcvd unknown DPC
                 SIO=07   OPC=001-001-001  DPC=002-002-002
                 LSN=A1234567
               Report Date: 99-07-16  Time: 01:01:00
```

```
    **** Logged 99-07-16  01:03:55****
    0014.1019    CARD 1103    INFO  SCCP rcvd invalid UDTS msg
                     SIO=03   OPC=001-001-001  DPC=002-002-002
                     CDPA: SSN=005  TT=250
                     CGPA: SSN=000  TT=000
                     RETURN CAUSE=001
                     DATA=26 80 03 09 0e 06 09 00 fe 08 50 55
                          43 00
                     LSN=A1234567
                   Report Date: 99-07-16  Time: 01:00:05
;
```

This example shows the records in the log created after 15 July 2003 at 10 PM up to a maximum of 50 records:

`rtrv-log:sdate=030715:stime=220000:num=50`

```
    ncralstp00001 10-03-16 10:15:29 EST  EAGLE 42.0.0
    Card 1113; SYS REL= 31.3.0; STP CLLI= ncralstp00001; Timezone= EST

    ****03-07-15  22:03:09****
    3159.0013 ** CARD 1207  CCS7ITU     Card is isolated from the system
    ****03-07-15  22:03:11****
    3160.0046    TERMINAL 10            Terminal enabled
    ****03-07-16  00:23:55****
    3161.0200    SLK 1103,B             RCVRY-LKF: link available
    ****03-07-16  01:42:18****
    3162.0155  * DLK 2117,A             STPLAN Connection unavailable
    ****03-07-16  01:43:51****
    3163.0317    LSET A123456789        RCVRY-LKSTO: linkset allowed
    ****03-07-16  02:35:16****
    3164.0082  * FUSE PANEL 11xx        Alarm in fuse panel
    ****03-07-16  03:00:23****
    3165.0108 ** IMT BUS A              Major IMT fault detected
    ****03-07-16  03:37:59****
    3166.0292 *C GLS SYSTEM             GLS is not available
    ****03-07-16  07:22:06****
    3167.0313 *C DPC  021-005-000       DPC is prohibited
    ****03-07-16  09:33:17****
    3168.0348  * SEAS SYSTEM            SEAS is at minimum service
    ****03-07-16  09:34:01****
    3169.0112  * IMT SYSTEM             Major Failures detected on both
    ****03-07-16  09:35:07****
    3170.0160  * CLOCK SYSTEM           1116-S clock failed
    ****03-07-16  09:36:34****
    3171.0160  * CARD 1116 OAM          1116-S clock failed
    ****03-07-16  09:37:23****
    3172.0065  * CLOCK                  Minor holdover clock trouble detected
    ****03-07-16  09:38:12****
    3173.0308 *C SYSTEM                 Node isolated due to SLK failure
    ****03-07-16  09:39:56****
    3174.0331 *C SCCP SYSTEM            SCCP is not available
    ****03-07-16  09:40:15****
    3175.0002  * GPL SYSTEM OAM         Card is not running approved GP
    ****03-07-16  09:41:34****
    3176.0153 *C SLAN SYSTEM            STPLAN not available
    ****03-07-16  09:42:45****
    3177.0060  * CDT 9                  Minor customer trouble detected

    ****03-07-16  09:45:29****
    3180.0321  * XLIST                  X-LIST occupancy threshold Exceeded
    ****03-07-16  09:48:48****
```

```
    3181.0175  * SECURITY 1114          LOGBUFROVL-SECULOG – upload required
    ****03-07-16  10:23:47****
    0259.0084 ** DSM 1101,B              IP Connection Unavailable
                 Failed Channels:  Prov  Dnld  TCP  UDP
    ****03-07-16  10:25:41****
    0069.0084 ** STC 1105,B              IP Connection Unavailable
                 ERROR STATUS: DHCP Lease. Physical Link.
;

    UAM Report terminated - end of log reached.
    END OF ALARM LOG REPORT.
;
```

This example shows the records in the log created after 15 July 2003 at 10 PM for Alarm (UAM) 160:

```
rtrv-log:sdate=030715:stime=220000:num=50:snum=160
```

```
    ncralstp00001 03-07-16 10:15:29 EST  EAGLE 31.3.0
    Card 1113; SYS REL= 31.3.0; STP CLLI= ncralstp00001; Timezone= EST

    ****03-07-16  09:35:07****
    3170.0160  * CLOCK SYSTEM           1116-S clock failed
    ****03-07-16  09:36:34****
    3171.0160  * CARD 1116 OAM          1116-S clock failed
;

    UAM Report terminated - end of log reached.
    END OF LOG REPORT.
;
```

This example shows the records in the log created after 15 July 2003 at 10 PM that include Alarms (UAMs) 106 - 350:

```
rtrv-log:sdate=030715:stime=220000:num=50:snum=106:enum=350
```

```
    ncralstp00001 10-03-16 10:15:29 EST  EAGLE 42.0.0
    Card 1113; SYS REL= 31.3.0; STP CLLI= ncralstp00001; Timezone= EST

    ****03-07-16  00:23:55****
    3161.0200    SLK 1103,B            RCVRY-LKF: link available
    ****03-07-16  01:42:18****
    3162.0155  * DLK 2117,A            STPLAN Exceededn unavailable
    ****03-07-16  01:43:51****
    3163.0317    LSET A123456789       RCVRY-LKSTO: linkset allowed
    ****03-07-16  03:00:23****
    3165.0108 ** IMT BUS A             Major IMT fault detected
    ****03-07-16  03:37:59****
    3166.0292 *C GLS SYSTEM            GLS is not available
    ****03-07-16  07:22:06****
    3167.0313 *C DPC  021-005-000      DPC is prohibited
    ****03-07-16  09:33:17****
    3168.0348  * SEAS SYSTEM           SEAS is at minimum service
    ****03-07-16  09:34:01****
    3169.0112  * IMT SYSTEM            Major Failures detected on both
    ****03-07-16  09:35:07****
    3170.0160  * CLOCK SYSTEM          1116-S clock failed
    ****03-07-16  09:36:34****
    3171.0160  * CARD 1116 OAM         1116-S clock failed
    ****03-07-16  09:38:12****
    3173.0308 *C SYSTEM                Node isolated due to SLK failure
```

```
    ****03-07-16  09:39:56****
    3174.0331 *C SCCP SYSTEM           SCCP is not available
    ****03-07-16  09:41:34****
    3176.0153 *C SLAN SYSTEM           STPLAN not available
    ****03-07-16  09:45:29****
    3180.0321  * XLIST                 X-LIST occupancy threshold Exceeded
    ****03-07-16  09:48:48****
    3181.0175  * SECURITY 1114         LOGBUFROVL-SECULOG - upload required
;

    UAM Report terminated - end of log reached.
    END OF LOG REPORT.
;
```

This example shows the records in the log created after 15 July 2003 at 10 PM for Alarms (UAMs) and UIMs in the SLAN Output Group:

```
rtrv-log:sdate=030715:stime=220000:num=50:outgrp=slan:type=all
```

```
    ncralstp00001 03-07-16 10:15:29 EST  EAGLE 31.3.0
    Card 1113; SYS REL= 31.3.0; STP CLLI= ncralstp00001; Timezone= EST

    Alarm Output Group - SLAN
    ****03-07-16  09:41:34****
    3176.0153 *C SLAN SYSTEM           STPLAN not available

    UIM Output Group - SLAN
    **** Logged 03-07-16  01:03:09****
    0001.1005    CARD 1105,B    INFO  GWS rcvd OPC that is not allowed
                 SIO=01   OPC=001-001-001  DPC=002-002-002
                 H0H1=000  AFTPC=003-003-003
                 TEST MODE
                 SR=scrb  LSN=A1234567
                 Report Date: 03-07-16  Time: 01:00:01

;
    Report terminated - end of log reached.
    END OF LOG REPORT.
;
```

This example shows the records in the log in the backward direction that were created between 12 June 2003 at 4:48:27 PM and 11 June 2003 at 10:00:45 PM for Alarms (UAMs):

```
rtrv-log:dir=bkwd:stime=044827:sdate=030612:etime=100045:edate=030611
```

```
    tekelecstp 03-06-23 04:10:12 EST  EAGLE 31.3.0
    Card 1115; SYS REL= 31.3.0. STP CLLI=   tekelecstp; Timezone= EST

    Report Initiated   - extended processing time required

    ****03-06-12  04:48:27****
    5001.0009    CARD 1115 EOAM          MASP became active
    ****03-06-11  13:38:55****
    5003.0002  * GPL SYSTEM BPHMUX       Card is not running approved GPL
    ****03-06-11  13:38:55****
    5002.0002  * GPL SYSTEM BPDCM        Card is not running approved GPL
    ****03-06-11  13:36:04****
    5001.0009    CARD 1115 EOAM          MASP became active
    ****03-06-11  12:15:29****
    5001.0009    CARD 1115 EOAM          MASP became active
```

```
    ****03-06-11  11:19:51****
    5001.0009    CARD 1115 EOAM          MASP became active
    ****03-06-11  10:00:46****
    5019.0109    IMT SYSTEM              All IMT System level alarms cleared
    ****03-06-11  10:00:45****
    5018.0106    IMT BUS B               IMT Bus alarm cleared
    ****03-06-11  10:00:45****
    5017.0106    IMT BUS A               IMT Bus alarm cleared
    ****03-06-11  10:00:45****
    5016.0014    CARD 1107 SS7ANSI       Card is present
                 ASSY SN:  10200301518
    ****03-06-11  10:00:45****
    5015.0111 ** IMT SYSTEM              Failure on both IMT A and IMT B
    UAM Report terminated - 11 records displayed
    END OF LOG REPORT.
;
```

This example shows all the records in the log in the backward direction (UAMs and UIMs):

`rtrv-log:type=all`

```
    tekelecstp 06-01-06 09:16:20 EST  EAGLE 35.0.0
    Card 1113; SYS REL= 35.0.0; STP CLLI=   tekelecstp; Timezone= ****

    ****06-01-06  09:06:49****
    0002.0009    CARD 1113 EOAM          MASP became active
    ****06-01-06  09:11:16****
    0004.0143  * CARD 1113 EOAM          System release GPL(s) not approved
    ****06-01-06  09:13:54****
    0005.0048  * TERMINAL    4           Terminal failed
    ****06-01-06  09:13:59****
    0006.0046    TERMINAL    2           Terminal enabled
    UAM Report terminated - end of log reached
;

    tekelecstp 06-01-06 09:16:22 **** EST  EAGLE 35.0.0
    Card 1113; SYS REL= 35.0.0; STP CLLI=   tekelecstp; Timezone= ****

    ****Logged  06-01-06  09:10:43****
    0003.1083    SYSTEM        INFO    REPT COND: system alive
                 Report Date:06-01-06  Time:09:10:43
    ****Logged  06-01-06  09:15:43****
    0007.1083    SYSTEM        INFO    REPT COND: system alive
                 Report Date:06-01-06  Time:09:15:43
    UIM Report terminated - end of log reached
    END OF LOG REPORT.
;
```

This example shows the log records in the backward direction that include Alarms (UAMs) 937 and 938 for the RTD System:

`rtrv-log:dir=bkwd:num=10`

```
    stdcfg1b 13-06-23 00:05:42 WET  EAGLE 35.6.0
    Card 1113; SYS REL= 35.6.0; STP CLLI=     stdcfg1b; Timezone= WET

    ****13-06-23  00:03:42****
    0936.0542    RTD SYSTEM              MSU cksum error threshold cleared
    ****13-06-22  23:15:12****
    0915.0541 *C RTD SYSTEM              MSU cksum error threshold exceeded
```

```
    ****13-06-21  21:50:24****
    0144.0542    RTD SYSTEM             MSU cksum error threshold cleared
    ****13-06-21  21:48:47****
    0142.0541 *C RTD SYSTEM             MSU cksum error threshold exceeded
    ****13-06-21  21:32:03****
    0138.0096    CARD 1101 SS7ML        Card has been reloaded
    ****13-06-21  21:31:40****
    0137.0002  * GPL SYSTEM SS7ML       Card is not running approved GPL
    ****13-06-21  21:31:28****
    0136.0109    IMT SYSTEM             All IMT System level alarms cleared
                 Outstanding IMT BUS A failure for card 1111, 1113
    ****13-06-21  21:31:28****
    0135.0106    IMT BUS B              IMT Bus alarm cleared
    UAM Report terminated - max. or num= count reached
    END OF LOG REPORT.
;
```

Related Commands

None.

rtrv-loopset

Retrieve Loop Set Command

Use this command to retrieve loopset data from the database.

Parameters

disp (optional)

Display method. The manner in which the retrieved data is displayed.

Range:

detail

Provides detailed information for a loopset entry.

list

Provides a list of loopset entries.

Default:

detail

force (optional)

Range:

yes

mode (optional)

Mode of operation. Retrieves loopset entries that have been assigned the specified mode.

Range:

notify

Generates a UIM without discarding the message.

discard

Generates a UIM and discards the message.

name (optional)

Loopset name.

Range:

ayyyyyyy

1 alphabetic and up to 7 alphanumeric characters.

num (optional)

The number of entries to be retrieved.

Range:

1 - 1000

Default:

50

Example

This example provides detailed information for the first 50 valid loopset entries in the loopset table.

```
rtrv-loopset
```

This example provides detailed information for the loopset entry RTP1.

```
rtrv-loopset:name=rtp1
```

This example provides detailed information for the first 100 valid loopset entries in the loopset table.

```
rtrv-loopset:num=100:force=yes
```

This example provides a list of the first 100 valid loopset entries in the loopset table.

```
rtrv-loopset:force=yes:num=100:disp=list
```

This example provides detailed information for the first 100 valid loopset entries set to *discard* mode in the loopset table.

```
rtrv-loopset:force=yes:num=100:mode=discard
```

This example provides a list of the first 100 valid loopset entries set to *notify* mode in the loopset table.

```
rtrv-loopset:force=yes:num=100:mode=notify:disp=list
```

Dependencies

If the value of the num parameter is greater than 50, then the force=yes parameter must be specified.

The value of the name parameter must already exist in the database.

The SCCP Loop Detection feature must be enabled before this command can be entered.

The GTT feature must be turned on before this command can be entered.

The name=none parameter cannot be specified.

If the name parameter is specified, then the disp=list parameter cannot be specified.

Output

This example displays loopset entry details for loopset RTP1:

```
rtrv-loopset:name=rtp1
```

```
    rlghncxa03w 07-02-10 08:52:38 EST  EAGLE Rel 35.6.0

    LoopSet   Mode     Point Codes
    ========================================================================
    RTP1      Discard  005-005-005       007-007-007       (ANSI)
                       003-007-003       005-007-005
                       005-004-005
;
```

This example displays details for up to 100 loopset entries:

```
rtrv-loopset:num=100:force=yes
```

```
    rlghncxa03w 07-02-10 08:59:18 EST  EAGLE Rel 35.6.0

    LoopSet   Mode     Point Codes
    ========================================================================
    Cary2     Notify   005-015-005       007-007-007       (ANSI)
           033-007-003       005-027-005

    Cary4     Notify   005-012-005       007-026-007       (ANSI)
                       033-002-003       005-008-055

    Apex3     Discard  005-017-008       007-017-009       (ANSI)
       005-014-005       005-017-005
                       033-002-043       005-038-005
       033-003-043       005-012-005

    Apex4     Discard  005-007-008       027-007-009       (ANSI)
       005-004-055       027-001-007
                       033-007-003       005-003-055

    RAL5      Notify   005-005-005       007-007-007       (ANSI)
       003-001-003       005-007-005
              003-002-003       005-008-005
       003-003-003       005-002-005

    RAL6      Notify   005-007-008       007-007-009       (ANSI)
                003-007-003

    DUNN1     Discard  005-002-055       007-051-007       (ANSI)

    RTP9      Discard  005-002-005       007-001-007       (ANSI)
       003-007-003       005-003-005
                       005-004-005

    RTP5      Discard  005-007-008       007-007-009       (ANSI)

    RTP1      Discard  005-005-005       007-007-007       (ANSI)
       003-007-003       005-007-005
```

```
       005-004-005

    RTP2      Notify   005-007-008       007-007-009       (ANSI)
;
```

This example displays the names and modes of up to 100 loopset entries:

`rtrv-loopset:force=yes:num=100:disp=list`

```
    rlghncxa03w 07-02-10 09:03:27 EST  EAGLE Rel 35.6.0

    LoopSet   Mode      ||  LoopSet   Mode       ||  LoopSet   Mode
    ============================================================================
    Cary2     Notify    ||  Cary4     Notify     ||  Apex3     Discard
    Apex4     Discard   ||  RAL5      Notify     ||  RAL6      Notify
    DUNN1     Discard   ||  RTP9      Discard    ||  RTP5      Discard
    RTP1      Discard   ||  RTP2      Notify
;
```

This example displays a list of up to 100 loopset entries that contain the mode=notify parameter:

`rtrv-loopset:force=yes:num=100:mode=notify:disp=list`

```
    rlghncxa03w 07-02-10 09:10:07 EST  EAGLE Rel 35.6.0

    LoopSet   Mode      ||  LoopSet   Mode       ||  LoopSet   Mode
    ============================================================================
    Cary2     Notify    ||  Cary4     Notify     ||  RAL5      Notify
    RAL6      Notify    ||  RTP2      Notify
;
```

Related Commands

chg-loopset, *dlt-loopset*, *ent-loopset*

rtrv-ls — Retrieve Linkset

Use this command to show the linkset information.

Parameters

apc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The prefix subfield indicates a private point code (*prefix-ni-nc-ncm*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001-005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006-255*.

The point code *000-000-000* is not a valid point code.

apc/apca/apci/apcn/apcn24/apcn16 (optional)

Adjacent point code.

apci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

apcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (*members*) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The prefix subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

apcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The prefix indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

apcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

cggtmod (optional)

Calling party GT modification indicator. This parameter displays the linksets that have the specified value of the calling party GT modification indicator.

Range:

yes

no

islsrsb (optional)

Incoming rotated signaling link selection (SLS) bit. This parameter displays the linksets with the specified rotated bit.

Range:

1 - 8

ITU linksets— *1-4*

ANSI linksets— *1-8*

Default:

Display all link sets

itutfr (optional)

ITU TFR (Transfer Restricted) procedure indicator. This parameter displays the linksets that have the specified value of the itutfr parameter.

This parameter is valid for ITU national linksets only.

Range:

on

off

Default:

Display all link sets

lsn (optional)

Linkset name

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Default:

Display all link sets

lst (optional)

Linkset type. This parameter specifies whether to display proxy links.

This parameter can be specified only when the Proxy Point Code feature is enabled.

Range:

prx

Display proxy links.

mtprse (optional)

ANSI or ITU MTP Restart equipped. This parameter specifies whether the node adjacent to the linkset is equipped with MTP Restart.

Range:

yes

equipped

no

not equipped

Default:

Display all link sets

pct (optional)

This parameter displays the linksets where the Point Code and CIC Translation has the specified status.

Range:

on

off

ppc (optional)

ANSI proxy point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

The proxy point code must be a full point code.

Synonym:

ppca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

ppc/ppca/ppci/ppcn/ppcn24/ppcn16 (optional)

Proxy Point Code.

The proxy point code must be a full point code.

ppci (optional)

ITU international proxy point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

ppcn (optional)

ITU national proxy point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The prefix subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

ppcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

ppcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

randsls (optional)

Random SLS (signaling link selection). This parameter displays linksets that have the specified value of the randsls parameter.

Range:

off

Displays all linksets where random SLS is disabled.

class0

Displays linksets where random SLS generation for Class0 SCCP traffic is enabled.

all

Displays ITU linksets where random SLS generation for Class0 and Class1 SCCP traffic is enabled and ANSI linksets where random SLS generation for Class0 and ISUP traffic is enabled.

Default:

off

slsocbit (optional)

Other CIC (Circuit Identification Code) Bit. This parameter displays the linksets that have the slsocbit parameter set to a value from 5 - 16.

Range:*

*****

Specifies all possible values (*5-16*)

Default:

Display all link sets

slsrsb (optional)

Rotated SLS (Signaling Link Selection) Bit. This parameter displays the linksets with the specified rotated bit.

Range:

1 - 4

Default:

Display all link sets

spc (optional)

ANSI secondary point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

spc/spca/spci/spcn/spcn24/spcn16 (optional)

Secondary point code.

spci (optional)

ITU international secondary point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

spcn (optional)

ITU national secondary point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

spcn24 (optional)

24-bit ITU national secondary point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

spcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Example

Display all linksets having the parameter pct=on:

```
rtrv-ls:pct=on
```

Display the attributes of all link sets:

```
rtrv-ls
```

Retrieve linkset LS1:

```
rtrv-ls:lsn=ls1
```

Retrieve all link sets with the mtprse=yes parameter:

```
rtrv-ls:mtprse=yes
```

Retrieve all link sets that use the slsocbit parameter with a value from *5 - 16*:

```
rtrv-ls:slsocbit=*
```

Display an ITU linkset to view the settings for the slsrsb or slsocbit parameters:

```
rtrv-ls:lsn=lsitu
```

Retrieve all ITU national linksets that have the itutfr parameter set to *on*:

```
rtrv-ls:itutfr=on
```

Retrieve the specified ITU national linkset and display its setting for the itutfr parameter:

```
rtrv-ls:lsn=lsitun
```

Retrieve all linksets where random SLS generation is enabled for SCCP ITU traffic and Class0 ANSI traffic:

```
rtrv-ls:randsls=class0
```

Display all proxy linksets:

```
rtrv-ls:lst=prx
```

Display all linksets using a specified proxy point code:

```
rtrv-ls:ppc=11-11-11
```

Display all linksets using a specified secondary point code:

```
rtrv-ls:spc=2-2-2
```

Display all linksets using a specified adjacent point code:

```
rtrv-ls:apc=1-1-2
```

Retrieves all linksets where calling party global title modification is requested:

```
rtrv-ls:cggtmod=yes
```

Retrieves all link sets with the ISLSRSB value 6:

```
rtrv-ls:islsrsb=6
```

Display all linksets using a specified adjacent point code:

```
rtrv-ls:apcn16=121-10-15
```

Dependencies

A PCT quantity feature must be enabled before the pct parameter can be specified.

The specified linkset must be in the database.

All optional parameters, except for the combination of the slsocbit and slsrsb parameters, can only be used individually. Any combination of 2 or more of the optional parameters, other than the specified exception, is invalid.

If the apcn parameter is specified as the Adjacent Point Code, then the format of the apcn parameter must match the format dictated by the `chg-stpopts:npcfmti` parameter.

The SLSOCB feature must be enabled before the slsocbit parameter can be specified.

The Multiple Linksets to Single Adjacent PC (MLS) feature must be turned on before the apc and spc parameters can be specified.

At least one linkset must be associated with the value of the apc parameter.

The Proxy Point Code feature must be enabled before the lst=prx parameter can be specified.

The Proxy Point Code feature must be enabled before the ppc parameter can be specified.

The value specified for the ppc parameter must be a full point code.

The value specified for the ppc parameter must already exist in the Destination table, and the prx=yes parameter must have been specified.

The value specified for the apc parameter must be a full point code.

The value specified for the spc parameter must be a full point code.

The AMGTT feature or the AMGTT CgPA Upgrade feature must be turned on before the cggtmod parameter can be specified.

The ISLSRSB feature must be enabled before the islsbr parameter can be specified.

The PPC specified must not be a private point code.

4722 E4722 Cmd Rej: PPC not supported for Private PC

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

The CLLI, TFATCABMLQ, MTPRSE, and ASL8 fields are displayed only when a specific linkset is specified. The SLSOCBIT and SLSRSB fields are displayed only when a specific linkset is specified, and the linkset must be an ITU linkset.

If the tfatcabmlq parameter database value is 0 for a linkset, then the value displayed is one-half (rounded-up) of the number of links assigned to the given linkset (or 1 if there are 2 or fewer links in the linkset).

If the tfatcabmlq parameter database value is 0, then the TFA/TCA broadcast minimum link quantity is calculated by the EAGLE to be a minimum of 1 for linksets containing 2 or fewer links, or half (rounded-up) of the number of links configured in the linkset for linksets containing more than 2 links. The calculated value is displayed in the `rtrv-ls` command output.

If the tfatcabmlq parameter value is set to a specific value greater than 0, then the EAGLE does not calculate a TFA/TCA broadcast minimum link quantity. The provisioned value is displayed in the `rtrv-ls` command output.

The EAGLE `ent-ls` command allows 10-character linkset names, but entering a linkset name through SEAS is still restricted to 8 characters. In SEAS, a specific linkset with a name greater than 8 characters (entered using the EAGLE command) cannot be retrieved by name. If an asterisk is used for the linkset name in the SEAS `vfy-ls` command, all linksets will be shown; however, the linkset names that are more than 8 characters will have only the first 8 characters shown. Therefore it may appear that there are duplicate linkset names in SEAS `vfy-ls` output, but all linkset names are actually unique.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

The value specified for the ppc parameter must be a full point code. Cluster point codes and private point codes are not supported.

The ICNIMAP and OGNIMAP fields are displayed only if the linkset name is specified in the command, the ITU Spare Point Code feature is enabled, and an ITUN or ITUI point code is associated with the linkset.

IPSG linksets have SLKTPS configured rather than IPTPS. SLKTPS configures the transactions per second for each link assigned to the IPSG linkset as opposed to IPTPS which configures the combined transactions per second for the entire IPGW linkset. For an IPSG linkset, the calculated IP TPS value (shown under the 'CONFIG' column in the report) is made up of the aggregate calculated SLKTPS of all of the provisioned links in the linkset. Non-IPSG hosted links are not counted in the calculation as they do not support SLKTPS.

If a linkset contains a mixture of IPLIMx M2PA and IPSG-M2PA links, then the command does not report any data below the TPS header or raise alarms.

Output

The Multiple Linksets to Single Adjacent PC (MLS) feature must be turned on before information can be retrieved for an adjacent point code or a secondary point code.

The Proxy Point Code feature must be enabled before information can be retrieved by proxy point code or proxy linkset.

This example shows all linksets where random SLS generation is enabled for Class0 and Class1 SCCP traffic for ITU linksets and Class0 and ISUP traffic for ANSI linksets:

```
rtrv-ls:randsls=all
```

```
    tekelecstp 10-03-06 19:36:00 EST  EAGLE 42.0.0

                                  L3T SLT             GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsa111        001-001-001   none 1   1   no  B   0    off off off no    off


                                  L3T SLT             GWS GWS GWS
    LSN           APCI   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsi111        1-001-1       none 1   2   no  B   0    off off off no    off


    Link set table is (2 of 1024) 1% full.

;
```

This example shows detailed linkset configuration for linkset LSI111. Random SLS generation is enabled for Class0 and Class1 SCCP traffic:

```
rtrv-ls:lsn=lsi111
```

```
    tekelecstp 08-02-26 12:49:06 EST  EAGLE 38.0.0

                                  L3T SLT             GWS GWS GWS
    LSN           APCI   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsi111        1-000-1       none 1   2   no  A   0    off off off no    off


               SPCI          CLLI         TFATCABMLQ MTPRSE ASL8
            ---------------- -----------  1          ---    ---

            SLSRSB RANDSLS ITUTFR
            1      all     off

            IPSG  IPGWAPC  GTTMODE           CGGTMOD
            no    no       CdPA               no

    Link set table is (1 of 1024) 1% full.

;
```

This example shows detailed linkset configuration for linkset LS4. Random SLS generation is enabled for SCCP Class0 traffic, and the SLSOCB and the ITUDUPPC features are turned on:

```
rtrv-ls:lsn=ls4
```

```
    tekelecstp 08-02-05 06:44:15 EST  EAGLE5 38.0.0

                                  L3T SLT             GWS GWS GWS
    LSN          APCI   (SS7)  SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    ls4          1-007-4       none  1   2   no  A   4    off off off ---   off
```

```
               SPCA          CLLI         TFATCABMLQ MTPRSE ASL8 GSMSCRN
              --------------- -----------  2          ---    ---  off

              SLSOCBIT SLSRSB RANDSLS MULTGC ITUTFR
              none     1      class0  no     off

              IPSG  IPGWAPC  GTTMODE           CGGTMOD
              no    no       CdPA               no

                                    L2T               PCR  PCR   E1   E1
              LOC  LINK SLC TYPE    SET  BPS    ECM   N1   N2    LOC  PORT TS
              1202 B     0  LIME1   11   56000  BASIC ---  ----- 1202 1    5
              1202 B1    1  LIME1   11   56000  BASIC ---  ----- 1202 1    6
              1202 B2    2  LIME1   11   56000  BASIC ---  ----- 1202 1    7
              1202 B3    3  LIME1   11   56000  BASIC ---  ----- 1202 1    8

    Link set table is (167 of 1024) 16% full.

;
```

This example displays the attributes of all linksets.

Note: If the mtprse or slsocibit parameters are specified, then the output appears the same as the `rtrv-ls` command's output. The command filters the output to display only the linksets that have the specified value of the parameter.

`rtrv-ls`

```
    tekelecstp 08-02-26 20:11:43 EST  EAGLE 38.0.0

                                    L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsa1111       011-001-001   none 1   1   no  A   1    off off off no    off

    lsa1112       011-001-002   none 1   1   no  A   1    off off off no    off

    lsa1121       011-002-001   none 1   1   no  A   1    off off off no    off

    lsa1122       011-002-002   none 1   1   no  A   1    off off off no    off

    lsa111111     011-011-011   none 1   1   no  A   1    off off off no    off


                                    L3T SLT              GWS GWS GWS
    LSN           APCI   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsi311        3-001-1       none 1   2   no  A   0    off off off ---   off


                                 L3T SLT              GWS GWS GWS
    LSN           APCN24 (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsn24         024-024-024   none 1   2   no  A   0    off off off ---   off


    Link set table is (7 of 1024) 1% full.

;
```

In this example:

- The TFATCABMLQ and MTPRSE fields are displayed only when a linkset is specified. The FE-PC of this link set has no CLLI; therefore the CLLI is shown as "----------".
- The SLSOCBIT and SLSRSB fields are not displayed for ANSI linksets.
- RANDSLS information is displayed for an ANSI linkset.

`rtrv-ls:lsn=ls1`

```
    tekelecstp 10-03-06 01:33:29 EST  EAGLE 42.0.0

                                  L3T SLT              GWS GWS GWS
    LSN          APCA   (SS7)  SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    ls1          003-003-003   gws1  1   1   no  A   15   on  on  on  yes   off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
                ---------------- -----------  7          no     no

                RANDSLS
                off

                IPSG  IPGWAPC  GTTMODE           CGGTMOD
                no    no       CdPA               no

                                          LP         ATM
                LOC  LINK SLC TYPE        SET BPS    TSEL     VCI   VPI  LL
                1102 A    2   LIMATM      1   1.544M EXTERNAL 5     0    0

                LOC  LINK SLC TYPE        IPLIML2
                1201 A    5   IPLIM       M2PA

                                          L2T              PCR  PCR   E1   E1
                LOC  LINK SLC TYPE        SET  BPS    ECM   N1   N2    LOC  PORT TS

                1205 A    6   LIME1       1    56000  BASIC ---  ----- 1205 1    1

                                          L2T              PCR  PCR   T1   T1
                LOC  LINK SLC TYPE        SET  BPS    ECM   N1   N2    LOC  PORT TS

                1206 A    10  LIMT1       1    56000  BASIC ---  ----- 1206 1    1

    Link set table is (7 of 1024) 1% full.

;
```

This example shows output that includes an E1 card.

`rtrv-ls:lsn=ls1`

```
    tekelecstp 09-12-09 00:55:45 EST  EAGLE 42.0.0

                                  L3T SLT              GWS GWS GWS
    LSN          APCA (SS7)    SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    ls1          003-003-003   none  1   1   no  A   14   off off off no    off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
                ---------------- -----------  1          no     no
```

```
              RANDSLS
              off

              IPSG  IPGWAPC  GTTMODE           CGGTMOD
              no    no       CdPA               no

                                     LP         ATM
              LOC  LINK SLC TYPE     SET BPS    TSEL     VCI   VPI  LL
              1103 A    3   LIMATM   1   1.544M EXTERNAL 5     0    0

              LOC  LINK SLC TYPE     IPLIML2
              1201 A    5   IPLIM    M2PA

                                   L2T               PCR  PCR   E1   E1
              LOC  LINK SLC TYPE   SET  BPS    ECM   N1   N2    LOC  PORT TS
              1205 A1   7   LIME1  1    56000  BASIC ---  ----- 1205 1    2

    Link set table is (7 of 1024) 1% full.

;
```

This example includes an IPLIMx to 8 Points card. The PCT feature is turned on.

`rtrv-ls:lsn=ls1`

```
    tekelecstp 10-08-17 01:25:45 EST  EAGLE 43.0.0

                                  L3T SLT              GWS GWS GWS
    LSN          APCA   (SS7)  SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    ls1          003-003-003   gws1  1   1   no  A   15   on  on  on  yes   off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
              ---------------- -----------  1          no     no

              RANDSLS
              off

              IPSG  IPGWAPC  GTTMODE           CGGTMOD    PCT
              no    no       CdPA               no         off

                                     LP         ATM
              LOC  PORT SLC TYPE     SET BPS    TSEL     VCI   VPI  LL
              1102 A     2  LIMATM   1   1.544M LINE     5     0    0

              LOC  PORT SLC TYPE     IPLIML2
              1201 A     5  IPLIM    M2PA

                                     L2T               PCR  PCR   E1   E1
              LOC  PORT SLC TYPE     SET  BPS    ECM   N1   N2    LOC  PORT TS

              1205 A     6  LIME1    1    56000  BASIC ---  ----- 1205 1    1

                                     L2T               PCR  PCR   T1   T1
              LOC  PORT SLC TYPE     SET  BPS    ECM   N1   N2    LOC  PORT TS

              1206 A     10 LIMT1    1    56000  BASIC ---  ----- 1206 1    1

    Link set table is (7 of 1024) 1% full.

;
```

This example includes adjacent spare point codes (s-), adjacent private point codes (p-), and adjacent private and spare point codes (ps-):

```
rtrv-ls
```

```
    tekelecstp 08-03-05 10:12:31 EST  EAGLE 38.0.0

                                    L3T SLT             GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsa1          001-001-002   none 1   1   no  A   0    off off off no    off

    lsa2        p-001-002-004   none 1   1   no  A   0    off off off no    off

    lsa3        p-001-002-005   none 1   1   no  A   0    off off off no    off


                                    L3T SLT             GWS GWS GWS
    LSN           APCI   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsn1        s-1-002-3       none 1   2   no  A   1    off off off ---   off

    lsn2        s-2-002-2       none 1   2   no  A   1    off off off ---   off

    lsn3        s-2-100-1       none 1   2   no  A   1    off off off ---   off

    lsn4        s-2-012-1       none 1   2   no  A   1    off off off ---   off

    lsn5          2-100-1       none 1   2   no  A   1    off off off ---   off

    lsn6        s-3-134-1       none 1   2   no  A   1    off off off ---   off


                                    L3T SLT             GWS GWS GWS
    LSN           APCN   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsn410234  ps-1-1-1-2047-aa none 1   2   no  B   0    off off off ---   off

    lsn410235   p-1-1-1-0059-aa none 1   2   no  B   0    off off off ---   off

    lsn4102356 ps-1-1-1-0234-aa none 1   2   no  B   0    off off off ---   off

    Link set table is (12 of 1024) 1% full.
;
```

This example displays linksets using a specified adjacent point code. The MLS feature must be turned on before information can be retrieved for an adjacent point code:

```
rtrv-ls:apc=1-1-2
```

```
    tekelecstp 07-07-26 12:49:06 EST  EAGLE 37.5.0

    APCA = 001-001-002
                                    L3T SLT             GWS GWS GWS
    LSN           SPCA           SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsa1          002-002-002   none 1   1   no  A   0    off off off no    off

    rtp4          001-002-005   none 1   1   no  A   0    off off off no    off
```

```
dur16         002-007-042   none 1   1   no  A   0    off off off no    off

morv12        012-009-005   none 1   1   no  A   0    off off off no    off

lsa22         004-002-022   none 1   1   no  A   0    off off off no    off


Link set table is (12 of 1024) 1% full.
```

This example displays all linksets when the MLS feature is turned on. The MLS feature allows multiple linksets to have the same adjacent point code.

`rtrv-ls`

```
                                L3T SLT              GWS GWS GWS
LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
lsa1            001-001-002   none 1   1   no  A   0    off off off no    off
lsa2         p-001-002-004   none 1   1   no  A   0    off off off no    off
lsa3         p-001-002-005   none 1   1   no  A   0    off off off no    off
rtp4            001-001-002   none 1   1   no  A   0    off off off no    off
dur16           001-001-002   none 1   1   no  A   0    off off off no    off
morv12          001-001-002   none 1   1   no  A   0    off off off no    off
lsa22           001-001-002   none 1   1   no  A   0    off off off no    off

                                   L3T SLT              GWS GWS GWS
LSN           APCI   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
lsn1         s-1-002-3       none 1   2   no  A   1    off off off ---   off
lsn2           2-100-1       none 1   2   no  A   1    off off off ---   off
lsn3         s-3-134-1       none 1   2   no  A   1    off off off ---   off

                                L3T SLT              GWS GWS GWS
LSN           APCN   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
lsn410234  ps-1-1-1-2047-aa none 1   2   no  B   0    off off off ---   off
lsn410235   p-1-1-1-0059-aa none 1   2   no  B   0    off off off ---   off

Link set table is (12 of 1024) 1% full.
```

This example displays all linksets when the Proxy Point Code feature is enabled. Proxy point codes used by the linksets are displayed:

`rtrv-ls`

```
homenetwork 08-03-19 17:03:37 EST  EAGLE 38.0.0

                                L3T SLT              GWS GWS GWS
LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

x1              001-001-001   none 1   1   no  PRX 0    off off off no    off

x2              001-001-002   none 1   1   no  PRX 0    off off off no    off

x3              001-001-003   none 1   1   no  PRX 0    off off off no    off

x4              001-001-004   none 1   1   no  PRX 0    off off off no    off

x5              001-001-005   none 1   1   no  PRX 0    off off off no    off

x6              001-001-006   none 1   1   no  PRX 0    off off off no    off
```

```
    x7            001-001-007   none 1   1   no  PRX 0    off off off no    off
    x8            001-001-008   none 1   1   no  PRX 0    off off off no    off
    x9            001-001-009   none 1   1   no  PRX 0    off off off no    off
    x10           001-001-010   none 1   1   no  PRX 0    off off off no    off
    y             002-002-002   none 1   1   no  A   0    off off off no    off

    Link set table is (11 of 1024) 1% full.
;
```

This example displays linksets using a specified proxy point code:

`rtrv-ls:ppc=2-2-2`

```
    homenetwork 07-05-19 17:05:04 EST  EAGLE 37.5.0
    PPCA   =    002-002-002
                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
    x1            001-001-001   none 1   1   no  PRX 0    off off off no    off
    x2            001-001-002   none 1   1   no  PRX 0    off off off no    off
    x3            001-001-003   none 1   1   no  PRX 0    off off off no    off
    x4            001-001-004   none 1   1   no  PRX 0    off off off no    off
    x5            001-001-005   none 1   1   no  PRX 0    off off off no    off
    x6            001-001-006   none 1   1   no  PRX 0    off off off no    off
    x7            001-001-007   none 1   1   no  PRX 0    off off off no    off
    x8            001-001-008   none 1   1   no  PRX 0    off off off no    off
    x9            001-001-009   none 1   1   no  PRX 0    off off off no    off
    x10           001-001-010   none 1   1   no  PRX 0    off off off no    off

    Link set table is (11 of 1024) 1% full.
;
```

The following example displays all proxy linksets.

`rtrv-ls:lst=prx`

```
    homenetwork 08-03-19 17:05:40 EST  EAGLE 38.0.0
                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
    x1            001-001-001   none 1   1   no  PRX 0    off off off no    off
```

```
    x2            001-001-002   none 1   1   no  PRX 0    off off off no    off

    x3            001-001-003   none 1   1   no  PRX 0    off off off no    off

    x4            001-001-004   none 1   1   no  PRX 0    off off off no    off

    x5            001-001-005   none 1   1   no  PRX 0    off off off no    off

    x6            001-001-006   none 1   1   no  PRX 0    off off off no    off

    x7            001-001-007   none 1   1   no  PRX 0    off off off no    off

    x8            001-001-008   none 1   1   no  PRX 0    off off off no    off

    x9            001-001-009   none 1   1   no  PRX 0    off off off no    off

    x10           001-001-010   none 1   1   no  PRX 0    off off off no    off


    Link set table is (11 of 1024) 1% full.
;
```

This example displays information for a specified linkset when the Proxy Point Code feature is enabled:

`rtrv-ls:lsn=x1`

```
    tekelecstp 08-11-05 17:32:59 EST  EAGLE 40.0.0

                               L3T SLT                     GWS GWS GWS
     LSN          APCA   (SS7)  SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

     x1           001-001-001   none  1   1   no  PRX 0    on  on  on  yes   off


                  PPCA          CLLI         TFATCABMLQ MTPRSE ASL8
                  002-002-002   -----------  7          ---    no

              RANDSLS
              off

              IPGWAPC MATELSN    IPTPS  LSUSEALM SLKUSEALM GTTMODE
              no      ---------- ----   ---      ---       CdPA

    Link set table is (11 of 1024) 1% full.

;
```

This example displays proxy linksets using a specified adjacent point code when the MLS feature is turned on and the Proxy Point Code feature is enabled:

`rtrv-ls:apc=1-1-1`

```
    tekelecstp 07-03-05 17:32:59 EST  EAGLE 37.5.0

    APCA   =    001-001-001

                                   L3T SLT              GWS GWS GWS
    LSN           PPCA          SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    x1            002-002-002   none 1   1   no  PRX   0  off off off no    off
```

```
    Link set table is (11 of 1024) 1% full.
;
```

This example displays linksets using a specified secondary point code when the MLS feature is turned on:

`rtrv-ls:spc=2-2-2`

```
    homenetwork 07-05-19 17:05:04 EST  EAGLE 37.5.0

    SPCA   =    002-002-002

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsa1          001-001-002   none 1   1   no  A   0    off off off no    off

    lsa2        p-001-002-004   none 1   1   no  A   0    off off off no    off


    Link set table is (12 of 1024) 1% full.

;
```

This example displays information for a specific linkset when the MLS feature is turned on:

`rtrv-ls:lsn=lsa1`

```
    tekelecstp 09-12-09 01:45:48 EST  EAGLE 42.0.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsa1          001-001-002   gws1 1   1   no  A   4    on  on  on  yes   off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8

                  002-002-002   -----------  2          ---    no
               RANDSLS
               off

               IPSG  IPGWAPC  GTTMODE           CGGTMOD
               no    no       CdPA               no

                                        LP         ATM
               LOC  LINK SLC TYPE       SET BPS    TSEL     VCI   VPI  LL
               1102 A    2   LIMATM     1   1.544M EXTERNAL 5     0    0

               LOC  LINK SLC TYPE       IPLIML2
               1201 A    5   IPLIM      M2PA

                                        L2T                PCR  PCR    E1   E1
               LOC  LINK SLC TYPE       SET  BPS    ECM   N1   N2     LOC  PORT
TS
               1205 A    6   LIME1      1    56000  BASIC ---- ------ 1205 1    1
```

```
                                  L2T                PCR  PCR   T1   T1
              LOC  LINK SLC TYPE  SET  BPS    ECM    N1   N2    LOC  PORT TS

              1206 A     10 LIMT1 1    56000  BASIC  ---  ----- 1206 1    1

    Link set table is (1 of 1024) 1% full.
;
```

This example displays output for a specified linkset when calling party GT modification is requested:

`rtrv-ls:lsn=ls3`

```
    tekelecstp 09-07-09 01:55:38 EST  EAGLE 41.1.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    ls3           002-002-003   none 1   1   no  A   0    off off off no    off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8 GSMSCRN
              ---------------- -----------  1          ---    no   off

              RANDSLS
              off

              IPSG  IPGWAPC  GTTMODE           CGGTMOD
              no    no       AdvCdPA,CdPA,CgPA   yes

    Link set table is (1 of 1024) 1% full.

;
```

This example displays all of the linksets where calling party global title modification is requested.

`rtrv-ls:cggtmod=yes`

```
    tekelecstp 08-02-27 11:56:50 EST  EAGLE 38.0.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    abc14368      330-020-000   SEAS  1   1   yes a   2    off off off  no   off

    abc34589      330-030-000   scr1  1   2   no  c   3    on  on  on   yes

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    abc32261      330-044-000   scr1  1   1   yes a   1    off off off  ---  off


                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS


                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN  SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
```

```
    Link set table is (114 of 1024) 12% full
;
```

This example displays output for an IPSG-M2PA linkset:

`rtrv-ls:lsn=m2pa12132`

```
    e1001501 10-04-03 16:20:43 EST  EAGLE 42.0.0

                                 L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    m2pa12132     001-213-002   none 1   1   no  A   1    off off off no    off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
               ---------------- -----------  1          no     no
               RANDSLS
               off

               IPSG    IPGWAPC  GTTMODE           CGGTMOD
               yes     no       CdPA               no

               ADAPTER    RSVDSLKTPS  MAXSLKTPS
               m2pa       1000        5000

               TPSALM     LSUSEALM    SLKUSEALM
               maxslktps  100%        80%

               LOC  LINK SLC TYPE     ANAME
               1303 A    0   IPSG     m2pa1303a

    Link set table is (20 of 1024) 2% full.

;
```

This example displays the output for an IPSG-M3UA linkset. If value of the numslk threshold parameter is provisioned to 0, and the value is recalculated as per the provisioned links within the linkset, then an indication marker "*" is printed as a superscript to the value of the corresponding parameter.

`rtrv-ls:lsn=ipsgm3ua`

```
    e1001501 10-04-03 16:20:42 EST  EAGLE 42.0.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    ipsgm3ua      008-008-004   none 1   1   no  A   3    off off off no    off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
               ---------------- -----------  ---        ---    no

               RANDSLS
               off

               IPSG  IPGWAPC  GTTMODE           CGGTMOD
               yes   no       CdPA               no

               ADAPTER    RSVDSLKTPS  MAXSLKTPS
```

```
              m3ua       100         100

              TPSALM     LSUSEALM    SLKUSEALM
              rsvdslktps 80%         80%

              RCONTEXT   ASNOTIF     NUMSLKALW  NUMSLKRSTR  NUMSLKPROH
              1234567890 yes         2*         1           1

              LOC  LINK SLC TYPE     ANAME
              1102 A2   0   IPSG     ipsgm3ua1102
              1202 A3   1   IPSG     ipsgm3ua1202
              1302 A4   2   IPSG     ipsgm3ua1302

    Link set table is (1 of 1024) 1% full.

;
```

This example displays linkset information when the ITU National and International Spare Point Code Support feature is enabled:

`rtrv-ls:lsn=lsnp1`

```
    tekelecstp 09-07-09 04:52:38 EST  EAGLE 41.1.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCI   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsnp1         1-002-1       none 1   2   no  A   3    off off off no    off


                  SPCI          CLLI         TFATCABMLQ MTPRSE ASL8
              ---------------- -----------  2          ---    ---

              SLSRSB RANDSLS ITUTFR ICNIMAP      OGNIMAP
              1      off     off    itui2ituis   ituis2itui

              IPSG  IPGWAPC  GTTMODE           CGGTMOD
              no    no       CdPA               no

                                LP         ATM                    E1ATM
              LOC  LINK SLC TYPE     SET BPS    TSEL     VCI   VPI  CRC4 SI SN

              1104 A    0   LIME1ATM 21  2.048M LINE     5     0    ON   3  0
              1105 A    1   LIME1ATM 21  2.048M LINE     5     0    ON   3  0
              1106 A    2   LIME1ATM 21  2.048M LINE     5     0    ON   3  0

    Link set table is (1 of 1024) 1% full.

;
```

This example displays output for an IPGWx linkset. It shows IPGWAPC information for a specific ANSI linkset.

`rtrv-ls:lsn=ls1315a`

```
    eagle10212 08-11-06 17:00:42 EST  EAGLE 40.0.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
```

```
    ls1315a       000-015-000   none 1   1   no  A   1    off off off no    off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
              ---------------- -----------  1          no     no

              RANDSLS
              off

              IPSG  IPGWAPC  GTTMODE           CGGTMOD
              no    yes      CdPA               no

              MATELSN    IPTPS   LSUSEALM  SLKUSEALM
              ---------- 4000    100%      80%

              LOC  LINK SLC TYPE
              1315 A    0   SS7IPGW

    Link set table is (18 of 1024) 2% full.

;
```

This example displays linkset information for an ANSI linkset when the Incoming SLS Bit Rotation feature is enabled:

`rtrv-ls:lsn=ls6`

```
    rlghncxa03w 09-04-27 11:43:04 GMT  EAGLE 41.0.0

                                   L3T SLT              GWS GWS GWS
    LSN         APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
    ls06        002-007-008   scr4 1   4   no  a   0    on  off off no    on

                SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
             ---------------- ls06clli     1          no     no

             RANDSLS
             off

             ISLSRSB RSLS8
             1       no

             IPSG  IPGWAPC  GTTMODE           CGGTMOD
             no    no       CdPA               no

    Link set table is ( 20 of 1024)  2% full

;
```

This example displays linkset information for an ITU linkset when the Incoming SLS Bit Rotation feature is enabled:

`rtrv-ls:lsn=lsi111`

```
    tekelecstp 08-10-08 10:46:00 EST  EAGLE 40.0.0

                                      L3T SLT              GWS GWS GWS
    LSN           APCI   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsi111        1-001-1       none 1   2   no  A   0    off off off no    off
```

```
               SPCI          CLLI         TFATCABMLQ MTPRSE ASL8
             --------------- -----------  1          ---    ---

             SLSOCBIT SLSRSB RANDSLS ITUTFR
             none     1      off     off

             ISLSRSB
             1

             IPSG  IPGWAPC  GTTMODE           CGGTMOD
             no    no       CdPA               no

    Link set table is (1 of 1024) 1% full.
```

This example displays the output when information for linksets with a specified ISLSRB filter is requested:

`rtrv-ls:islsrsb=4`

```
    tekelecstp 08-10-21 09:46:52 EST  EAGLE 40.0.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCI   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsi616        6-001-6       none 1   2   no  B   0    off off off no    off

    lsi747        7-014-7       none 1   2   no  A   0    off off off no    off


    Link set table is (16 of 1024) 2% full.

;
```

This example displays linkset information for a specific linkset when the Flexible Linkset Optional Based Routing feature is turned on:

`rtrv-ls:lsn=ls8`

```
    tekelecstp 10-08-17 12:29:09 EST  EAGLE 43.0.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    ls8           001-001-001   none 1   1   no  A   0    off off off no    off


               SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
             --------------- -----------  1          ---    no

             RANDSLS
             off

             IPSG  IPGWAPC  GTTMODE           CGGTMOD    PCT
             no    no       FLCdPA,FLCgPA      no       off

    Link set table is (2 of 1024) 1% full.

;
```

This example displays linkset information for an ANSI linkset when the Incoming SLS Bit Rotation feature is enabled and the islsrsb=6 parameter was specified:

```
rtrv-ls:lsn=lsa
```

```
    tekelecstp 09-03-24 15:05:51 EST  EAGLE 41.0.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsa           001-001-001   none 1   1   no  A   0    off off off no    off


                  SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
               ---------------- -----------  1          ---    no

               RANDSLS
               off

               ISLSRSB RSLS8
               6       yes

               IPSG  IPGWAPC  GTTMODE           CGGTMOD
               no    no       CdPA               no

    Link set table is (1 of 1024) 1% full.
```

This example displays linkset information for an ITU link set, when the MPC, ITUDUPPC, Spare Point Code, SLSOCB and ISLSBR features are enabled:

```
rtrv-ls:lsn=lsi
```

```
    tekelecstp 09-03-04 11:07:38 EST  EAGLE 41.0.0

                                  L3T SLT              GWS GWS GWS
    LSN           APCN   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    lsi           01001-aa      none 1   2   no  A   0    off off off no    off


                  SPCN          CLLI         TFATCABMLQ MTPRSE ASL8

               ---------------- -----------  1          ---    ---
               SLSOCBIT SLSRSB RANDSLS MULTGC ITUTFR ICNIMAP      OGNIMAP
               none     1      off     no     off    none         none

               ISLSRSB
               1

               IPSG  IPGWAPC  GTTMODE           CGGTMOD
               no    no       CdPA               no

    Link set table is (4 of 1024) 1% full.

;
```

This example displays linkset information when all linksets are in SLT Reflect mode:

`rtrv-ls`

```
tekelecstp 11-10-13 15:55:42 EST  EAGLE 44.0.0

                                 L3T SLT              GWS GWS GWS
LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

ls1           001-001-001   none 1   RFT no  A   0    off off off no    off

ls2           002-002-002   none 1   RFT no  A   0    off off off no    off

ls3           003-003-003   none 1   RFT no  A   0    off off off no    off


Link set table is (3 of 1024) 1% full.
```

This example displays linkset information for a specified linkset in SLT Reflect mode:

`rtrv-ls:lsn=ls1`

```
tekelecstp 11-10-13 15:56:22 EST  EAGLE 44.0.0

                                 L3T SLT              GWS GWS GWS
LSN           APCA   (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

ls1           001-001-001   none 1   RFT no  A   0    off off off no    off


              SPCA          CLLI         TFATCABMLQ MTPRSE ASL8
            ---------------- -----------  1          ---    no

            RANDSLS
            off

            IPSG  IPGWAPC  GTTMODE           CGGTMOD   PCT
            no    no       CdPA               no      off


Link set table is (3 of 1024) 1% full.
```

Example with J1 links.

`rtrv-ls:lsn=ls2`

```
tekelecstp 13-12-19 19:41:52 EST  46.0.0-65.3.0
rtrv-ls:lsn=ls2
Command entered at terminal #4.

                                 L3T SLT              GWS GWS GWS
LSN           APCN16 (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

ls2           001-02-03     none 1   RFT no  A   3    off off off no    off


              SPCN16        CLLI         TFATCABMLQ MTPRSE ASL8
            ---------------- -----------  2          ---    ---

            SLSRSB RANDSLS ITUTFR
            1      off     off

            IPSG  IPGWAPC  GTTMODE           CGGTMOD   PCT
```

```
                no    no       SysDflt             no      off

                                      L2T               PCR  PCR    J1
                LOC  LINK SLC TYPE     SET  BPS    ECM   N1   N2     PORT TS
                1102 A    11  LIMT1    11   64000  BASIC ---- ------ 1    11
                1102 A1   10  LIMT1    11   64000  BASIC ---- ------ 1    11
                1102 A2   5   LIMT1    11   64000  BASIC ---- ------ 1    20

    Link set table is (2 of 1024) 1% full.

;
```

This example displays a specific linkset details.

`rtrv-ls:lsn=ls123`

```
    tekelecstp 13-09-26 16:25:02 EST  45.1.0-64.75.0
    rtrv-ls:lsn=ls123
    Command entered at terminal #4.

                                     L3T SLT              GWS GWS GWS
    LSN           APCN16 (SS7)  SCRN SET SET BEI LST LNKS ACT MES DIS SLSCI NIS

    ls123         001-02-03     none 1   RFT no  A   1    off off off no    off


                  SPCN16        CLLI         TFATCABMLQ MTPRSE ASL8
                ---------------- -----------  1          ---    ---

                SLSRSB RANDSLS ITUTFR
                1      off     off

                IPSG  IPGWAPC  GTTMODE           CGGTMOD   PCT
                yes   no       SysDflt             no      off

                ADAPTER    RSVDSLKTPS  MAXSLKTPS
                m2pa       100         100

                TPSALM     LSUSEALM    SLKUSEALM
                rsvdslktps 100%        80%

                LOC  LINK SLC TYPE     ANAME
                1101 A    0   IPSG     assoc1101


    Link set table is (2 of 1024) 1% full.
;
Command Executed
```

Legend

- **LSN**—Name of the linkset. When CHINA appears after the LSN heading, each linkset that is listed under the heading was defined with the apcntype=itunchina parameter specified.
- **APC/APCI/APCN/APCN24/APCN16**—Adjacent DPC of the linkset
- **SPC/SPCI/SPCN/SPCN24/SPCN16**—Secondary PC of the linkset
- **SCRN**—Screen set assigned to the linkset
- **L3TSET**—Level 3 timer set value assigned to the linkset

- **SLTSET**—SLTM record associated with the linkset
- **BEI**—Broadcast exception indicator. Indicates whether TFP (transfer prohibited) messages can be broadcast on the linkset.
- **LST**—Type of links in the linkset (access links, bridge links, etc.)
- **LNKS**—Number of links in the linkset
- **GWSA**—Shows whether gateway screening is used on the specified linkset
- **GWSM**—Shows whether the display of messages generated for each screened message is turned on or off
- **GWSD**—Shows whether the gateway screening message discard function is turned on or off
- **SLSCI**—Shows whether the 5-to-8-bit SLS conversion feature is to be used to select links for outgoing messages directed to the given linkset
- **NIS**—Shows whether the Network Indicator Spare option is on or off for the specified linkset
- **CLLI**—The far end Common Language Location Identifier (CLLI)
- **TFATCABMLQ**—the minimum number of links in the given linkset (or in the combined linkset in which it resides) that must be available to user-part messages traffic in order for the STP to consider the first-choice ordered routes using that linkset as allowed rather than restricted
- **MTPRSE**—Shows whether the adjacent node is equipped with MTP restart
- **ASL8**—Shows whether the adjacent node is sending MSUs with 8-bit SLSs
- **MULTGC**—Shows whether multiple group codes are allowed
- **IPGWAPC**—Shows whether the adjacent point code is an IP Gateway adjacent point code
- **MATELSN**—Name of the mate IP Gateway linkset
- **IPTPS**—Provisioned or default TPS for the specified IPGWx linkset. This value is a user-defined or default portion of the total enabled system IP Signaling TPS.
- **LSUSEALM**—Percent of the linkset TPS (IPTPS) at which an alarm is generated to indicate that the actual linkset TPS is approaching the configured IPTPS value for the linkset
- **SLKUSEALM**—Percent of the link "fair share" TPS at which an alarm is generated to indicate that the actual link TPS is approaching the link's "fair share" of its linkset's configured IPTPS. The "fair share" of the linkset TPS for a link is the configured linkset TPS divided by the number of in-service links in the linkset.
- **LOC**—Location of the card containing the signaling links that make up the linkset
- **PORT**—Port on the card containing the signaling link
- **SLSOCBIT**—Setting of the Other CIC (Circuit Identification Code) Bit
- **SLSRSB**—Setting of the Rotated SLS (Signaling Link Selection) Bit
- **ISLSRSB**—setting of the Incoming Rotated SLS (Signaling Link Selection) Bit
- **GSMSCRN—**Shows whether the GSM MAP screening indicator is turned on or off
- **ITUTFR**—Shows whether the ITU TFR procedure indicator is turned on or off
- **L2TSET**—Level 2 timer set value associated with the signaling link
- **SLC**—Signaling link code of the signaling link
- **TYPE**—Type of card
- **BPS**—Transmission rate for the link in bits per second
- **E1PORT**—E1 port with the E1 interface that services the link
- **E1LOC**—Card location of the E1 card with the E1 interface that services the link
- **T1PORT**—T1 port with the T1 interface that services the link
- **T1LOC**—Card location of the T1 card with the T1 interface that services the link
- **TS**—Timeslot assigned to the link that is serviced by the E1 or T1 interface
- **E1ATMCRC4**—Indicator of whether CRC4 multi-frame structure is enabled or disabled

- **E1ATMSI**—Value of two Spare International bits of NFAS data
- **E1ATMSN**—Value of five Spare National bits of NFAS data
- **RANDSLS**—The setting of linkset for Random SLS generation
- **ADAPTER**—Shows whether the linkset is IPSG M2PA or IPSG M3UA linkset
- **RSVDSLKTPS**—Guaranteed SLKTPS for an IPSG linkset
- **MAXSLKTPS**—Maximum SLKTPS for an IPSG linkset
- **RCONTEXT**—Routing context ID of IPSG M3UA linkset
- **ASNOTIF**—Shows whether AS notifications will be generated for IPSG M3UA linkset
- **ANAME**—Association name configured for signaling link of IPSG linkset
- **SLKTPS**—Provisioned TPS for concerned signaling link of the specified IPSG linkset
- **CGGTMOD—**Shows whether calling party global title modification indicator is yes or no for the linkset
- **PPC/PPCI/PPCN/PPCN24/PPCN16**—The proxy point code of the linkset
- **NUMSLKALW**—Threshold value for IPSG M3UA linkset used to transition to Allowed state from Restricted or Prohibited state
- **NUMSLKRSTR**—Threshold value for IPSG M3UA linkset used to transition to Restricted state from Allowed state
- **NUMSLKPROH**—Threshold value for IPSG M3UA linkset used to transition to Prohibited state from Restricted or Allowed state
- **ICNIMAP**—Incoming NI Map
- **OGNIMAP**—Outgoing NI Map
- **RSLS8**—Shows whether the incoming SLS is rotated by 8 bits
- **PCT**—Shows whether the Point Code & CIC Translation (PCT) feature is applied to messages coming in or going out on links of a particular link set
- **RFT**—Shows whether the linkset is in SLT Reflect mode
- **J1PORT**---J1 port with the J1 interface that services the link

Related Commands

chg-ls, *chg-lsopts*, *dlt-ls*, *ent-ls*, *rept-stat-ls*

rtrv-m2pa-tset

Retrieve M2PA Timer Set

Use this command to retrieve either one M2PA timer set or all M2PA timer sets.

Parameters

tset (optional)

The name of the M2PA timer set to be retrieved.

Range:

1 - 20

ver (optional)

The M2PA version supported by the association.

Range:

d6

rfc

Example

```
rtrv-m2pa-tset
```

```
rtrv-m2pa-tset:tset=1
```

Dependencies

None

Notes

If a timer set is not specified in the command, all timer sets are retrieved.

Output

```
rtrv-m2pa-tset:tset=1:ver=d6
```

```
    rlghncxa03w 06-01-18 08:16:14 EST  EAGLE 34.3.0
    M2PA Draft 6 Timers (in msec, T16 in microsec)

    TSET T1     T2     T3    T4N   T4E  T5    T6   T7    T16    T17  T18
    1    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000

;
```

```
rtrv-m2pa-tset:tset=1:ver=rfc
```

```
    rlghncxa03w 06-01-18 08:16:14 EST  EAGLE 34.3.0
    M2PA RFC Timers (in msec, T16 in microsec)

    TSET T1     T2     T3    T4N   T4E  T5    T6   T7    T16     T17  T18
    1    300000 20000  2000  30000 500  100   3000 1200  200000  250  1000

;
```

```
rtrv-m2pa-tset:tset=1
```

```
    rlghncxa03w 06-01-18 08:16:14 EST  EAGLE 34.3.0
    M2PA Draft 6 Timers (in msec, T16 in microsec)

    TSET T1     T2     T3    T4N   T4E  T5    T6   T7    T16    T17  T18
    1    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000

    M2PA RFC Timers (in msec, T16 in microsec)

    TSET T1     T2     T3    T4N   T4E  T5    T6   T7    T16    T17  T18
```

```
    1    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000

;
```

rtrv-m2pa-tset:ver=d6

```
    rlghncxa03w 06-01-18 08:16:14 EST  EAGLE 34.3.0
    M2PA Draft 6 Timers (in msec, T16 in microsec)

    TSET T1     T2     T3    T4N   T4E  T5    T6   T7    T16    T17  T18
    1    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    2    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    3    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    4    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    5    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    6    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    7    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    8    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    9    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    10   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    11   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    12   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    13   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    14   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    15   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    16   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    17   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    18   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    19   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    20   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000

;
```

rtrv-m2pa-tset:ver=rfc

```
    rlghncxa03w 06-01-18 08:16:14 EST  EAGLE 34.3.0
    M2PA RFC Timers (in msec, T16 in microsec)

    TSET T1     T2     T3    T4N   T4E  T5    T6   T7    T16    T17  T18
    1    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    2    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    3    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    4    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    5    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    6    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    7    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    8    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    9    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    10   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    11   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    12   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    13   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    14   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    15   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    16   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    17   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    18   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    19   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    20   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
```

```
;
```

rtrv-m2pa-tset

```
    rlghncxa03w 06-01-18 08:16:14 EST  EAGLE 34.3.0
    M2PA Draft 6 Timers (in msec)

    TSET T1     T2     T3    T4N   T4E  T5    T6   T7    T16    T17  T18
    1    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    2    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    3    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    4    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    5    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    6    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    7    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    8    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    9    10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    10   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    11   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    12   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    13   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    14   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    15   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    16   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    17   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    18   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    19   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000
    20   10000  ------ 10000 10000 500  1000  3000 1200  200000 250  1000

    M2PA RFC Timers (in msec, T16 in microsec)

    TSET T1     T2     T3    T4N   T4E  T5    T6   T7    T16    T17  T18
    1    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    2    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    3    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    4    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    5    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    6    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    7    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    8    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    9    300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    10   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    11   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    12   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    13   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    14   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    15   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    16   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    17   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    18   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    19   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000
    20   300000 20000  2000  30000 500  100   3000 1200  200000 250  1000

;
```

Related Commands

chg-m2pa-tset

rtrv-map

Retrieve Mate Applications

Use this command to show the mated application relationship information and Alternate RI Mate information maintained by the system. The GTT Load Sharing with Alternate Routing Indicator (GTT LS ARI) feature must be enabled to view Alternate RI Mate information. This information is used to support the routing of SCCP management SSP/SSA messages.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Note: Definitions for the feature options specified by the on parameter are located in the Notes section.

mapset (optional)

MAP set ID.

Range:

1 - 36000, dflt

dflt —Default MAP set

Default:

dflt

The default value is *dflt* only when the Flexible GTT Load Sharing feature is not enabled.

on (optional)

Enables or turns on the specified options. A comma-separated list of options that are requested to be turned on. Up to 8 options can be specified in the list.

Range:

refcnt

pc (optional)

ANSI point code in the form of *network indicator-network cluster-network cluster member (ni-nc-ncm).*

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (optional)

Point code.

pci (optional)

ITU international point code in the form of *zone-area-id*.

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code in the form of *main signaling area-sub signaling area-signaling point*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code in the form of *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

ssn (optional)

Subsystem number

Range:

2 - 255

Default:

All subsystem numbers and their mates are shown for the given point code.

Example

```
rtrv-map
rtrv-map:pc=2-2-2
rtrv-map:pca=1-1-4:ssn=15
rtrv-map:mapset=2
rtrv-map:mapset=dflt:pcn=s-10155-ab
rtrv-map:pcn=1001:on=refcnt
rtrv-map:pcn16=1-2-3
```

Dependencies

The value of the pc/pca/pci/pcn/pcn24/pcn16 parameter must already exist in the MAP entity set. All subsystem numbers for the specified PC and mate are displayed.

The remote PC must be specified as a full PC.

Asterisk entries are not allowed.

If an SSN is specified, the PC/SSN pair must exist in the MAP table. The PC/SSN entry and its mate are shown.

The DPC of the primary subsystem must be a full PC.

If the SSN is specified, then the remote PC must be specified.

The Flexible GTT Load Sharing feature must be enabled before the mapset parameter can be specified.

The specified MAP set must exist in the database.

If the PC and MAP set are specified, and the SSN is not specified, then at least one entry for that PC/MAP set must exist in the MAP table.

If the PC, SSN, and MAP set are specified, then they must already be provisioned in the MAP table.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See the `canc-cmd` command for more information.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (*s-*).

If the Flexible GTT Load Sharing feature is enabled, then the retrieved MAP examples contain the MAPSET ID for each MAP set. MAP sets that were configured before the Flexible GTT Load Sharing feature was enabled are shown as MAPSET ID=DFLT after the Flexible GTT Load Sharing feature is enabled.

The pc/pca/pci/pcn/pcn24/pcn16, ssn, and mapset parameters can be used to screen the output of all MAP sets. These parameters allow retrieval of only those MAP sets that contain the desired parameters.

A MAP set can contain one primary entry and up to 31 mated entries.

If no parameters are entered, all defined mated point codes (up to 36,000) are shown.

If the Flexible Final GTT Loadsharing feature is not enabled, then the number of entries in the MAP table is based on unique point codes. Point codes that are duplicated in MRN sets using different SSNs are counted only once in the number of entries.

If the Flexible Final GTT Loadsharing feature is enabled, then the number of entries in the MAP table is based on unique point code and SSN combinations. Point codes that are duplicated in MRN sets are counted in the number of entries).

When the GTT LS ARI feature is enabled, the Alternate RI Mate, identified by the MRNSET and MRNPC fields, is displayed for all MAP Sets. When the GTT LS ARI feature is not enabled, the Alternate RI Mate is not displayed, and the display is unchanged.

on option

refcnt—displays the MAPSET, MAPSET/PC, and MAPSET/PC/SSN reference counts

Output

All subsystem numbers for the specified point code and its mates are shown.

The NET column is shown only when a MAP set contains mixed network point code types. Addition of the NET column realigns all remaining columns in the output. The re-alignment is constant even if the NET column is not shown.

If an MRC value is preceded with an "*", then the MRC value is not applicable for the current multiplicity mode (MULT field). The MRC value is only valid when MULT is *DOM*.

If an SRM value is preceded with an "*", then the SRM value is not applicable for the current multiplicity mode (MULT field). The SRM value is only valid when MULT is *DOM*or *COM*.

If an SSN REFCNT value is preceded with an "*", then the entry can be deleted if any other entry with the same point code exists in that MAP set.

This example retrieves an ANSI MAP set for a specified point code:

`rtrv-map:pc=2-2-2`

```
flexgttoff 09-08-09 12:05:28 EST  EAGLE 41.1.0
   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   002-002-002                   10 10  SHR *Y  *Y  -------- OFF
                  002-002-003    20 10  SHR *Y  *Y  -------- OFF

MAP table is (8 of 1024) 1% full.
```

This example includes MAP sets with a Concerned Signaling Point Code group name and spare point codes, (s-). The ITUDUPPC (ITU National Duplicate Point Code) feature is on, and the Flexible ITU National Point Code STP option is set to *4*.

`rtrv-map`

```
spareduppc 09-08-09 12:05:28 EST  EAGLE 41.1.0
   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   002-002-002                   10 10  SHR *Y  *Y  -------- OFF
                  002-002-003    20 10  SHR *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   003-101-001                   10 30  DOM YES YES abcdefg  OFF
                  003-001-000    10 40  DOM YES YES abcdefg  OFF

   PCI       NET  Mate PC       SSN RC MULT SRM MRC GRP NAME SSO
   1-109-0                       90 10  COM NO  *N  -------- OFF
             I    1-110-0        90 20  COM NO  *N  -------- OFF
             N    00-01-7-3-aa   90 20  COM NO  *N  -------- OFF
             N    01-03-2-2-aa   90 30  COM NO  *N  -------- OFF

   PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
   03-00-1-2-aa                  55 10  DOM NO  NO  -------- OFF
                s-09-14-5-3-ab   45 99  DOM NO  NO  -------- OFF

   PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
   12-00-7-1-aa                   5 10  DOM NO  NO  -------- OFF
                  12-00-7-3-aa    5 20  DOM NO  NO  -------- OFF

   PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO
 s-1-128-6                      55 10  SOL *N  *N  -------- OFF

MAP table is (13 of 1024) 1% full.
```

This example includes a Flexible ITU National Point Code STP option of 3-8-3-0:

rtrv-map

```
sareduppc 09-08-09 12:05:28 EST  EAGLE 41.1.0
   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-001                   10 25  SHR *Y  *Y  -------- OFF
                  001-001-004    20 25  SHR *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-002                   55  5  DOM YES YES -------- OFF
                  001-001-002    15 15  DOM YES YES -------- ON
                  001-001-003    25 20  DOM YES YES -------- ON
                  001-001-002    40 35  DOM YES YES -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-003                   30 10  COM NO  *N  -------- OFF
                  001-010-010    30 30  COM NO  *N  -------- OFF
                  001-001-004    15 30  COM YES *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-004                    5 25  SHR *Y  *Y  -------- OFF
                  001-001-001    50 25  SHR *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-004                   25 10  DOM YES YES -------- OFF
                  001-001-004    10 15  DOM YES YES -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-102-001                  110  5  SHR *Y  *Y  -------- OFF
                  002-001-000   110  5  SHR *Y  *Y  -------- OFF
                  003-001-000   110  5  SHR *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   002-001-000                   10 20  SOL *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   002-002-002                   10 10  SHR *Y  *Y  -------- OFF
                  002-002-003    20 10  SHR *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   003-101-001                   10 30  DOM YES YES abcdefg  OFF
                  003-001-000    10 40  DOM YES YES abcdefg  OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   007-101-001                  254 10  SOL *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   007-101-001                  255 10  COM YES *Y  -------- OFF
                  007-001-000   251 10  COM YES *Y  -------- OFF
                  007-001-000   249 10  COM YES *Y  -------- OFF
                  007-001-000   253 15  COM YES *Y  -------- OFF

   PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO
   1-101-0                       10 10  SHR *N  *N  -------- OFF
                  1-102-0        10 10  SHR *N  *N  -------- OFF
                  1-103-0        30 10  SHR *N  *N  -------- OFF
                  1-104-0        40 10  SHR *N  *N  -------- OFF
                  1-105-0        50 10  SHR *N  *N  -------- OFF
                  1-106-0        60 10  SHR *N  *N  -------- OFF
                  1-107-0        70 10  SHR *N  *N  -------- OFF
                  1-108-0        80 10  SHR *N  *N  -------- OFF

   PCI       NET  Mate PC       SSN RC MULT SRM MRC GRP NAME SSO
   1-109-0                       90 10  COM NO  *N  -------- OFF
```

```
               I    1-110-0        90 20  COM NO  *N  -------- OFF
               N    0-015-3-aa     90 20  COM NO  *N  -------- OFF
               N    0-154-2-aa     90 30  COM NO  *N  -------- OFF

   PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
   1-129-2-aa                    55 10  DOM NO  NO  -------- OFF
                 s-4-245-3-ab    45 99  DOM NO  NO  -------- OFF

   PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
   6-007-1-aa                     5 10  DOM NO  NO  -------- OFF
                  6-007-3-aa      5 20  DOM NO  NO  -------- OFF

   PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO
 s-1-128-6                      55 10  SOL *N  *N  -------- OFF

MAP table is (30 of 1024) 3% full.
```

This example retrieves all MAP sets containing a specified ANSI point code:

`rtrv-map:pca=1-1-4`

```
spareduppc 09-08-09 12:05:28 EST  EAGLE 41.1.0
   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-004                    5 25  SHR *Y  *Y  -------- OFF
                  001-001-001    50 25  SHR *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
                  001-001-004    10 15  DOM YES YES -------- OFF
   001-001-004                   25 10  DOM YES YES -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
                  001-001-004    15 30  COM YES *Y  -------- OFF
   001-001-003                   30 10  COM NO  *N  -------- OFF
                  001-010-010    30 30  COM NO  *N  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
                  001-001-004    20 25  SHR *Y  *Y  -------- OFF
   001-001-001                   10 25  SHR *Y  *Y  -------- OFF

   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-004                   25 10  DOM YES YES -------- OFF
                  001-001-004    10 15  DOM YES YES -------- OFF

MAP table is (30 of 1024) 3% full.
```

This example retrieves a unique ANSI point code and SSN combination:

`rtrv-map:pca=1-1-4:ssn=15`

```
spareduppc 09-08-09 12:05:28 EST  EAGLE 41.1.0
   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
                  001-001-004    15 30  COM YES *Y  -------- OFF
   001-001-003                   30 10  COM NO  *N  -------- OFF
                  001-010-010    30 30  COM NO  *N  -------- OFF

MAP table is (30 of 1024) 3% full.
```

This example shows output when the Flexible Final GTT Loadsharing feature is enabled:

```
rtrv-map:mapset=2
```

```
flexgtton 08-12-09 12:05:28 EST  EAGLE 40.1.0

   MAPSET ID=2
   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-002                   50  5  DOM YES YES -------- OFF
                  001-001-002    10 15  DOM YES YES -------- ON
                  001-001-003    20 20  DOM YES YES -------- ON
                  001-001-002    40 35  DOM YES YES -------- OFF

MAP table is (49 of 36000) 1% full.
```

```
rtrv-map:mapset=dflt:pcn=s-10155-ab
```

```
flexgtton 08-12-10 12:01:04 EST  EAGLE 40.1.0

   MAPSET ID=DFLT
   PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
   03082-aa                      55 10  DOM NO  NO  -------- OFF
                s-10155-ab       45 99  DOM NO  NO  -------- OFF

MAP table is (49 of 36000) 1% full.
```

This example shows output when the Weighted GTT Loadsharing feature is enabled, and the Flexible Final GTT Loadsharing feature is not enabled:

```
rtrv-map:pci=1-110-0
```

```
wgtonflxoff 09-08-10 12:03:44 EST  EAGLE 41.1.0
   PCI       NET  Mate PC       SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

   1-110-0                       90 20  COM NO  *N  -------- OFF 10  20  60

             I    1-109-0        90 20  COM NO  *N  -------- OFF 20  40  60

             N    00123          90 20  COM NO  *N  -------- OFF 20  40  60

             N    01234          90 30  COM NO  *N  -------- OFF 30 100  60


MAP table is (14 of 1024) 1% full.
```

This example shows a Flexible ITU National Point Code STP option of 3-8-3-0. T he Weighted GTT Loadsharing and Flexible Final GTT Loadsharing features are enabled:

```
rtrv-map:pcn=6-7-1
```

```
npcfmti3830 08-12-10 12:03:44 EST  EAGLE 40.1.0

   MAPSET ID=DFLT
   PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

   6-007-1                        5 10  DOM NO  NO  -------- OFF -- --- ---

                  6-007-3         5 20  DOM NO  NO  -------- OFF -- --- ---
```

```
MAP table is (19 of 36000) 1% full.
```

This example shows a PCN24 point code. The Weighted GTT Loadsharing and Flexible Final GTT Loadsharing features are not enabled.

`rtrv-map`

```
wgttgflxoff 09-08-10 15:00:37 EST  EAGLE 41.1.0
   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
   001-001-001                   10 10  SHR *Y  *Y  -------- ON
                  001-001-002    20 10  SHR *Y  *Y  -------- OFF

   PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO
   1-101-0                       10 10  SHR *N  *N  -------- OFF
                  1-102-0        10 10  SHR *N  *N  -------- OFF

   PCN24          Mate PCN24    SSN RC MULT SRM MRC GRP NAME SSO
   000-000-001                    5 30  SHR *N  *N  -------- OFF
                  000-001-002     5 30  SHR *N  *N  -------- OFF


MAP table is (6 of 1024) 1% full.
```

This example shows weighted MAP sets:

`rtrv-map`

```
wgtonflxoff 09-08-08 15:00:37 EST  EAGLE 41.1.0
   PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

   001-001-001                   10 10  SHR *Y  *Y  -------- ON  20  67  50

                  001-001-002    20 10  SHR *Y  *Y  -------- OFF 10  33  50

   PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

   1-101-0                       10 10  SHR *N  *N  -------- OFF 10  33   1

                  1-102-0        10 10  SHR *N  *N  -------- OFF 20  67   1

   PCN24          Mate PCN24    SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

   000-000-001                    5 30  SHR *N  *N  -------- OFF 50  91  80

                  000-001-002     5 30  SHR *N  *N  -------- OFF  5   9  80


MAP table is (6 of 1024) 1% full.
```

This example shows output when the Flexible Final GTT Loadsharing feature is enabled:

`rtrv-map:pcn24=0-1-2`

```
wgtonflxoff 09-08-10 15:00:37 EST  EAGLE 41.1.0

   MAPSET ID=DFLT
   PCN24          Mate PCN24    SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR
```

```
       000-000-001                   5 30  SHR *N  *N  -------- OFF 50  91  80

                      000-001-002     5 30  SHR *N  *N  -------- OFF  5   9  80


    MAP table is (6 of 36000) 1% full.
```

This example shows output when the Flexible GTT Load Sharing and GTT LS ARI features are enabled and the Weighted GTT Load Sharing feature is turned off:

`rtrv-map`

```
    tekelecstp 09-08-22 13:36:31 EST  EAGLE 41.1.0
       MAPSET ID=DFLT  MRNSET ID=----  MRNPC=-----------
       PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO
       1-101-1                       11 10  SHR *N  *N  itugrp   OFF
                      1-101-2        12 10  SHR *N  *N  itugrp   OFF

       MAPSET ID=1      MRNSET ID=----  MRNPC=-----------
       PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
     s-02001                         21 10  SHR *N  *N  -------- OFF
                    s-02002          22 10  SHR *N  *N  -------- OFF

    MAP table is (4 of 36000) 1% full.
;
```

This example shows output when the Flexible GTT Load Sharing and GTT LS ARI features are enabled, ARI Mates are provisioned, and the Weighted GTT Load Sharing feature is turned off:

`rtrv-map`

```
    tekelecstp 09-08-22 13:36:31 EST  EAGLE 41.1.0
       MAPSET ID=DFLT  MRNSET ID=DFLT  MRNPC=   001-001-004
       PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
       001-001-001                   11 10  SHR *Y  *Y  -------- OFF
                      001-001-002    12 10  SHR *Y  *Y  -------- OFF

       MAPSET ID=2      MRNSET ID=DFLT  MRNPC=   001-001-003
       PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO
       001-001-005                   11 20  SHR *Y  *Y  -------- OFF
                      001-001-006    10 20  SHR *Y  *Y  -------- OFF

       MAPSET ID=DFLT  MRNSET ID=----  MRNPC=-----------
       PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO
       1-101-1                       11 10  SHR *N  *N  itugrp   OFF
                      1-101-2        12 10  SHR *N  *N  itugrp   OFF

       MAPSET ID=5      MRNSET ID=DFLT  MRNPC=   1-101-3
       PCI       NET  Mate PC       SSN RC MULT SRM MRC GRP NAME SSO
       1-101-1                       11 10  SHR *N  *N  itugrp   OFF
                 I  s-2-202-1        12 10  SHR *N  *N  -------- OFF
                 N    01002          12 10  SHR *N  *N  -------- OFF

       MAPSET ID=3      MRNSET ID=1     MRNPC=   01003
       PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
       01001                         11 10  SHR *N  *N  -------- OFF
                      01002          12 10  SHR *N  *N  -------- OFF

       MAPSET ID=4      MRNSET ID=2     MRNPC= s-2-202-3
       PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO
```

```
     s-2-202-1                      21 10  SHR *N  *N  -------- OFF
                   s-2-202-2        22 10  SHR *N  *N  -------- OFF

       MAPSET ID=1      MRNSET ID=----  MRNPC=-----------
       PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
     s-02001                         21 10  SHR *N  *N  -------- OFF
                   s-02002           22 10  SHR *N  *N  -------- OFF

    MAP table is (15 of 36000) 1% full.
;
```

This example shows output for a specific point code. The Flexible GTT Load Sharing and GTT LS ARI features are enabled, and the Weighted GTT Load Sharing feature is turned off.

`rtrv-map:pcn=1001`

```
    eaglestp 09-08-22 18:41:14 EST  EAGLE 41.1.0

       MAPSET ID=3      MRNSET ID=1     MRNPC=   01003
       PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
       01001                         11 10  SHR *N  *N  -------- OFF
                      01002          12 10  SHR *N  *N  -------- OFF

    MAP table is (15 of 36000) 1% full.
;
```

This example shows output for a specific point code and subsystem number. The Flexible GTT Load Sharing and GTT LS ARI features are enabled. The Weighted GTT Load Sharing feature is turned off.

`rtrv-map:pcn=1002:ssn=12`

```
    eaglestp 09-08-12 18:41:20 EST  EAGLE 41.1.0

       MAPSET ID=3      MRNSET ID=1     MRNPC=   01003
       PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO
       01001                         11 10  SHR *N  *N  -------- OFF
                      01002          12 10  SHR *N  *N  -------- OFF

       MAPSET ID=5      MRNSET ID=DFLT  MRNPC=   1-101-3
       PCN       NET  Mate PC        SSN RC MULT SRM MRC GRP NAME SSO
       1-101-1                       11 10  SHR *N  *N itugrp   OFF
                 I  s-2-202-1        12 10  SHR *N  *N  -------- OFF
                 N    01002          12 10  SHR *N  *N  -------- OFF

    MAP table is (15 of 36000) 1% full.
;
```

This example shows output when the Flexible GTT Load Sharing and GTT LS ARI features are enabled, and the Weighted GTT Load Sharing feature is turned on:

`rtrv-map`

```
    eaglestp 09-08-12 18:43:29 EST  EAGLE 41.1.0
       MAPSET ID=DFLT  MRNSET ID=DFLT  MRNPC=   001-001-004
       PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

       001-001-001                    11 10  SHR *Y  *Y  -------- OFF -- --- ---
```

```
                    001-001-002    12 10  SHR *Y  *Y  -------- OFF -- --- ---

      MAPSET ID=2      MRNSET ID=DFLT  MRNPC=   001-001-003
      PCA            Mate PCA      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

      001-001-005                   11 20  SHR *Y  *Y  -------- OFF 20  67  50

                    001-001-006    10 20  SHR *Y  *Y  -------- OFF 10  33  50

      MAPSET ID=DFLT  MRNSET ID=----  MRNPC=-----------
      PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

      1-101-1                       11 10  SHR *N  *N  itugrp   OFF -- --- ---

                    1-101-2        12 10  SHR *N  *N  itugrp   OFF -- --- ---

      MAPSET ID=5      MRNSET ID=DFLT  MRNPC=   1-101-3
      PCI       NET  Mate PC       SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

      1-101-1                       11 10  SHR *N  *N  itugrp   OFF 30  33   1

                I  s-2-202-1        12 10  SHR *N  *N  -------- OFF 30  33   1

                N    01002          12 10  SHR *N  *N  -------- OFF 30  33   1

      MAPSET ID=3      MRNSET ID=1     MRNPC=   01003
      PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

      01001                         11 10  SHR *N  *N  -------- OFF 40  67   1

                    01002          12 10  SHR *N  *N  -------- OFF 20  33   1

      MAPSET ID=4      MRNSET ID=2     MRNPC= s-2-202-3
      PCI            Mate PCI      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

    s-2-202-1                       21 10  SHR *N  *N  -------- OFF -- --- ---

                   s-2-202-2        22 10  SHR *N  *N  -------- OFF -- --- ---

      MAPSET ID=1      MRNSET ID=----  MRNPC=-----------
      PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

    s-02001                         21 10  SHR *N  *N  -------- OFF -- --- ---

                   s-02002          22 10  SHR *N  *N  -------- OFF -- --- ---

    MAP table is (15 of 36000) 1% full.
;
```

This example shows output for a specific point code. The Flexible GTT Load Sharing and GTT LS ARI features are enabled, and the Weighted GTT Load Sharing feature is turned on.

`rtrv-map:pcn=1001`

```
    eaglestp 09-08-12 18:43:34 EST  EAGLE 41.1.0
```

```
       MAPSET ID=3      MRNSET ID=1     MRNPC=   01003
       PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

       01001                         11 10  SHR *N  *N  -------- OFF 40  67   1

                      01002          12 10  SHR *N  *N  -------- OFF 20  33   1


    MAP table is (15 of 36000) 1% full.
;
```

This example shows output for a specific point code and subsystem number. The Flexible GTT Load Sharing and GTT LS ARI features are enabled, and the Weighted GTT Load Sharing feature is turned on.

`rtrv-map:pcn=1002:ssn=12`

```
    eaglestp 09-08-12 18:43:39 EST  EAGLE 41.1.0
       MAPSET ID=3      MRNSET ID=1     MRNPC=   01003
       PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

       01001                         11 10  SHR *N  *N  -------- OFF 40  67   1

                      01002          12 10  SHR *N  *N  -------- OFF 20  33   1


       MAPSET ID=5      MRNSET ID=DFLT  MRNPC=   1-101-3
       PCN       NET  Mate PC       SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

       1-101-1                       11 10  SHR *N  *N  itugrp   OFF 30  33   1

                 I  s-2-202-1        12 10  SHR *N  *N  -------- OFF 30  33   1

                 N    01002          12 10  SHR *N  *N  -------- OFF 30  33   1


    MAP table is (15 of 36000) 1% full.
;
```

This example shows output for a specific point code. The GTT LS ARI feature is enabled, the Weighted GTT Load Sharing feature is turned on, and on=refcnt is specified.

`rtrv-map:pcn=1001:on=refcnt`

```
    eaglestp 11-03-17 16:23:34 EST  EAGLE 44.0.0

       MAPSET ID=3      MRNSET ID=1     MRNPC=   01003
       MAPSET REFCNT=1
       PCN            Mate PCN      SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

       01001                         11 10  SHR *N  *N  -------- OFF 40  67   1

       MAPSETPCSSN REFCNT=2       MAPSETPC REFCNT=1
                      01002          12 10  SHR *N  *N  -------- OFF 20  33   1

       MAPSETPCSSN REFCNT=0       MAPSETPC REFCNT=*1

    MAP table is (15 of 36000) 1% full.

;
```

Output for 16 bit PC map entry.

```
rtrv-map:pcn16=1-2-3
```

```
    tekelecstp 13-07-02 16:13:30 EST  45.0.0-64.69.0
    rtrv-map:pcn16=1-2-3
    Command entered at terminal #4.

       MAPSET ID=DFLT
       PCN16          Mate PCN16    SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR

       001-02-03                     10 10  SOL *N  *N  -------- OFF -- --- ---


    MAP table is (2 of 36000) 1% full.

;
```

Legend

- **MAPSET ID**—MAP set number or DFLT when numbered MAP sets are allowed
- **PCA/PCI/PCN/PCN24/PCN16**—Point code of the SCP where the primary application resides
- **NET**—Mate network type of the point code when an ITU MAP set contains both ITU-I and ITU-N point codes. The field can show I if the MATE PC is an ITU-I point code or N if the MATE PC is an ITU-N point code.
- **MATE PC/PCA/PCI/PCN/PCN24/PCN16**—Point code of the SCP where the mate application resides
- **SSN**—Applications subsystem number
- **RC**—Relative cost of the point code/subsystem
- **MULT**—Multiplicity mode SOL (Solitary), DOM (Dominant), SHR (Shared), or COM (Combined - Shared and Dominant) Load sharing. See the "Notes" section in the `ent-map` command description for an explanation of multiplicity modes.
- **SRM**—Specifies whether subsystem routing messages are transmitted is on (YES), off (NO), not applicable (*Y) but would be YES if applicable, or not applicable (*N) but would be NO if applicable. See the "Notes" section in the command description for SRM non applicable Load sharing modes.
- **MRC**—Specifies whether message routing under congestion is on (YES), off (NO), not applicable (*Y) but would be YES if applicable, or not applicable (*N) but would be NO if applicable. See the "Notes" section in the rtrv-map command for *MRC* non applicable Load sharing modes.
- **GRP NAME**—Name of a group of point codes (broadcast list group name) to be notified of the subsystem status
- **SSO**—Subsystem Status Option. Subsystem status (ON=prohibited or OFF=allowed) for PC/SSN MAP entries.
- **WT**—Weight assigned to the PC
- **%WT**—Relative percentage, according to weight, of an in-service PC within an RC group
- **THR**—Service threshold. If the relative percentage, according to weight, of in-service PCs within an RC group falls below the in-service threshold, that RC group is considered out-of-service and traffic is routed to the next lowest RC group.
- **MRNSET**—Alternate RI Mate MRN Set ID
- **MRNPC**—Alternate RI Mate point code

- **MAPSET REFCNT**—Count of GTT Translation table entries with XLAT=NONE that refer to the corresponding MAP set
- **MAPSETPCSSN REFCNT**—Count of entries from MRN, GSM MAP Screening, GSM MAP Opcode, GTT Translation and GTT Action tables that refer a MAP entry with a MAPSET/PC/SSN combination
- **MAPSETPC REFCNT**—Count of entries from MRN, GTT Translation, GSM MAP Screening, GSM MAP Opcode and Prepaid SMS Options tables that refer a MAP entry with a MAPSET/PC combination

Related Commands

chg-map, *dlt-map*, *ent-map*

rtrv-meas-sched — Retrieve Measurements Schedule

Use this command to retrieve the list of measurement reports currently scheduled to be dumped to the UI, and the collection settings for OAM based measurements.

This command provides no information on Measurements Platform (MCP) scheduled FTP reports or on the status of MCP measurements (see `rtrv-measopts`).

Refer to the *Measurements Manual* for specific details on measurement reports.

Parameters

This command has no parameters.

Example

```
rtrv-meas-sched
```

Dependencies

None

Notes

None

Output

Output with measurement collection on.

```
rtrv-meas-sched
```

```
rlghncxa03w 04-02-27 07:19:51 EST  EAGLE 31.3.0
COLLECT        = on
GTWYLSFLTR     = both
```

```
    --------------------
    SYSTOT-STP     = on
    SYSTOT-TT      = off
    SYSTOT-STPLAN  = off
    COMP-LNKSET    = on
    COMP-LINK      = on
    GTWY-STP       = on
    GTWY-LNKSET    = on
    MTCD-STP       = on
    MTCD-LINK      = on
    MTCD-STPLAN    = on
    MTCD-LNKSET    = on
;
```

Output with measurement collection off. The parentheses () indicate that a setting is not in effect because collection is turned off.

`rtrv-meas-sched`

```
    rlghncxa03w 04-02-27 07:19:51 EST  EAGLE 31.3.0
    COLLECT        = off
    GTWYLSFLTR     = (both)
    --------------------
    SYSTOT-STP     = (off)
    SYSTOT-TT      = (off)
    SYSTOT-STPLAN  = (off)
    COMP-LNKSET    = (off)
    COMP-LINK      = (off)
    GTWY-STP       = (off)
    GTWY-LNKSET    = (off)
    MTCD-STP       = (on)
    MTCD-LINK      = (on)
    MTCD-STPLAN    = (on)
    MTCD-LNKSET    = (on)
;
```

Legend

- **COLLECT**—Shows whether measurement collection is on or off.
- **GTWYLSFLTR**—Shows the setting that filters the linksets included in the GTWY report. The settings are as follows:
- *both*—Only gateway linksets are included in the report to the terminal and SEAS.
- *stp*—Only gateway linksets are included in the report to the terminal. All defined linksets are included in the report to SEAS.
- *seas*—All defined linksets are included in the report to the terminal. Only gateway linksets are included in the report to SEAS.
- *none*—All defined linksets are included in the report to the terminal and SEAS.
- **SYSTOT-STP**—System total–STP measurement collection is on or off.
- **SYSTOT-TT**—System total–translation type measurement collection is on or off.
- **SYSTOT-STPLAN**—System total–STP LAN measurement collection is on or off.
- **COMP-LNKSET**—Component–linkset measurement collection is on or off.
- **COMP-LINK**—Component-link measurement collection is on or off.
- **GTWY-STP**—Gateway administration–STP measurement report is on or off.
- **GTWY-LNKSET**—Gateway administration–LNKSET measurement report is on or off.

- **MTCD-STP**—Maintenance daily–STP measurement collection is on or off.
- **MTCD-LINK**—Maintenance daily–link measurement collection is on or off.
- **MTCD-STPLAN**—Maintenance daily–STP LAN measurement collection is on or off.
- **MTCD-LNKSET**—Maintenance daily–LNKSET measurement report is on or off.

Related Commands

chg-meas, *rept-meas*, *rtrv-measopts*

rtrv-measopts

Retrieve Measurement Options

Use this command show the status of:

- All FTP scheduled measurements reports
- the Measurements Platform collection function (PLATFORMENABLE setting)
- the 15 Minute Measurements collection function (COLLECT15MIN setting)
- the CLLI-based report file name option (CLLIBASEDNAME setting)
- the Integrated Measurements collection function (OAMHCMEAS setting)
- the unchannelized link label function (UNCHLINKLABEL setting)

Parameters

This command has no parameters.

Example

`rtrv-measopts`

Dependencies

This command cannot be entered while in upgrade mode.

Notes

None

Output

`rtrv-measopts`

```
e1061001 12-01-13 00:03:37 EST  EAGLE5 45.0.0
PLATFORMENABLE   = off
COLLECT15MIN     = off
CLLIBASEDNAME    = off
OAMHCMEAS        = on
UNCHLINKLABEL    = on
---------------------
SYSTOTSTP        = off
```

```
    SYSTOTTT          = off
    SYSTOTSTPLAN      = off
    SYSTOTIDPR        = off
    SYSTOTSIP         = off
    COMPLINK          = off
    COMPLNKSET        = on
    COMPSCTPASOC      = off
    COMPSCTPCARD      = off
    COMPUA            = off
    GTWYSTP           = off
    GTWYLNKSET        = off
    GTWYORIGNI        = off
    GTWYORIGNINC      = off
    GTWYLSORIGNI      = off
    GTWYLSDESTNI      = off
    GTWYLSONISMT      = off
    NMSTP             = off
    NMLINK            = off
    NMLNKSET          = on
    AVLLINK           = off
    AVLSTPLAN         = off
    AVLDLINK          = off

;
```

Legend

- **PLATFORMENABLE**—status of the Measurements Collection function
- **COLLECT15MIN**—status of the 15 Minute Measurements collection function
- **OAMHCMEAS**—Indicates the status of the Integrated Measurements collection function on an E5-OAM card
- **UNCHLINKLABEL**—status of the unchannelized link label for high-speed MTP2 links
- **CLLIBASEDNAME**—indicates whether the CLLI-based file name option is turned on or off
- **SYSTOTSTP**—System Total measurements report for the entire STP
- **SYSTOTTT**—System Total report for Translation Type measurements
- **SYSTOTSTPLAN**—System Total report STP LAN measurements
- **SYSTOTIDPR**—System Total measurements report for the entire IDPR Measurements
- **SYSTOTSIP**— System Total measurements report for the entire SIP Measurements
- **COMPLINK**—Component measurements report for links
- **COMPLNKSET**—Component measurements report for link sets
- **COMPSCTPASOC**—Component measurements report for SCTP associations
- **COMPSCTPCARD**—Component measurements report for SCTP cards
- **COMPUA**—Component measurements report for M3UA and SUA application server/association pairs
- **GTWYORIGNI**—Gateway Administration measurements report per originating network (large network uniquely identified by NI only)
- **GTWYORIGNINC**—Gateway Administration measurements report per originating network (small network identified by NI-NC)
- **GTWYLSORIGNI**—Gateway Administration measurements report per link set and originating network
- **GTWYLSDESTNI**—Gateway Administration measurements report per link set and destination network

- **GTWYLSONISMT**—Gateway Administration measurements report per link set, per originating network, per ISUP message type
- **NMLINK**—Network Management measurements report for links
- **NMLNKSET**—Network Management measurements report for link sets
- **NMSTP**—Network Management measurements report for the entire STP
- **AVLINK**—Hourly Availability report for links
- **AVLSTPLAN**—Hourly Availability report for STP LAN
- **AVLDLINK**—Daily Availability report for links

Related Commands

chg-measopts , *chg-mtc-measopts*, *rtrv-mtc-measopts*

rtrv-mrn

Retrieve Mated Relay Node

Use this command to display the Mated Relay Node application relationship information maintained by the EAGLE. This information is used to support the routing of SCCP management SSP/SSA messages.

If the Intermediate GTT Load-Sharing feature is on and the Flexible GTT Load-Sharing feature is enabled, then use this command to retrieve MRN set information.

If the GTT Load Sharing with Alternate Routing Indicator (GTT LS ARI) feature is enabled, then use this command to display Alternate RI Mate information.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

Note: Definitions for the feature options specified by the on parameter are located in the Notes section.

mrnset (optional)

MRN set ID.

Range:

1 - 3000, dflt

dflt —Default MRN set

on (optional)

Enables or turns on the specified options. A comma-separated list of options that are requested to be turned on. Up to 8 options can be specified in the list.

Range:

refcnt

pc (optional)

ANSI point code in the form of *network indicator-network cluster-network cluster member (ni-nc-ncm)*.

Synonym:

pca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

pc/pca/pci/pcn/pcn24/pcn16 (optional)

Post-GTT-translated point code.

pci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

pcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

pcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

pcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Example

```
rtrv-mrn
rtrv-mrn:pc=1-1-2
rtrv-mrn:pcn=s-1-1-1-123-aa
rtrv-mrn:pci=1-55-1:mrnset=2
rtrv-mrn:pcn=1001:mrnset=dflt:on=refcnt
rtrv-mrn:pcn16=1-2-3:mrnset=dflt
```

Dependencies

A point code that is specified in the command must already exist in the MRN table.

The mrnset parameter can only be specified when the Flexible GTT Load-Sharing feature is enabled.

If the Flexible GTT Load Sharing feature is ON, then the PC and MRN set must be specified together.

The specified MRN set must already exist in the MRN table.

If the Flexible GTT Load Sharing feature is enabled, then the specified PC must already exist in the specified MRN set.

The Intermediate Global Title Translation Load Sharing (IGTTLS) feature must be turned on before this command can be entered.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

If any entries are provisioned in the SCCP-SERV table, then the maximum number of entries shown for the MRN table are reduced by that amount.

When the GTT LS ARI feature is enabled, the Alternate RI Mate, identified by the MAPSET, MAPPC, and MAPSSN fields, is displayed for all MRN Sets. When the GTT LS ARI feature is not enabled, the Alternate RI Mate is not displayed, and the display is unchanged.

on options

refcnt —displays the MRNSET and MRNSET/PC reference counts

Output

The NET column is shown only when an MRN set contains mixed network point code types. Addition of the NET column realigns all remaining columns in the output. The re-alignment is constant even if the NET column is not shown.

`rtrv-mrn`

```
sparedupc 08-12-13 11:35:12 EST  EAGLE 40.1.0

     PC             RC
     001-001-000     5
     001-001-001    10
     001-001-002    20
     001-001-003    30
     001-001-004    40

     PC             RC
     001-002-001    20
     001-001-007    25
     001-001-008    30
     001-003-002    30

     PCI            RC
   s-2-100-1        10
   s-2-002-1        10
   s-2-002-2        10

     PCN            RC
   s-1-1-1-0123-aa   1
   s-1-1-1-0235-aa   2
```

```
       s-1-1-1-0555-aa   3

    MRN table is (15 of 3000) 1% full.
```

```
rtrv-mrn:pc=1-1-2
```

```
    spareduppc 08-12-13 11:35:12 EST  EAGLE 40.1.0

         PC             RC
         001-001-000     5
         001-001-001    10
         001-001-002    20
         001-001-003    30
         001-001-004    40

    MRN table is (15 of 3000) 1% full.
```

```
rtrv-mrn:pci=s-2-2-1
```

```
    spareduppc 08-12-13 11:35:12 EST  EAGLE 40.1.0

         PCI            RC
       s-2-100-1        10
       s-2-002-1        10
       s-2-002-2        10

    MRN table is (15 of 3000) 1% full.
```

```
rtrv-mrn:pcn=s-1-1-1-123-aa
```

```
    spareduppc 08-12-13 11:35:12 EST  EAGLE 40.1.0

         PCN            RC
       s-1-1-1-0123-aa   1
       s-1-1-1-0235-aa   2
       s-1-1-1-0555-aa   3

    MRN table is (15 of 3000) 1% full.
```

This example shows output when the Weighted GTT Load Sharing feature is on, and weights are added to an existing MRN set:

```
rtrv-mrn:pci=s-2-2-2
```

```
    weighton 08-12-13 11:35:12 EST  EAGLE 40.1.0

         PCI            RC WT %WT THR
       s-2-002-1        10  5  17  50
       s-2-002-2        10 10  33  50
       s-2-100-1        10 15  50  50

    MRN table is (15 of 3000) 1% full.
```

This example shows output when the Flexible Final GTT Load Sharing feature is enabled, and the first new ANSI MRN set is added:

```
rtrv-mrn
```

```
gflexon 08-12-13 11:35:12 EST  EAGLE 40.1.0

   MRNSET      PC             RC WT %WT THR
   DFLT        001-001-000     5 -- --- ---
               001-001-001    10 -- --- ---
               001-001-002    20 -- --- ---
               001-001-003    30 -- --- ---
               001-001-004    40 -- --- ---

   MRNSET      PC             RC WT %WT THR
   DFLT        001-002-001    20 -- --- ---
               001-001-007    25 -- --- ---
               001-001-008    30 -- --- ---
               001-003-002    30 -- --- ---

   MRNSET      PCI            RC WT %WT THR
   DFLT      s-2-100-1        10 15  50  50
             s-2-002-1        10  5  17  50
             s-2-002-2        10 10  33  50

   MRNSET      PCN            RC WT %WT THR
   DFLT      s-1-1-1-0123-aa   1 -- --- ---
             s-1-1-1-0235-aa   2 -- --- ---
             s-1-1-1-0555-aa   3 -- --- ---

   MRNSET      PC             RC WT %WT THR
   1           001-003-001    10 -- --- ---
               001-003-002    10 -- --- ---
               001-003-003    30 -- --- ---
               001-003-004    30 -- --- ---
               001-003-006    60 -- --- ---
               001-003-007    60 -- --- ---
               001-003-008    80 -- --- ---
               001-003-009    80 -- --- ---

MRN table is (23 of 6000) 1% full.
```

This example shows output when a mixed ITU network weighted MRN set is used:

```
rtrv-mrn:pci=1-55-1:mrnset=2
```

```
gflexon 08-12-13 11:35:12 EST  EAGLE 40.1.0

   MRNSET NET  PC             RC WT %WT THR
   2      N  s-1-1-1-0235-aa  30 20  20   1
          I    1-055-1        30 20  20   1
          I  s-2-002-1        30 20  20   1
          I  s-2-002-2        30 20  20   1
          N    1-1-1-0444-bb  30 20  20   1

MRN table is (28 of 6000) 1% full.
```

This example shows output when the Flexible GTT Loadsharing and GTT LS ARI features are enabled, and the Weighted GTT Loadsharing feature is not turned on:

```
rtrv-mrn
```

```
eaglestp 08-12-22 19:03:49 EST  EAGLE 40.1.0
```

```
      MRNSET MAPSET  MAPPCN         MAPSSN      PCN            RC
      DFLT   DFLT    01003             10      01002          10
                                               01001          10

      MRNSET MAPSET  MAPPC          MAPSSN      PC             RC
      1      -----   -----------       ---      001-001-002    10
                                               001-001-001    10

      MRNSET MAPSET  MAPPCI         MAPSSN      PCI            RC
      2      1       1-101-3           10      1-101-2        10
                                               1-101-1        10

      MRNSET MAPSET  MAPPCI         MAPSSN      PCI            RC
      3      2     s-2-202-3            *    s-2-202-2        10
                                           s-2-202-1        10

      MRNSET MAPSET  MAPPCN         MAPSSN      PCN            RC
      4      DFLT  s-02003              *    s-02002          20
                                           s-02001          20

      MRNSET MAPSET  MAPPCN         MAPSSN NET  PC             RC
      5      DFLT    01004             20 I    1-101-1        10
                                          N    01001          10
                                          I  s-2-202-1        30

   MRN table is (13 of 6000) 1% full.

;
```

This example shows output when the Flexible GTT Loadsharing and GTT LS ARI features are enabled, and the Weighted GTT LS feature is turned on:

`rtrv-mrn`

```
   eaglestp 08-12-22 19:04:42 EST  EAGLE 40.1.0
      MRNSET MAPSET  MAPPCN         MAPSSN      PCN            RC WT %WT THR
      DFLT   DFLT    01003             10      01002          10  5  50   1
                                               01001          10  5  50   1

      MRNSET MAPSET  MAPPC          MAPSSN      PC             RC WT %WT THR
      1      -----   -----------       ---      001-001-002    10 20  67  20
                                               001-001-001    10 10  33  20

      MRNSET MAPSET  MAPPCI         MAPSSN      PCI            RC WT %WT THR
      2      1       1-101-3           10      1-101-2        10 40  57   1
                                               1-101-1        10 30  43   1

      MRNSET MAPSET  MAPPCI         MAPSSN      PCI            RC WT %WT THR
      3      2     s-2-202-3            *    s-2-202-2        10 50  50   1
                                           s-2-202-1        10 50  50   1

      MRNSET MAPSET  MAPPCN         MAPSSN      PCN            RC WT %WT THR
      4      DFLT  s-02003              *    s-02002          20 -- --- ---
                                           s-02001          20 -- --- ---

      MRNSET MAPSET  MAPPCN         MAPSSN NET  PC             RC WT %WT THR
      5      DFLT    01004             20 I    1-101-1        10 20  50   1
                                          N    01001          10 20  50   1
                                          I  s-2-202-1        30 20 100   1

   MRN table is (13 of 6000) 1% full.
```

```
;
```

This example shows output for a specific point code and MRN Set. The Flexible GTT Loadsharing and GTT LS ARI features are enabled, and the Weighted GTT Loadsharing feature is turned off.

```
rtrv-mrn:pcn=1001:mrnset=dflt
```

```
    eaglestp 08-12-22 19:03:53 EST  EAGLE 40.1.0

       MRNSET MAPSET  MAPPCN         MAPSSN      PCN            RC
       DFLT   DFLT    01003              10      01002          10
                                                 01001          10

    MRN table is (13 of 6000) 1% full.
;
```

This example shows output for a specific point code and MRN Set. The Flexible GTT Loadsharing and GTT LS ARI features are enabled, and the Weighted GTT Loadsharing feature is turned on.

```
rtrv-mrn:pcn=1001:mrnset=dflt
```

```
    eaglestp 08-12-22 19:04:47 EST  EAGLE 40.1.0

       MRNSET MAPSET  MAPPCN         MAPSSN      PCN            RC WT %WT THR
       DFLT   DFLT    01003              10      01002          10  5  50   1
                                                 01001          10  5  50   1

    MRN table is (13 of 6000) 1% full.
;
```

This example shows output for a specific point code and MRN set. The GTT LS ARI feature is enabled, the Weighted GTT Loadsharing feature is turned on, and on=refcnt is specified.

```
rtrv-mrn:pcn=1001:mrnset=dflt:on=refcnt
```

```
    eaglestp 11-03-17 14:24:37 EST  EAGLE 44.0.0

       MRNSET REFCNT=1
       MRNSET MAPSET  MAPPCN         MAPSSN      PCN            RC WT %WT THR
       DFLT   DFLT    01003              10      01002          10  5  50   1
       MRNSETPC REFCNT=2
                                                 01001          10  5  50   1
       MRNSETPC REFCNT=1

    MRN table is (13 of 6000) 1% full.

;
```

16 bit PC MRN entry output.

```
rtrv-mrn:pcn16=1-2-3:mrnset=dflt
```

```
    tekelecstp 13-07-02 16:18:09 EST  45.0.0-64.69.0
    rtrv-mrn:pcn16=1-2-3:mrnset=dflt
    Command entered at terminal #4.

       MRNSET      PCN16          RC WT %WT THR
```

```
      DFLT        002-02-02      10 10  25   1
                  001-02-03      10 30  75   1

   MRN table is (2 of 6000) 1% full.
```

Legend

- **MRNSET**—MRN set ID
- **NET**—Mmated network type of the point code when an ITU MRN set contains both ITU-I and ITU-N point codes. The field can show I if the PC is an ITU-I point code or N if the PC is an ITU-N point code.
- **PC/PCI/PCN/PCN24/PCN16**—Point Code
- **RC**—Relative Cost
- **WT**—PC Weight
- **%WT**—Relative percentage, according to weight, of an in-service PC within an RC group
- **THR**—Service threshold. If the relative percentage, according to weight, of in-service PCs within a RC group falls below the in-service threshold, that RC group is considered out-of-service, and traffic is routed to the next lowest RC group.
- **MAPSET**—Secondary mate MAP Set
- **MAPPCN**—Alternate RI Mate point code
- **MAPSSN**—Alternate RI Mate subsystem number
- **MRNSET REFCNT**—Count of GTA table entries with XLAT=NONE that refer to the corresponding MRN set
- **MRNSETPC REFCNT**—Count of entries from the MAP, GTT Translation, GTT Action, and Prepaid SMS Options tables that refer to the corresponding MRN entry with an MRNSET/PC combination

Related Commands

chg-mrn, *dlt-mrn*, *ent-mrn*

rtrv-mtc-measopts

Retrieve Maintenance Measurement Options

Use this command to show the enabled/disabled status of all hourly and daily scheduled maintenance measurements reports.

Parameters

This command has no parameters.

Example

```
rtrv-mtc-measopts
```

Dependencies

This command cannot be entered while in upgrade mode.

Notes

None

Output

`rtrv-mtc-measopts`

```
    tekelecstp 13-03-25 16:31:40 EST  EAGLE 45.1.0

    MTCHLNP          = off
    MTCHNP           = off
    MTCHMAP          = off
    MTCHEIR          = off
    MTCHENUM         = on
    MTCHVFLEX        = on
    MTCHATINPQ       = off
    MTCHGTTAPATH     = off
    MTCHAIQ          = off
    MTCDSTP          = off
    MTCDLINK         = off
    MTCDLNKSET       = off
    MTCDSTPLAN       = off
    MTCDLNP          = off
    MTCDNP           = off
    MTCDMAP          = off
    MTCDEIR          = off
    MTCDENUM         = on
    MTCDVFLEX        = on
    MTCDATINPQ       = off
    MTCDSCTPASOC     = off
    MTCDSCTPCARD     = off
    MTCDUA           = off
    MTCDGTTAPATH     = off
    MTCDAIQ          = off
    MTCDSIP          = off
    MTCHDEIR         = off
    MTCDDEIR         = off


;
```

Legend

- **MTCHEIR**—Maintenance Hourly (marginal) measurements report for Equipment Identity Register
- **MTCHENUM**—Maintenance Hourly measurements report for ENUM Mobile Number Portability and Tier One Address Resolution
- **MTCHVFLEX**—Maintenance Hourly (marginal) measurements report for V-Flex (Voice Mail Router)
- **MTCHATINPQ**—Maintenance Hourly (marginal) measurements report for ATINP Query
- **MTCHNP**—Maintenance Hourly (marginal) measurements report for INP, INP CRP, and G-Port
- **MTCHLNP**—Maintenance Hourly (marginal) measurements report for LNP
- **MTCHAIQ**—Maintenance Hourly (marginal) measurements report for ANSI41 AIQ
- **MTCHMAP**—Maintenance Hourly (marginal) measurements report for GSM Map Screening

- **MTCHGTTAPATH**—Maintenance Hourly (marginal) measurements report for GTT Action Per-Path.
- **MTCDEIR**—Maintenance Daily measurements report for Equipment Identity Register
- **MTCDENUM**—Maintenance Daily measurements report for ENUM Mobile Number Portability and Tier One Address Resolution
- **MTCDVFLEX**—Maintenance Daily measurements report for V-Flex (Voice Mail Router)
- **MTCDSTP**—Maintenance Daily measurements report for STP
- **MTCDLNK**—Maintenance Daily measurements report for links
- **MTCDLNKSET**—Maintenance Daily measurements report for linksets
- **MTCDSTPLAN**—Maintenance Daily measurements report for STPLAN
- **MTCDLNP**—Maintenance Daily measurements report for LNP
- **MTCDNP**—Maintenance Daily measurements report for INP/AINPQ, INP CRP, and G-Port
- **MTCDMAP**—Maintenance Daily measurements report for GSM Map Screening
- **MTCDSCTPASOC**—Maintenance Daily measurements report for SCTP associations
- **MTCDSCTPCARD**—Maintenance Daily measurements report for SCTP cards
- **MTCDUA**—Maintenance Daily measurements report for UA associations
- **MTCDGTTAPATH**—Maintenance Daily measurements report for GTT Action Per-Path.
- **MTCDAIQ**—Maintenance Daily measurements report for ANSI41 AIQ
- **MTCDSIP**— Maintenance Daily measurement report for SIP
- **MTCHDEIR**— Maintenance Hourly measurements report for S13/S13' Diameter Equipment Identity Register
- **MTCDDEIR**—Maintenance Daily measurements report for S13/S13' Diameter Equipment Identity Register

Related Commands

chg-measopts , *chg-mtc-measopts*, *chg-netopts*, *rtrv-measopts*, *rtrv-netopts*

rtrv-na — Retrieve Network Appearance

Use this command to display the configured network appearances.

Parameters

This command has no parameters.

Example

```
rtrv-na
```

Dependencies

None

Notes

None

Output

`rtrv-na`

```
    rlghncxa03w 05-01-20 09:07:58 EST  EAGLE 31.12.0
    TYPE    GC           NA
    ANSI    --            0
    ITUI    --            1
    ITUN    aa            2
    ITUN24  --            3
    ITUIS                 4
    ITUNS   bb            5
;
```

Related Commands

dlt-na, *ent-na*

rtrv-netopts

Retrieve Network Options

Use this command to retrieve the user-specified options for the IP and Fast Copy (FC) networks used by the EAGLE. This command displays the PVN IP address, PVN subnet mask, and FC Network parameters.

Parameters

This command has no parameters.

Example

`rtrv-netopts`

Dependencies

The EAGLE 5 Integrated Monitoring Support (E5IS) feature must be turned on before this command can be entered.

Notes

None

Output

`rtrv-netopts`

```
    rlghncxa03w 08-12-11 16:35:57 IST  EAGLE 40.1.0
    NETWORK OPTIONS
    ------------------
    PVN         = 170.120.50.1
    PVNMASK     = 255.255.252.0
    FCNA        = 170.21.96.0
    FCNAMASK    = 255.255.254.0
    FCNB        = 170.22.96.0
    FCNBMASK    = 255.255.254.0
;
```

Related Commands

chg-netopts

rtrv-npp-as

Retrieve NPP Action Set(s)

Use this command to display a Numbering Plan Processor (NPP) Action Set (AS) entry.

Parameters

asn (optional)

Action set name. The name of the AS.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

mode (optional)

This parameter allows the command to display Service Action optional numerical and digit string data values.

Range:

full

Example

`rtrv-npp-as`

`rtrv-npp-as:asn=asn6`

`rtrv-npp-as:mode=full`

Dependencies

None

Output

Note: The asn or mode=full parameter must be specified before FA list information is displayed in the rtrv-npp-as output.

This example displays all AS entries:

`rtrv-npp-as`

```
    tekelecstp 11-03-05 15:37:41 EMS  EAGLE 44.0.0

    ASN         CA          SA          FA          OFNAI  REFS
    ----------  ----------  ----------  ----------  -----  ----
    asn1        znx         asdlkup     asd         inc    0

    asn2        znx         grnlkup     grn         inc    0

    asn3        znx         cgpnasdrqd  zn          inc    0
                            nprls

    asn4        znx         cgpnasdrqd  grn         inc    0
                            cgpngrnrqd
                            nprelay

    asn5        ac8         rtdbtrn     sn          inc    0
                sn8         rtdbtsp     ac
                cc3         rtdbtrnsp   cc
                            cdial
    asn6        cc3         nscdpn      cc          intl   0
                ac8         nscgpn      ac
                sn8                     sn

    NPP-AS   table is (6 of 1024) 1% full.

;
```

This example displays a specific AS entry that contains TIF Number Substitution Service Actions:

`rtrv-npp-as:asn=asn6`

```
    tekelecstp 12-02-05 15:37:41 EMS  EAGLE 45.0.0

    ASN         CA          SA          FA          OFNAI  REFS
    ----------  ----------  ----------  ----------  -----  ----
    asn6        cc3         nscdpn      cc          intl   0
                ac8         nscgpn      ac
                sn8                     sn
     FANE     : none
     FANF     : none
     FARN     : none
     FASP     : none
     FASCRCD  : none
     FASCRCG  : none


    NPP-AS   table is (6 of 1024) 1% full.

;
```

```
rtrv-npp-as:mode=full
```

```
    tekelecstp 12-02-05 15:37:41 EMS  EAGLE 45.0.0

    ASN         CA          SA          SA DATA         FA        OFNAI   REFS
    ----------  ----------  ----------  ------------    --------  ------  ------

    asn6        cc3         nscdpn                      cc         intl     1
                ac8         nscgpn                      ac
                sn8                                     sn
     FANE     : none
     FANF     : none
     FARN     : none
     FASP     : none
     FASCRCD  : none
     FASCRCG  : none

    tifcgpn1    cc2         blrls       val1 =12        cc          intl   1
                dnx                     val2 =45        dn
                            blnfndrls   val1 =56
                                        val2 =78
                            grnlkup
     FANE     : none
     FANF     : none
     FARN     : none
     FASP     : none
     FASCRCD  : none
     FASCRCG  : none

    tifcgpn2    cc2         asdlkup                     cc           intl   1
                dnx                                     dn
     FANE     : none
     FANF     : none
     FARN     : none
     FASP     : none
     FASCRCD  : none
     FASCRCG  : none

     tif1     znx        selscr                         dlma         intl  1
                                                        zn
     FANE     : none
     FANF     : none
     FARN     : none
     FASP     : none
     FASCRCD  : cc, ac, rn, sn
     FASCRCG  : dlmd

    NPP-AS   table is (3 of 1024) 1% full.

;
```

This example displays full information for a specific AS entry.

```
rtrv-npp-as:mode=full:asn=idpinp1
```

```
    tekelecstp 12-02-11 15:37:41 EMS  EAGLE 45.0.0

    ASN         CA          SA          SA DATA         FA        OFNAI     REFS

    ----------  ----------  ----------  ------------    -------   -----     ----

    idpinp1     cc3         inprtg                      cc        intl      1
                ac4         cdpnnp                      ac
```

```
                sn8         asdlkup                     sn
                            grnlkup
     FANE       : cc, ac, grn, sn
     FANF       : dlma, cc, ac, sn
     FARN       : cc, ac, rn, sn
     FASP       : none
     FASCRCD    : none
     FASCRCG    : none


    NPP-AS   table is (1 of 1024) 1% full.

;
```

Legend

- **ASN**—Action Set Name
- **CA**—Conditioning Action
- **SA**—Service Action
- **SA DATA**—Service Action Data
- **FA**—Formatting Action
- **OFNAI**—Outgoing Filter Nature of Address Indicator
- **REFS**—NPP Rule References
- **FANE**—Formatting Action List when the SP and RN entities are not associated with the DN in the RTDB
- **FANF**—Formatting Action when the DN is not present in the RTDB
- **FARN**—Formatting Action List when the RN network entity is associated with the DN in the RTDB
- **FASP**—Formatting Action List when the SP network entity is associated with the DN in the RTDB
- **FASCRCD**— Formatting Action List to format ISUP CdPN digits when CdPN is Screened and SA(X)VAL is none.
- **FASCRCG**— Formatting Action List to format ISUP CgPN digits when CdPN is Screened and SA(X)VAL is none.

Related Commands

chg-npp-as, *ent-npp-as*

rtrv-npp-serv

Retrieve a NPP Service Data

Use this command to display a Numbering Plan Processor (NPP) Service Data entry.

Parameters

mode (optional)

This parameter allows the command to display NAI and delimiter values.

Range:

full

srvn (optional)

Service name. The name of the NPP Service.

Range:

nppt

NPP Test Service

idprcdpn

IDPRCDPN Service

idprcgpn

IDPRCGPN Service

tif

TIF Service

tif2

TIF2 Service

tif3

TIF3 Service

mosmsicgpn

MOSMSICGPN service

mosmsicdpn

MOSMSICDPN Service

mosmsgcgpn

MOSMSGCGPN Service

mosmsgcdpn

MOSMSGCDPN Service

iarcdpn

IARCDPN Service

iarcgpn

IARCGN Service

idprcdpn2

IDPRCDPN2 Service

idprcdpn3

IDPRCDPN3 Service

idprcdpn4

IDPRCDPN4 Service

tifcgpn

TIFCGPN Service

tifcgpn2

TIFCGPN2 Service

tifcgpn3

TIFCGPN3 Service

Example

```
rtrv-npp-serv:srvn=tif:mode=full
```

```
rtrv-npp-serv:srvn=tif
```

Dependencies

None

Output

This example displays all NPP Service table entries:

```
rtrv-npp-serv
```

```
tekelecstp 12-07-05 19:09:11 EST EAGLE 45.0.0

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
nppt        off      rtdbtrnsp   100
                     rtdbtrn     50
                     rtdbtsp     50
                     cdial       10

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
tif         off     cdial       10
                    fwdscs      5
                    crp         92
                    npnrls      91
                    nprelay     80
                    nprls       80
                    snscgpn     75
                    cgpnsvcrqd  80
                    asdlkup     90
                    grnlkup     90
                    cgpnasdrqd  90
                    cgpngrnrqd  90
                    nscdpn      80
                    nscgpn      75
                    nocgpnrls   80
                    fpfxrls     92
                    blrls       91
                    blnfndrls   91
                    selscr      91

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
tif2        off     cdial       10
                    fwdscs      5
                    crp         92
                    npnrls      91
                    nprelay     80
                    nprls       80
```

```
                    snscgpn     75
                    cgpnsvcrqd  80
                    asdlkup     90
                    grnlkup     90
                    cgpnasdrqd  90
                    cgpngrnrqd  90
                    nscdpn      80
                    nscgpn      75
                    nocgpnrls   80
                    fpfxrls     92
                    blrls       91
                    blnfndrls   91
                    selscr      91

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
tif3        off     cdial       10
                    fwdscs      5
                    crp         92
                    npnrls      91
                    nprelay     80
                    nprls       80
                    snscgpn     75
                    cgpnsvcrqd  80
                    asdlkup     90
                    grnlkup     90
                    cgpnasdrqd  90
                    cgpngrnrqd  90
                    nscdpn      80
                    nscgpn      75
                    nocgpnrls   80
                    fpfxrls     92
                    blrls       91
                    blnfndrls   91
                    selscr      91

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
idprcdpn    off     cdial       10
                    ccncchk     100
                    cdpnnp      80
                    lacck       60
                    cgpnsvcrqd  60
                    asdlkup     50
                    grnlkup     50
                    cgpnasdrqd  50
                    cgpngrnrqd  50
                    inprtg      95
                    skgtartg    50

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
idprcgpn    off     cdial       10
                    cgpnnp      80
                    asdlkup     50
                    grnlkup     50
                    blklstqry   90
                    blklstrly   90
                    cgpnrtg     70
                    inprtg      95

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
mosmsicdpn  off     cdial       10
```

```
                    cdpnnp      60
                    asdlkup     50
                    grnlkup     50
                    cgpnasdrqd  50
                    cgpngrnrqd  50
                    migrate     70

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
mosmsicgpn  off     cdial       10
                    asdlkup     50
                    grnlkup     50

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
mosmsgcdpn  off     cdial       10
                    cdpnnp      60
                    asdlkup     50
                    grnlkup     50
                    cgpnasdrqd  50
                    cgpngrnrqd  50
                    pprelay     80

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
mosmsgcgpn  off     cdial       10
                    asdlkup     50
                    grnlkup     50
                    pprelay     80
                    fraudchk    90

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
iarcdpn     off     cdial       10
                    ccncchk     100
                    cdpnnp      80
                    cgpnsvcrqd  60
                    asdlkup     50
                    grnlkup     50
                    cgpnasdrqd  50
                    cgpngrnrqd  50

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
iarcgpn     off     cdial       10
                    cgpnnp      80
                    asdlkup     50
                    grnlkup     50

SERVICE     STATUS  SA          PRECEDENCE
----------------------------------------
idprcdpn2   off     cdial       10
                    ccncchk     100
                    cdpnnp      80
                    lacck       60
                    cgpnsvcrqd  60
                    asdlkup     50
                    grnlkup     50
                    cgpnasdrqd  50
                    cgpngrnrqd  50
                    inprtg      95
                    skgtartg    50

SERVICE     STATUS  SA          PRECEDENCE
```

```
    ----------------------------------------
    idprcdpn3   off     cdial       10
                        ccncchk     100
                        cdpnnp      80
                        lacck       60
                        cgpnsvcrqd  60
                        asdlkup     50
                        grnlkup     50
                        cgpnasdrqd  50
                        cgpngrnrqd  50
                        inprtg      95
                        skgtartg    50

    SERVICE     STATUS  SA          PRECEDENCE
    ----------------------------------------
    idprcdpn4   off     cdial       10
                        ccncchk     100
                        cdpnnp      80
                        lacck       60
                        cgpnsvcrqd  60
                        asdlkup     50
                        grnlkup     50
                        cgpnasdrqd  50
                        cgpngrnrqd  50
                        inprtg      95
                        skgtartg    50

    SERVICE     STATUS  SA          PRECEDENCE
    ----------------------------------------
    tifcgpn     off     cdial       10
                        snscgpn     75
                        cgpnnp      80
                        asdlkup     90
                        grnlkup     90
                        nscgpn      75
                        fpfxrls     92
                        blrls       91
                        blnfndrls   91

    SERVICE     STATUS  SA          PRECEDENCE
    ----------------------------------------
    tifcgpn2    off     cdial       10
                        snscgpn     75
                        cgpnnp      80
                        asdlkup     90
                        grnlkup     90
                        nscgpn      75
                        fpfxrls     92
                        blrls       91
                        blnfndrls   91

    SERVICE     STATUS  SA          PRECEDENCE
    ----------------------------------------
    tifcgpn3    off     cdial       10
                        snscgpn     75
                        cgpnnp      80
                        asdlkup     90
                        grnlkup     90
                        nscgpn      75
                        fpfxrls     92
                        blrls       91
                        blnfndrls   91

;
```

This example displays NPP Service table data for a specific Service:

```
rtrv-npp-serv:srvn=tif
```

```
    tekelecstp 12-07-05 19:09:11 EST EAGLE 45.0.0

    SERVICE     STATUS  SA          PRECEDENCE
    ----------------------------------------
    tif         off     crp         92
                        npnrls      91
                        nprelay     90
                        nprls       90
                        cgpnsvcrqd  90
                        snscgpn     80
                        cdial       10
                        fwdscs      5
                        nprelay     80
                        nprls       80
                        snscgpn     75
                        cgpnnprqd   80
                        asdlkup     90
                        grnlkup     90
                        cgpnasdrqd  90
                        cgpngrnrqd  90
                        nscdpn      80
                        nscgpn      75
                        nocgpnrls   80
                        fpfxrls     92
                        blrls       91
                        blnfndrls   91
                        selscr      91

;
```

This example displays all NPP Service data for a specified Service when mode=full is specified:

```
rtrv-npp-serv:srvn=tif:mode=full
```

```
    tekelecstp 11-02-02 08:46:52 EST  EAGLE 44.0.0

    SERVICE     STATUS  SA          PRECEDENCE  FNAI  NAI
    ------------------------------------------------------
    tif         off     cdial       10          unkn  0
                        fwdscs      5           intl  4
                        crp         92          natl  3
                        npnrls      91          nai1  none
                        nprelay     90          nai2  none
                        nprls       90          nai3  none
                        snscgpn     80
                        cgpnnprqd   80
                        asdlkup     90
                        grnlkup     90
                        cgpnasdrqd  90
                        cgpngrnrqd  90
                        nscdpn      80
                        nscgpn      75
                        nocgpnrls   80
                        fpfxrls     92
                        blrls       91
                        blnfndrls   91
                        selscr      91

                               DELIMITERS
```

```
         dlma=1234567890abcdef  dlmb=aaaaabbbbbcccccd  dlmc=1020304050607080
         dlmd=d0d0              dlme=e0e0              dlmf=f0f0
         dlmg=9010              dlmh=9020              dlmi=9030
         dlmj=9040              dlmk=9050              dlml=9050
         dlmm=9060              dlmn=9070              dlmo=9080
         dlmp=9090

;
```

Related Commands

chg-npp-serv, *chg-npp-srs*, *dlt-npp-srs*, *ent-npp-srs*

rtrv-npp-srs

Retrieve a NPP Service Rule Set

Use this command to display a Numbering Plan Processor (NPP) Service Rule Set entry.

Parameters

asn (optional)

Action set name.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

fdl (optional)

Filter digit length. The number of digits on the incoming digit string that is filtered by the NPP.

Range:

*1 - 32, **

* —multiple lengths of digit strings can be filtered

fnai (optional)

Filter nature of address indicator. This parameter specifies the filter Nature of Address Indicator (NAI) class.

Range:

intl, natl, nai1, nai2, nai3, unkn

intl- filter messages with NAI=INTL

natl—filter messages with NAI=NATL

nai1—filter messages with NAI=NAI1

nai2—filter messages with NAI=NAI2

nai3—filter messages with NAI=NAI3

unkn—filter messages with NAI=UNKN

The `chg-npp-serv` command is used to assign values to the various FNAI classes.

fpfx (optional)

Filter prefix. The prefix used to filter incoming digit strings.

Range:

1 - 16 hexadecimal digits inclusive of single digit wildcard (*?*); or wildcard (*) matching the entire digit string; Valid digits are *?*, *, *0-9*, *a-f*, *A-F*.

srvn (optional)

Service name.

Range:

nppt

NPP Test Service

idprcdpn

IDPRCDPN Service

idprcgpn

IDPRCGPN Service

tif

TIF Service

tif2

TIF2 Service

tif3

TIF3 Service

mosmsicgpn

MOSMSICGPN Service

mosmsicdpn

MOSMSICDPN Service

mosmsgcgpn

MOSMSGCGPN Service

mosmsgcdpn

MOSMSGCDPN Service

iarcdpn

IARCDPN Service

iarcgpn

IARCGPN Service

idprcdpn2

IDPRCDPN2 Service

idprcdpn3

IDPRCDPN3 Service

idprcdpn4

IDPRCDPN4 Service

tifcgpn

TIFCGPN Service

tifcgpn2

TIFCGPN2 Service

tifcgpn3

TIFCGPN3 Service

Example

Display all NPP Service Rule Set table entries for a given service.

`rtrv-npp-srs`

Display NPP Service Rule Set table entries for a specified digit length.

`rtrv-npp-srs:fdl=*`

Display NPP Service Rule Set table entries for a specified filter prefix and filter digit length.

`rtrv-npp-srs:fpfx=91:fdl=16`

Dependencies

The value specified for the fpfx parameter cannot have a *?* as the final character.

Output

`rtrv-npp-srs`

```
    tekelecstp 11-02-28 16:41:44 EST  EAGLE 44.0.0

    SRVN        FPFX              FDL  FNAI  ASN         INVKSERV
    ----------  ----------------  ---  ----  ----------  ----------
    nppt        a                 10   intl  asn2        none
    nppt        a                 16   intl  asn3        none
    tif2        b                 12   natl  asn5        tifcgpn2
    idprcdpn    91                12   intl  cdset1      none
    idprcdpn2   91                10   natl  cdset2      none
    idprcdpn3   *                 *    intl  cdset3      none
    idprcdpn4   98                9    intl  cdset2      none

    NPP-SRS  table is (7 of 8192) 1% full.

;
```

Legend

- **SRVN**—Service Name
- **FPFX**—Filter Prefix
- **FDL**—Filter Digit Length
- **FNAI**—Filter Nature of Address Indicator
- **ASN**—Action Set Name
- **INVKSERV**—Invoke Service Name

Related Commands

chg-npp-serv, *chg-npp-srs*, *dlt-npp-srs*, *ent-npp-srs*

rtrv-obit

Retrieve Obituary Report

Use this command to show the obituaries that were most recently logged in the system. The report shows the obituaries from either the active or standby OAM, and the report indicates which card and processor generated the obituary.

An obituary is a set of data that describes the status of the system just before a processor restarted due to a fault in hardware or software. The data includes a register and stack dump of the processor, card location, reporting module number, software code location, and class of the fault detected.

Parameters

loc (mandatory)

The address of the card that is running the OAM from which the obituary information is to be retrieved.

Range:

1113, 1115

mode (optional)

Display mode

Range:

c

Continuous mode; shows obituaries already logged and new obituaries as they occur.

m

Manual mode; shows obituaries on demand only, when this command is entered.

Default:

c

num (optional)

The number of obituaries to display.

Range:

1 - 150

Default:

150

Example

```
rtrv-obit:loc=1115:num=2
```

Dependencies

The obituary log on the specified OAM must contain at least one obituary; otherwise, the command is rejected.

If the mode parameter is specified without the num parameter, the entire log is displayed.

Only one `rtrv-obit` or `rtrv-trbl` command at a time can be in progress throughout the entire system.

The card location specified by the loc parameter must be either 1113 or 1115.

If the loc parameter specifies the card that is running the standby OAM, that card must be available.

The num parameter value must be between 1 - 150.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command when the command is entered for the active OAM. See `canc-cmd` for more information.

In most situations, obituary reports are generated automatically when a card is reset. Automatic report generation can be turned off by selecting the mode=m parameter for manual mode.

The obituary from a 186 processor displays the register dump and a 16-word stack dump.

The obituary from a 486 processor is different from 186 because the register set is larger. Also, only 12 words of the stack are dumped for the 486.

The obituary from an IXP-based processor card (which includes MUX and HC-MIM cards) contains significantly more information than an obituary from an X86-based processor card. The data in an IXP obituary is spread over multiple system buffers, where each buffer is logged and printed as an independent obituary. Sequence numbers are displayed in the output so that it is clear which buffers comprise a given obituary. There is an overall sequence number, and a sequence number within each class (such as IXP register set or user data) of information.

Output

This example shows output for two obituaries from an x86-based card:

```
rtrv-obit:loc=1115:num=2
```

```
   rlghncxa03w 03-03-30 08:43:14 EST  EAGLE 31.3.0
   ------------------------------------------------------------
   STH: Received a BOOT 286-obituary reply for 1 restart(s)
```

```
        Primary: Card 1203   Module 4608  Mod_loc  1  Class 0080
        Register Dump :
            FL=338e    CS=4a9c    IP=01c0
            AX=0000    CX=0100    DX=21c1    BX=078a
            SP=01a6    BP=01a6    SI=0fe4    DI=3ece
            DS=dce8    ES=21c1    SS=336b
        Stack Dump :
        [SP+1E]=3ece    [SP+16]=46cc    [SP+0E]=0001    [SP+06]=0246
        [SP+1C]=078a    [SP+14]=dce8    [SP+0C]=4608    [SP+04]=338e
        [SP+1A]=078a    [SP+12]=078a    [SP+0A]=0001    [SP+02]=4a9c
        [SP+18]=0100    [SP+10]=336b    [SP+08]=0080    [SP+00]=01c0

    STH: Received a BOOT 486-obituary reply for 1 restart(s)
        Primary: Card 1213   Module 0047  Mod_loc  5  Class 0241
        Register Dump :
            EFL=00000000    CS =0208        EIP=0003e75f    SS =0060
            EAX=0009a90b    ECX=0009a915    EDX=00000000    EBX=00000000
            ESP=000ddaf2    EBP=000ddb6c    ESI=00090241    EDI=00141df8
            DS =0060        ES =0060        FS =0060        GS =0060
        Stack Dump :
        [ESP+2E]=0009    [ESP+28]=1df8    [ESP+22]=0000    [ESP+1C]=a915
        [ESP+2C]=a90b    [ESP+26]=0009    [ESP+20]=0000    [ESP+1A]=0009
        [ESP+2A]=0014    [ESP+24]=a8c0    [ESP+1E]=0009    [ESP+18]=a90b
        User Data Dump :
            0a 06 00 00 46 01 08 04 00 00 00                ....F......
    Report Date:03-03-04  Time:09:19:59
    ------------------------------------------------------------------
;
```

This example shows output for six obituaries from an IXP-based card:

`rtrv-obit:loc=1113:num=6`

```
    rlghncxa03w 03-01-23 08:43:14 EST  EAGLE 30.0.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IMT-obituary reply for 1 restart(s)
        Card 1209   Module TKS_SBFR.C   Line 728    Class 01cc
        StrongARM Core Register Dump (1 of 1):    [Overall: 1 of 6]
            r0 =00008b22    r1 =00004e72      r2 =0003e75f    r3 =0060024a
            r4 =0004a92b    r5 =000019c5      r6 =0000a57c    r7 =00005521
            r8 =0000b1f7    r9 =0000836c      r10=0000e251    r11=00141d42
            r12=006055a3    sp =0000727c      lr =0000003f    pc =00006429
    Report Date:03-01-23  Time:12:20:45
    ------------------------------------------------------------------

    rlghncxa03w 03-01-23 08:43:14 EST  EAGLE 30.0.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IMT-obituary reply for 1 restart(s)
        Card 1209   Module TKS_SBFR.C   Line 728    Class 01cc
        StrongARM Core Stack Dump (1 of 1):       [Overall: 2 of 6]
        System Mode Stack:
            0000   15a3a816  0012be0a  06000046  01080400             ..…......

            0010   00a2342c  07f7b83a  15729dd2  05580601             ..…......

            0020   1a22a616  7072b91a  46304a44  06887400             ..…......

            0030   25a33b12  01a4ba22  17e03026  11483402             ..…......

            0040   00130811  0033a30a  14008149  0cab6130             ..…......

            0050   00000000  00000000  00000000  00000000             ..…......
```

```
        0060   15a3a816  0012be0a  06000046  01080400              ..…......

        0070   00a2342c  07f7b83a  15729dd2  05580601              ..…......

        0080   1a22a616  7072b91a  46304a44  06887400              ..…......

    Abort Mode Stack:
        0000   25a33b12  01a4ba22  17e03026  11483402              ..…......

        0010   00130811  0033a30a  14008149  0cab6130              ..…......

        0020   1a22a616  7072b91a  46304a44  06887400              ..…......

        0030   25a33b12  01a4ba22  17e03026  11483402              ..…......

        0040   00130811  0033a30a  14008149  0cab6130              ..…......

        0050   00000000  00000000  00000000  00000000              ..…......

        0060   15a3a816  0012be0a  06000046  01080400              ..…......

Report Date:03-01-23  Time:12:20:45
-------------------------------------------------------------------------

rlghncxa03w 03-01-23 08:43:14 EST  EAGLE 30.0.0
-------------------------------------------------------------------------
STH: Received a BOOT IMT-obituary reply for 1 restart(s)
Card 1209   Module TKS_SBFR.C   Line 728    Class 01cc
     IXP Register Dump (1 of 2):              [Overall: 3 of 6]
        ********** FBI Registers: **********
        IREG =00000000                  SOP_SEQ1=00000000
        SOP_SEQ2=0003e75f               ENQUEUE_SEQ1=0060024a
        ENQUEUE_SEQ2=0060024a       THREAD_DONE_REG0=00600231
        THREAD_DONE_REG1=00600231       RCV_RDY_CNT=000012d4
        RCV_RDY_HI =0009a90b      RCV_RDY_LO=00000000
        RCV_RDY_CTL=0009a915       RCV_CNTL=00000000
        REC_FASTPORT_CTL =000ddaf2   FLOWCTL_MASK =000ddb6c
        RDYBUS_SYN_CNT_DEF=00090241      SELF_DESTRUCT=00141df8
        HASH_MULTIPLIER_64_HI=006011a3   HASH_MULTIPLIER_64_LO=00000000
        HASH_MULTIPLIER_48_HI=006011a3   HASH_MULTIPLIER_48_LO=00000000
        GET_CMD=00000000                XMIT_RDY_LO=00000000
        XMIT_RDY_HI=00000000             XMIT_RDY_CTL=00000000
        XMIT_PTR =0003e75f

       ********** SDRAM Registers: **********
        SDRAM_CSR=0060024a              SDRAM_MEMCTL0=0060024a
        SDRAM_MEMCTL1=00600231          DRAM_MEMINIT=00600231

       ********** StrongARM System Registers: **********
        PLL_CFG=0060024a                GPIO_EN=0060024a
        GPIO_DATA=00600231              RTC_DIV=00600231
        RTC_INIT=000012d4               RTC_TVAL=0009a90b
        RTC_CNTR=00000000               RTC_ALM=0009a915
        UART_SR=0009a915               UART_CR=00000000
        UART_DR=00090241                TIMER_1_LOAD=000ddb6c
        TIMER_2_LOAD=00090241           TIMER_3_LOAD=00141df8
        TIMER_4_LOAD=00000000           TIMER_1_VALUE=00000000
        TIMER_2_VALUE=006011a3          TIMER_3_VALUE=00000000
        TIMER_4_VALUE=00090241          TIMER_1_CONTROL=00141df8
        TIMER_2_CONTROL=00000000        TIMER_3_CONTROL=00000000
        TIMER_4_CONTROL=006011a3        FIQ=00000000
         IRQ=00000000
       ********** PCI Configuration Space Registers: **********
```

```
          PCI_VEN_DEV_ID=0060024a          PCI_CMD_STAT=0060024a
          PCI_REV_CLASS=00600231           PCI_CACHE_LAT_HDR_BIST=00600231
          PCI_MEM_BAR=000012d4             PCI_IO_BAR=0009a90b
          PCI_DRAM_BAR=00000000            PCI_SUBSYS=0009a915
          PCI_INT_LAT=0009a915
         ********** PCI Shared Control Registers: **********
          CAP_PTR_EXT=00090241             PWR_MGMT=000ddb6c
          IXP1200_RESET=00090241           PCI_OUT_INT_MASK=00141df8
          I20_INB_FIFO=00000000            I20_OUTB_FIFO=00000000
          MAILBOX_0=006011a3               MAILBOX_1=00000000
          MAILBOX_2=006011a3               MAILBOX_3=00000000
          DOORBELL=006011a3                DOORBELL_SETUP=00000000
         ********** PCI Control Registers: **********
          CHAN_1_BYTE_COUNT=0060024a       CHAN_2_BYTE_COUNT=0060024a
          CHAN_1_PCI_BAR=00600231          CHAN_2_PCI_BAR=00600231
          CHAN_1_DRAM_ADDR=000012d4        CHAN_2_DRAM_ADDR=0009a90b
          CHAN_1_DESC_PTR=00000000         CHAN_2_DESC_PTR=0009a915
          CHAN_1_CONTROL=0009a915       CHAN_2_CONTROL=00000000
          DMA_INF_MODE=00090241            CSR_BASE_ADDR_MASK=000ddb6c
          DRAM_BASE_ADDR_MASK=000ac14c     I20_INB_FLIST_HPTR=00141df8
          I20_INB_PLIST_TPTR=006011a3      I20_OUTB_PLIST_HPTR =00000000
          I20_OUTB_FLIST_TPTR =00000000    I20_INB_FLIST_CNT=00000000
          I20_OUTB_PLIST_CNT =006011a3     I20_INB_PLIST_CNT =00000000
          SA_CONTROL=00090241              PCI_ADDR_EXT=000ddb6c
          DBELL_PCI_MASK=00090241          DBELL_SA_MASK=00141df8
          IRQ_STATUS=00000000              FIQ_STATUS=00000000
          IRQ_RAW_STATUS=006011a3          FIQ_RAW_STATUS=00000000
          IRQ_ENABLE=006011a3              FIQ_ENABLE=00000000
         ********** Coprocessor 15 Registers: **********
          ID_CHIP=0060024a                 CONTROL_CP15=0060024a
          TRANSLATION_TAB_BASE=00600231    DOMAIN_ACCESS_CONTROL=00600231
          FAULT_STATUS=000012d4            FAULT_ADDRESS=0009a90b
          CACHE_CONTROL_OPER=00000000      READ_BUFFER_OPER=0009a915
          PROC_ID_VIRT_ADDR_MAP=00000000   DATA_BREAKPT_CONTROL_REG=0009a915

Report Date:03-01-23  Time:12:20:45
-------------------------------------------------------------------------

rlghncxa03w 03-01-23 08:43:14 EST  EAGLE 30.0.0
-------------------------------------------------------------------------
STH: Received a BOOT IMT-obituary reply for 1 restart(s)
Card 1209   Module TKS_SBFR.C   Line 728    Class 01cc
     IXP Register Dump (2 of 2):            [Overall: 4 of 6]
       ********** SRAM Registers: **********
        SRAM_CSR=0060024a                SRAM_AUTO_BASE=0060024a
        SRAM_AUTO_PTR=00600231           SRAM_AUTO_END=00600231
        SRAM_TEST_MOD=000012d4           SRAM_SLOW_CONFIG=0009a90b
        SRAM_BOOT_CONFIG=00000000        SRAM_SLOWPORT_CONFIG=0009a915
       ********** Microengine 0 Registers: **********
        USTORE_DATA=0060024a             ALU_OUTPUT=0060024a
        CTX_ENABLES=000012d4              CC_ENABLE=0009a90b
        CTX_0_SIG_EVENTS=00090241         CTX_1_SIG_EVENTS=000ddb6c
        CTX_2_SIG_EVENTS=00090241         CTX_3_SIG_EVENTS=00141df8
        CTX_0_WAKEUP_EVENTS=00000000      CTX_1_WAKEUP_EVENTS=00000000
        CTX_2_WAKEUP_EVENTS=006011a3      CTX_3_WAKEUP_EVENTS=00000000
        CTX_ARB_CNTL=00600231
        ACTIVE_CTX_STS:  SEG=1    ACNO=1    AB=0    ACTXPC: 38
        CTX_0_STS:       SEG=1    ACNO=2    RR=0    CTX_PC: 245

        CTX_1_STS:       SEG=0    ACNO=1    RR=1    CTX_PC: 15

        CTX_2_STS:       SEG=0    ACNO=0    RR=0    CTX_PC: 75

        CTX_3_STS:       SEG=1    ACNO=3    RR=1    CTX_PC: 132
```

```
********** Microengine 1 Registers: **********
 USTORE_DATA=0060024a               ALU_OUTPUT=0060024a
 CTX_ENABLES=000012d4               CC_ENABLE=0009a90b
 CTX_0_SIG_EVENTS=00090241          CTX_1_SIG_EVENTS=000ddb6c
 CTX_2_SIG_EVENTS=00090241          CTX_3_SIG_EVENTS=00141df8
 CTX_0_WAKEUP_EVENTS=00000000       CTX_1_WAKEUP_EVENTS=00000000
 CTX_2_WAKEUP_EVENTS=006011a3       CTX_3_WAKEUP_EVENTS=00000000
 CTX_ARB_CNTL=00600231
 ACTIVE_CTX_STS:  SEG=1    ACNO=1    AB=0    ACTXPC: 38
 CTX_0_STS:       SEG=1    ACNO=2    RR=0    CTX_PC: 245

 CTX_1_STS:       SEG=0    ACNO=1    RR=1    CTX_PC: 15

 CTX_2_STS:       SEG=0    ACNO=0    RR=0    CTX_PC: 128

 CTX_3_STS:       SEG=1    ACNO=3    RR=1    CTX_PC: 72

********** Microengine 2 Registers: **********
 USTORE_DATA=0060024a               ALU_OUTPUT=0060024a
 CTX_ENABLES=000012d4               CC_ENABLE=0009a90b
 CTX_0_SIG_EVENTS=00090241          CTX_1_SIG_EVENTS=000ddb6c
 CTX_2_SIG_EVENTS=00090241          CTX_3_SIG_EVENTS=00141df8
 CTX_0_WAKEUP_EVENTS=00000000       CTX_1_WAKEUP_EVENTS=00000000
 CTX_2_WAKEUP_EVENTS=006011a3       CTX_3_WAKEUP_EVENTS=00000000
 CTX_ARB_CNTL=00600231
 ACTIVE_CTX_STS:  SEG=1    ACNO=1    AB=0    ACTXPC: 38
 CTX_0_STS:       SEG=1    ACNO=2    RR=0    CTX_PC: 245

 CTX_1_STS:       SEG=0    ACNO=1    RR=1    CTX_PC: 125

 CTX_2_STS:       SEG=0    ACNO=0    RR=0    CTX_PC: 75

 CTX_3_STS:       SEG=1    ACNO=3    RR=1    CTX_PC: 62

********** Microengine 3 Registers: **********
 USTORE_DATA=0060024a               ALU_OUTPUT=0060024a
 CTX_ENABLES=000012d4               CC_ENABLE=0009a90b
 CTX_0_SIG_EVENTS=00090241          CTX_1_SIG_EVENTS=000ddb6c
 CTX_2_SIG_EVENTS=00090241          CTX_3_SIG_EVENTS=00141df8
 CTX_0_WAKEUP_EVENTS=00000000       CTX_1_WAKEUP_EVENTS=00000000
 CTX_2_WAKEUP_EVENTS=006011a3       CTX_3_WAKEUP_EVENTS=00000000
 CTX_ARB_CNTL=00600231
 ACTIVE_CTX_STS:  SEG=1    ACNO=1    AB=0    ACTXPC: 38
 CTX_0_STS:       SEG=1    ACNO=2    RR=0    CTX_PC: 245

 CTX_1_STS:       SEG=0    ACNO=1    RR=1    CTX_PC: 125

 CTX_2_STS:       SEG=0    ACNO=0    RR=0    CTX_PC: 75

 CTX_3_STS:       SEG=1    ACNO=3    RR=1    CTX_PC: 62

********** Microengine 4 Registers: **********
 USTORE_DATA=0060024a               ALU_OUTPUT=0060024a
 CTX_ENABLES=000012d4               CC_ENABLE=0009a90b
 CTX_0_SIG_EVENTS=00090241          CTX_1_SIG_EVENTS=000ddb6c
 CTX_2_SIG_EVENTS=00090241          CTX_3_SIG_EVENTS=00141df8
 CTX_0_WAKEUP_EVENTS=00000000       CTX_1_WAKEUP_EVENTS=00000000
 CTX_2_WAKEUP_EVENTS=006011a3       CTX_3_WAKEUP_EVENTS=00000000
 CTX_ARB_CNTL=00600231
 ACTIVE_CTX_STS:  SEG=1    ACNO=1    AB=0    ACTXPC: 38
 CTX_0_STS:       SEG=1    ACNO=2    RR=0    CTX_PC: 245

 CTX_1_STS:       SEG=0    ACNO=1    RR=1    CTX_PC: 15
```

```
         CTX_2_STS:       SEG=0    ACNO=0    RR=0    CTX_PC: 75

         CTX_3_STS:       SEG=1    ACNO=3    RR=1    CTX_PC: 132

        ********** Microengine 5 Registers: **********
         USTORE_DATA=0060024a               ALU_OUTPUT=0060024a
         CTX_ENABLES=000012d4               CC_ENABLE=0009a90b
         CTX_0_SIG_EVENTS=00090241          CTX_1_SIG_EVENTS=000ddb6c
         CTX_2_SIG_EVENTS=00090241          CTX_3_SIG_EVENTS=00141df8
         CTX_0_WAKEUP_EVENTS=00000000       CTX_1_WAKEUP_EVENTS=00000000
         CTX_2_WAKEUP_EVENTS=006011a3       CTX_3_WAKEUP_EVENTS=00000000
         CTX_ARB_CNTL=00600231
         ACTIVE_CTX_STS:  SEG=1    ACNO=1    AB=0    ACTXPC: 38
         CTX_0_STS:       SEG=1    ACNO=2    RR=0    CTX_PC: 245

         CTX_1_STS:       SEG=0    ACNO=1    RR=1    CTX_PC: 15

         CTX_2_STS:       SEG=0    ACNO=0    RR=0    CTX_PC: 75

         CTX_3_STS:       SEG=1    ACNO=3    RR=1    CTX_PC: 132

Report Date:03-01-23  Time:12:20:45
-------------------------------------------------------------------

rlghncxa03w 03-01-23 08:43:14 EST  EAGLE 30.0.0
-------------------------------------------------------------------------
STH: Received a BOOT IMT-obituary reply for 1 restart(s)
    Card 1209   Module TKS_SBFR.C   Line 728    Class 01cc
    User Data Dump (1 of 2):                  [Overall: 5 of 6]
        0000   15a3a816  0012be0a  06000046  01080400             ..…......

        0010   00a2342c  07f7b83a  15729dd2  05580601             ..…......

        0020   1a22a616  7072b91a  46304a44  06887400             ..…......

        0030   25a33b12  01a4ba22  17e03026  11483402             ..…......

        0040   00130811  0033a30a  14008149  0cab6130             ..…......

        0050   00000000  00000000  00000000  00000000             ..…......

        0060   15a3a816  0012be0a  06000046  01080400             ..…......

        0070   00a2342c  07f7b83a  15729dd2  05580601             ..…......

        0080   1a22a616  7072b91a  46304a44  06887400             ..…......

        0090   25a33b12  01a4ba22  17e03026  11483402             ..…......

        00a0   00130811  0033a30a  14008149  0cab6130             ..…......

        00b0   1a22a616  7072b91a  46304a44  06887400             ..…......

        00c0   25a33b12  01a4ba22  17e03026  11483402             ..…......

        00d0   00130811  0033a30a  14008149  0cab6130             ..…......

        00e0   00000000  00000000  00000000  00000000             ..…......

        00f0   15a3a816  0012be0a  06000046  01080400             ..…......

        0100   00a2342c  07f7b83a  15729dd2  05580601             ..…......
```

```
           0110   1a22a616  7072b91a  46304a44  06887400              ..…......

           0120   25a33b12  01a4ba22  17e03026  11483402              ..…......

           0130   25a33b12  01a4ba22  17e03026  11483402              ..…......

           0140   00130811  0033a30a  14008149  0cab6130              ..…......

           0150   00000000  00000000  00000000  00000000              ..…......

           0160   15a3a816  0012be0a  06000046  01080400              ..…......

           0170   00a2342c  07f7b83a  15729dd2  05580601              ..…......

           0180   1a22a616  7072b91a  46304a44  06887400              ..…......

           0190   25a33b12  01a4ba22  17e03026  11483402              ..…......

           01a0   00130811  0033a30a  14008149  0cab6130              ..…......

           01b0   1a22a616  7072b91a  46304a44  06887400              ..…......

           01c0   25a33b12  01a4ba22  17e03026  11483402              ..…......

Report Date:03-01-23  Time:12:20:45
-------------------------------------------------------------------

 rlghncxa03w 03-01-23 08:43:14 EST  EAGLE 30.0.0
 ------------------------------------------------------------------------
 STH: Received a BOOT IMT-obituary reply for 1 restart(s)
     Card 1209   Module TKS_SBFR.C   Line 728    Class 01cc
     User Data Dump (2 of 2):                  [Overall: 6 of 6]
         0000   15a3a816  0012be0a  06000046  01080400              ..…......

         0010   00a2342c  07f7b83a  15729dd2  05580601              ..…......

         0020   1a22a616  7072b91a  46304a44  06887400              ..…......

         0030   25a33b12  01a4ba22  17e03026  11483402              ..…......

         0040   00130811  0033a30a  14008149  0cab6130              ..…......

         0050   00000000  00000000  00000000  00000000              ..…......

         0060   15a3a816  0012be0a  06000046  01080400              ..…......

         0070   00a2342c  07f7b83a  15729dd2  05580601              ..…......

         0080   1a22a616  7072b91a  46304a44  06887400              ..…......

         0090   25a33b12  01a4ba22  17e03026  11483402              ..…......

         00a0   00130811  0033a30a  14008149  0cab6130              ..…......

         00b0   1a22a616  7072b91a  46304a44  06887400              ..…......

         00c0   25a33b12  01a4ba22  17e03026  11483402              ..…......

         00d0   00130811  0033a30a  14008149  0cab6130              ..…......

         00e0   00000000  00000000  00000000  00000000              ..…......

         00f0   15a3a816  0012be0a  06000046  01080400              ..…......
```

```
            0100   00a2342c  07f7b83a  15729dd2  05580601              ..…......

            0110   1a22a616  7072b91a  46304a44  06887400              ..…......

            0120   25a33b12  01a4ba22  17e03026  11483402              ..…......

    Report Date:03-01-23  Time:12:20:45
    ------------------------------------------------------------------
;
```

rtrv-obit:loc=1115

```
    Command Accepted - Processing

    stdcfg1b 05-06-13 16:32:30 EST  EAGLE 34.0.0
    NOTICE: Only 7 obit(s) to retrieve in the log.
;

    stdcfg1b 05-06-13 16:32:30 EST  EAGLE 34.0.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IMT-Obituary reply for restart
        Card 1103   Module ATH_386A.ASM  Line  988  Class 0400
        Register Dump :
            EFL=00000246    CS =0058        EIP=0041cf03    SS =0060
            EAX=00000046    ECX=00000000    EDX=005245d9    EBX=00000001
            ESP=00483f80    EBP=00483f88    ESI=00000000    EDI=00000000
            DS =0060        ES =0060        FS =0060        GS =0060

        Stack Dump :
        [SP+1E]=0048    [SP+16]=0000    [SP+0E]=0041    [SP+06]=0000
        [SP+1C]=3fd0    [SP+14]=0001    [SP+0C]=cecc    [SP+04]=0000
        [SP+1A]=0048    [SP+12]=0000    [SP+0A]=0048    [SP+02]=0041
        [SP+18]=3fbc    [SP+10]=0a0a    [SP+08]=3f9c    [SP+00]=e600

    Report Date:05-06-10  Time:19:20:55
    ------------------------------------------------------------------------
;

    stdcfg1b 05-06-13 16:32:31 EST  EAGLE 34.0.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IMT-Obituary reply for restart
        Card 1209   Module sds_arm_send  Line  356  Class 0001
        StrongARM Core Register Dump (1 of 1):    [Overall: 1 of 6]

        SYSTEM MODE REGISTERS:
        r0 = 00116bd4    r1 = 00000164    r2 = 00000001    r3 = 00000003
        r4 = 00f5f3f0    r5 = 00000000    r6 = 0000001f    r7 = 001251a0
        r8 = 00177be0    r9 = 10ffbfcc    r10= 00118b74    r11= 00000000
        r12= 642b0002    sp = 000cffa8    lr = 00116b88    pc = 00102424
        cpsr=400000df

    Register Dump 2 is empty

    Report Date:05-06-13  Time:16:30:42
    ------------------------------------------------------------------------
;

    stdcfg1b 05-06-13 16:32:33 EST  EAGLE 34.0.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IMT-Obituary reply for restart
        Card 1209   Module sds_arm_send  Line  356  Class 0001
        StrongARM Core Stack Dump (1 of 1):    [Overall: 2 of 6]
```

```
    SYSTEM MODE STACK (Length=192):
    0000  00e00000 00000007 00e00000 00102ab0  ............*..
    0010  00178698 00000000 000000f8 000cff08  ................
    0020  00000001 00116bd4 00000164 00000001  .....k..d.......
    0030  000cff68 00000000 00000000 0000001f  h...............
    0040  001251a0 00177be0 10ffbfcc 00118b74  .Q...{......t...
    0050  00000000 00102468 00000000 00000000  ....h$..........
    0060  000cffa8 00116bd4 00000164 00000001  .....k..d.......
    0070  00000003 00f5f3f0 00000000 0000001f  ................
    0080  001251a0 00177be0 10ffbfcc 00118b74  .Q...{......t...
    0090  00000000 642b0002 00116b88 00102424  ......+d.k..$$..
    00a0  00000000 00000000 0000001f 00115e10  ............^...
    00b0  00177c4c 00177bf0 0000001f 00125268  L|...{......hR..
;

    stdcfg1b 05-06-13 16:32:34 EST  EAGLE 34.0.0
    Stack Dump 2 is empty

    Report Date:05-06-13  Time:16:30:42
    ------------------------------------------------------------------------
;

    stdcfg1b 05-06-13 16:32:35 EST  EAGLE 34.0.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IMT-Obituary reply for restart
        Card 1209   Module sds_arm_send  Line  356  Class 0001
        User Data Dump (1 of 1):    [Overall: 3 of 6]

    User Data is empty

    Report Date:05-06-13  Time:16:30:42
    ------------------------------------------------------------------------
;

    stdcfg1b 05-06-13 16:32:36 EST  EAGLE 34.0.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IMT-Obituary reply for restart
        Card 1209   Module sds_arm_send  Line  356  Class 0001
        EP9312 Register Dump (1 of 2):    [Overall: 4 of 6]

        ************ DMA Registers ************
        DMA_CTRL_M2M0=        0608d40c    DMA_INTR_STAT_M2M0=   00000000
        DMA_STAT_M2M0=        00000000    DMA_BCR0_M2M0=        0608d40c
        DMA_BASE_SRC0_M2M0=   00000000    DMA_CRNT_SRC0_M2M0=   00000000
        DMA_BASE_DSTN0_M2M0=  00000000    DMA_CRNT_DSTN0_M2M0=  00000000
        DMA_BCR1_M2M0=        000001fc    DMA_BASE_SRC1_M2M0=   00000000
        DMA_CRNT_SRC1_M2M0=   00000000    DMA_BASE_DSTN1_M2M0=  00000000
        DMA_CRNT_DSTN1_M2M0=  00000000
        DMA_CTRL_M2M1=        0608d40c    DMA_INTR_STAT_M2M1=   00000000
        DMA_STAT_M2M1=        00000000    DMA_BCR0_M2M1=        00000000
        DMA_BASE_SRC0_M2M1=   00000000    DMA_CRNT_SRC0_M2M1=   00000000
        DMA_BASE_DSTN0_M2M1=  00000000    DMA_CRNT_DSTN0_M2M1=  00000000
        DMA_BCR1_M2M1=        00000000    DMA_BASE_SRC1_M2M1=   00000000
        DMA_CRNT_SRC1_M2M1=   00000000    DMA_BASE_DSTN1_M2M1=  00000000
        DMA_CRNT_DSTN1_M2M1=  00000000
        DMA_ACTIVE_INTR=      00000000

        ************ TIMER Registers **********
        TMR1_CURR_VALUE=      00000000    TMR1_CTRL_REG=        00000000
        TMR1_LOAD_REG=        00000000    TMR2_CURR_VALUE=      00000000
        TMR2_CTRL_REG=        00000000    TMR2_LOAD_REG=        00000000
        TMR3_CURR_VALUE=      00000001    TMR3_CTRL_REG=        000000d5
        TMR3_LOAD_REG=        00000001    TMR4_VALUE_LOW=       413c60f3
        TMR4_VALUE_HI=        0000015f
```

```
        ************ SYSCON Registers *********
        PWRSTS=               4320ace3    PWRCNT=               0c000000
        CLKSET1=              00a5a127    CLKSET2=              0003c317
        SCRATCH0=             00000040    SCRATCH1=             00000000
        DEVCFG=               6902090e    CHIP_ID=              34009213
        SYSCFG=               340000d6    APB_WAIT=             00000001
        ARB_REG=              00000000    VID_REG=              00000000
        MIR_REG=              00000000    I2S_REG=              00000000
        TCH_REG=              00000000

        ************ GPIO Registers ***********
        PADR=                 0000007f    PBDR=                 000000e9
        PCDR=                 000000c0    PDDR=                 000000c4
        PEDR=                 00000000    PFDR=                 000000ff
        PGDR=                 00000002    PHDR=                 0000007f
        PADDR=                00000000    PBDDR=                00000009
        PCDDR=                000000fb    PDDDR=                000000fb
        PEDDR=                00000003    PFDDR=                00000000
        PGDDR=                0000000c    PHDDR=                00000007
        PA_TYPE1=             00000000    PB_TYPE1=             00000080
        PF_TYPE1=             00000000    PA_TYPE2=             00000000
        PB_TYPE2=             00000000    PF_TYPE2=             00000000
        PA_INT_EN=            00000000    PB_INT_EN=            00000080
        PF_INT_EN=            00000000    PA_RAW_STAT=          00000080
        PB_RAW_STAT=          0000001f    PF_RAW_STAT=          00000000
        PA_INT_STAT=          00000000    PB_INT_STAT=          00000000
        PF_INT_STAT=          00000000    PA_DB=                00000000
        PB_DB=                00000000    PF_DB=                00000000
        EE_REG=               00000000

        ************ Coprocessor 15 Registers *
        ID_CODE_CP15_0=       41129200    CACHE_CODE_CP15_0=    0d172172
        CONTROL_CP15_1=       c000107d    TRANS_BASE_TBL_CP15_2=10ffc000
        DOMAIN_ACCESS_CP15_3= ffffffd     FAULT_STATUS_CP15_5=  0000000d
        FAULT_PREFETCH_CP15_5=000000fa    FAULT_ADDR_CP15_6=    d3b765e8
        CACHE_OPER_CP15_7=    00000000    TLB_OPER_CP15_8=      00000000
        DCACHE_LOCKDN_CP15_9= 00000000    ICACHE_LOCKDN_CP15_9= 00000000
        D_TLB_LOCKDN_CP15_10= 00b00000    I_TLB_LOCKDN_CP15_10= 00200000
        FCSE_PID_CP15_13=     00000000

    Report Date:05-06-13  Time:16:30:42
    ------------------------------------------------------------------------
;

    stdcfg1b 05-06-13 16:32:40 EST  EAGLE 34.0.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IMT-Obituary reply for restart
        Card 1209   Module sds_arm_send  Line  356  Class 0001
        EP9312 Register Dump (2 of 2):    [Overall: 5 of 6]

        ************ VIC Registers ************
        VIC_1_IRQ_STATUS=     00000000    VIC_1_FIQ_STATUS=     00000000
        VIC_1_RAW_INTR=       25000008    VIC_1_INT_SELECT=     00000000
        VIC_1_INT_ENABLE=     00060000    VIC_1_SOFT_INT=       00000000
        VIC_1_SOFT_INT_CLEAR= 00000000
        VIC_2_IRQ_STATUS=     00000000    VIC_2_FIQ_STATUS=     00000000
        VIC_2_RAW_INTR=       0000021b    VIC_2_INT_SELECT=     00080000
        VIC_2_INT_ENABLE=     08080004    VIC_2_SOFT_INT=       00000000
        VIC_2_SOFT_INT_CLEAR= 00000000

        ************ SMC Registers ************
        BANK_CONFIG0=         70001c80    BANK_CONFIG1=         70001420
        BANK_CONFIG2=         40001480    BANK_CONFIG3=         70000400
```

```
        BANK_CONFIG6=         70001440    BANK_CONFIG7=         70001440

        ************ UART3 Registers **********
        LINE_CTRL_LOW=        00000003    LINE_CTRL_MID=        00000000
        LINE_CTRL_HIGH=       00000074    CTRL_REG=             00000001
        STATUS_REG=           00000000    FLAGS_REG=            00000090
        DATA_REG=             00000020

        ************ Watchdog Registers *******
        WDOG_REG=             00806c69

    Report Date:05-06-13  Time:16:30:42
    ---------------------------------------------------------------------------
;

    stdcfg1b 05-06-13 16:32:42 EST  EAGLE 34.0.0
    ---------------------------------------------------------------------------
    STH: Received a BOOT IMT-Obituary reply for restart
        Card 1209   Module sds_arm_send  Line  356  Class 0001
        SIFB Register Dump (1 of 1):    [Overall: 6 of 6]

        ************ BCM5630 Switch0 Registers *******
        Switch0 Port0 Status= 00c06c00    Switch0 Port1 Status= 00c06c00
        Switch0 Port2 Status= 00806c00    Switch0 Port3 Status= 00806c00
        Switch0 Port4 Status= 00806c00    Switch0 Port5 Status= 00806c00
        Switch0 Port6 Status= 00806c00    Switch0 Port7 Status= 00800000
        Switch0 Port12 Status=00806c00

        ************ BCM5630 Switch1 Registers *******
        Switch1 Port0 Status= 00806c00    Switch1 Port1 Status= 00806c00
        Switch1 Port2 Status= 00806c00    Switch1 Port3 Status= 00806c00
        Switch1 Port4 Status= 00806c00    Switch1 Port5 Status= 00806c00
        Switch1 Port6 Status= 00806c00    Switch1 Port7 Status= 00806c00
        Switch1 Port8 Status= 00806c00    Switch1 Port9 Status= 00806c00
        Switch1 Port10 Status=00806c00    Switch1 Port11 Status=00800000
        Switch1 Port12 Status=aaaaaa00

    Report Date:05-06-13  Time:16:30:43
    ---------------------------------------------------------------------------
;
```

This example shows output for seven obituaries from an IXP2350-based card:

`rtrv-obit:loc=1113`

```
    tekelecstp 09-06-12 08:40:04 GMT  EAGLE 41.1.0
    ---------------------------------------------------------------------------
    STH: Received a BOOT IXP2350-Obituary reply for restart
        Card 1109   Module hiprop_init.  Line  489  Class 0001
        StrongARM Core Register Dump (1 of 1):    [Overall: 1 of 7]

        SYSTEM MODE REGISTERS:
        r0=  00607964    r1=  000001e9    r2=  00000001    r3=  00000003
        r4=  003dffec    r5=  00000000    r6=  42000360    r7=  0002c498
        r8=  0000006f    r9=  90003c00    r10= 00606e54    r11= 00000000
        r12= 00000000    sp=  003dff78    lr=  006079f4    pc=  00601ae4
        cpsr=400000df

    Register Dump 2 is empty

    Report Date:09-06-12  Time:08:40:04
    ---------------------------------------------------------------------------
```

```
;

    tekelecstp 09-06-12 08:40:05 GMT  EAGLE 41.1.0
    0007.0106    IMT BUS A              IMT Bus alarm cleared
;

    tekelecstp 09-06-12 08:40:07 GMT  EAGLE 41.1.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IXP2350-Obituary reply for restart
        Card 1109   Module hiprop_init.  Line  489  Class 0001
        StrongARM Core Stack Dump (1 of 1):    [Overall: 2 of 7]

    SYSTEM MODE STACK (Length=132):
    0000  00000000 00000000 00000001 003d0000  ............=.
    0010  003dffec 00615b98 00000001 00606f00  ..=..[a.....o`.
    0020  00000000 00000000 00000000 00000000  ................
    0030  00000000 00000000 00000000 00000000  ................
    0040  00000000 00000000 00000000 00000000  ................
    0050  00000000 00000000 00000000 00000000  ................
    0060  00000000 00000000 00000000 00000000  ................
    0070  00000000 00000001 00000001 00000000  ................
    0080  00000000                            ....
;

    tekelecstp 09-06-12 08:40:09 GMT  EAGLE 41.1.0
    Stack Dump 2 is empty

    Report Date:09-06-12  Time:08:40:04
    ------------------------------------------------------------------------
;

    tekelecstp 09-06-12 08:40:10 GMT  EAGLE 41.1.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IXP2350-Obituary reply for restart
        Card 1109   Module hiprop_init.  Line  489  Class 0001
        User Data Dump (1 of 1):    [Overall: 3 of 7]

    User Data is empty

    Report Date:09-06-12  Time:08:40:04
    ------------------------------------------------------------------------
;

    tekelecstp 09-06-12 08:40:12 GMT  EAGLE 41.1.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IXP2350-Obituary reply for restart
        Card 1109   Module hiprop_init.  Line  489  Class 0001
        IXP Register Dump (1 of 3):    [Overall: 4 of 7]

      ************ XSI SDRAM Registers ************
     SDIR=                     00730000 SDCR=                     06553100
     ESDCR=                    93005001 SDBR=                     008000b6
     SBR0=                     02000000 SBR1=                     02000000
     ECC=                      0f000000 ELOC0=                    00000000
     ELOC1=                    00000000 ECAR_0=                   00000000
     ECAR_1=                   00000000 ECTST=                    00000000
     MCISR=                    00000000 MPTCR=                    1c000000
     MPCR=                     00000000 RFR=                      8a000000
     SDPR0=                    01008002 SDPR1=                    00000070
     SDPR2=                    0000ffa0 SDPR3=                    0000fff8
     SDPR4=                    000000b0 SDPR5=                    00000000
     SDPR6=                    00000000 SDPR7=                    00000000
     DDR_RCOMP_SETUP_CTRL=     60000000 PMOS_RCOMP_MEAS=          8f000000
     NMOS_RCOMP_MEAS=          8f000005 PMOS_RCOMP_OVRD_REG_1=    00000016
```

```
     NMOS_RCOMP_OVRD_REG_1=     00000000 PMOS_NMOS_SCOMP_OVRD_REG_1=002d0000
     SLEW_RATE_INDEX_SEL=       39009b00 CTL_PMOS_PULL_UP_OFST=     0100005b
     CTL_PMOS_PULL_DW_OFST=     01000000 CKE_PMOS_PULL_UP_OFST=     01000000
     CKE_PMOS_PULL_DW_OFST=     01000000 CK_PMOS_PULL_UP_OFST=      01000000
     CK_PMOS_PULL_DW_OFST=      01000000 DQ_PMOS_PULL_UP_OFST=      01000000
     DQ_PMOS_PULL_DW_OFST=      01000000 PMOS_NMOS_RCOMP_OVRD_REG_1=00000000
     PMOS_RCOMP_OVRD_REG_2=     00000000 NMOS_RCOMP_OVRD_REG_2=     00000000
     PMOS_RCOMP_OVRD_REG_3=     00000000 NMOS_RCOMP_OVRD_REG_3=     00000000
     PMOS_RCOMP_OVRD_REG_4=     00000000 NMOS_RCOMP_OVRD_REG_4=     00000000
     PMOS_NMOS_SCOMP_OVRD_2=    00000000 CS_PMOS_PULL_UP_OFST=      01000000
     CS_NMOS_PULL_DW_OFST=      01000000 RCVEN_PMOS_PULL_UP_OFST=   01000000
     RCVEN_NMOS_PULL_DW_OFST=   01000000 GMII_PMOS_PULL_UP_OFST=    00000000
     GMII_NMOS_PULL_DW_OFST=    00000000 SLEW_RATE_IDX_SEL_REG_2=   06000000
     SETUP_AND_CTRL_REG=        00000000 DDR_ACIO_RX_DDL_SETINGS=   13000000
     DDR_RX_DESKEW=             13000013 DDR_RDDLYSEL_RECVEN=       13000000

      ************ MSG SDRAM Registers ************
     SRAM_CONTROL=              00000000 SRAM_PARITY_STATUS_1=      00000028
     SRAM_PARITY_STATUS_2=      00001f00 MSG_STAT=                  00000000
     MSG_RET_STAT=              00000000 MSG_OVFL_INT_ENB=          00000000

      ************ COPROCESSOR Registers ************
     ID_CHIP=                   05040500 CONTROL_CP15=              fd030066
     TRANSLATION_TBL_BASE=      00ffff10 DOMAIN_ACCESS_CONTROL=     fd00ff80
     FAULT_STATUS=              066000ff FAULT_ADDRESS=             c7000e04
     PROC_ID_VIRTUAL_ADDR_MAPING=000000eb

    Report Date:09-06-12  Time:08:40:04
    -------------------------------------------------------------------------
;

    tekelecstp 09-06-12 08:40:19 GMT  EAGLE 41.1.0
    -------------------------------------------------------------------------
    STH: Received a BOOT IXP2350-Obituary reply for restart
        Card 1109   Module hiprop_init.  Line  489  Class 0001
        IXP Register Dump (2 of 3):    [Overall: 5 of 7]

     ************ Microengine 0 Registers ************
     USTORE_ERROR_STATUS=       02020202 ALU_OUTPUT=                02020202
     CTX_ARB_CNTL=              02020202 CTX_ENABLES=               02020202
     CC_ENABLE=                 02020202
     INDIRECT_CTX_STS0:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS1:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS2:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS3:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS4:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS5:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS6:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS7:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     ACTIVE_CTX_STS: SEG=0  ACNO=02  AB=0  ACTXPC=0064
     INDIRECT_CTX_0_SIG_EVNT=   02020202 INDIRECT_CTX_1_SIG_EVNT=   02020202
     INDIRECT_CTX_2_SIG_EVNT=   02020202 INDIRECT_CTX_3_SIG_EVNT=   02020202
     INDIRECT_CTX_4_SIG_EVNT=   02020202 INDIRECT_CTX_5_SIG_EVNT=   02020202
     INDIRECT_CTX_6_SIG_EVNT=   02020202 INDIRECT_CTX_7_SIG_EVNT=   02020202
     ACTIVE_CTX_SIG_EVNT=       02020202 INDIRECT_CTX_0_WAKEUP_EVNT=02020202
     INDIRECT_CTX_1_WKEUP_EVNT= 02020202 INDIRECT_CTX_2_WAKEUP_EVNT=02020202
     INDIRECT_CTX_3_WAKEUP_EVNT=02020202 INDIRECT_CTX_4_WAKEUP_EVNT=02020202
     INDIRECT_CTX_5_WAKEUP_EVNT=02020202 INDIRECT_CTX_6_WAKEUP_EVNT=02020202
     INDIRECT_CTX_7_WAKEUP_EVNT=02020202 ACTIVE_CTX_WAKEUP_EVNT=    02020202

     ************ Microengine 1 Registers ************
     USTORE_ERROR_STATUS=       02020202 ALU_OUTPUT=                02020202
     CTX_ARB_CNTL=              02020202 CTX_ENABLES=               02020202
     CC_ENABLE=                 02020202
```

```
     INDIRECT_CTX_STS0:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS1:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS2:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS3:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS4:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS5:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS6:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS7:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     ACTIVE_CTX_STS: SEG=0  ACNO=02  AB=0  ACTXPC=0064
     INDIRECT_CTX_0_SIG_EVNT=   02020202 INDIRECT_CTX_1_SIG_EVNT=   02020202
     INDIRECT_CTX_2_SIG_EVNT=   02020202 INDIRECT_CTX_3_SIG_EVNT=   02020202
     INDIRECT_CTX_4_SIG_EVNT=   02020202 INDIRECT_CTX_5_SIG_EVNT=   02020202
     INDIRECT_CTX_6_SIG_EVNT=   02020202 INDIRECT_CTX_7_SIG_EVNT=   02020202
     ACTIVE_CTX_SIG_EVNT=       02020202 INDIRECT_CTX_0_WAKEUP_EVNT=02020202
     INDIRECT_CTX_1_WKEUP_EVNT= 02020202 INDIRECT_CTX_2_WAKEUP_EVNT=02020202
     INDIRECT_CTX_3_WAKEUP_EVNT=02020202 INDIRECT_CTX_4_WAKEUP_EVNT=02020202
     INDIRECT_CTX_5_WAKEUP_EVNT=02020202 INDIRECT_CTX_6_WAKEUP_EVNT=02020202
     INDIRECT_CTX_7_WAKEUP_EVNT=02020202 ACTIVE_CTX_WAKEUP_EVNT=    02020202

     ************ Microengine 2 Registers ************
     USTORE_ERROR_STATUS=       02020202 ALU_OUTPUT=                02020202
     CTX_ARB_CNTL=              02020202 CTX_ENABLES=               02020202
     CC_ENABLE=                 02020202
     INDIRECT_CTX_STS0:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS1:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS2:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS3:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS4:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS5:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS6:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS7:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     ACTIVE_CTX_STS: SEG=0  ACNO=02  AB=0  ACTXPC=0064
     INDIRECT_CTX_0_SIG_EVNT=   02020202 INDIRECT_CTX_1_SIG_EVNT=   02020202
     INDIRECT_CTX_2_SIG_EVNT=   02020202 INDIRECT_CTX_3_SIG_EVNT=   02020202
     INDIRECT_CTX_4_SIG_EVNT=   02020202 INDIRECT_CTX_5_SIG_EVNT=   02020202
     INDIRECT_CTX_6_SIG_EVNT=   02020202 INDIRECT_CTX_7_SIG_EVNT=   02020202
     ACTIVE_CTX_SIG_EVNT=       02020202 INDIRECT_CTX_0_WAKEUP_EVNT=02020202
     INDIRECT_CTX_1_WKEUP_EVNT= 02020202 INDIRECT_CTX_2_WAKEUP_EVNT=02020202
     INDIRECT_CTX_3_WAKEUP_EVNT=02020202 INDIRECT_CTX_4_WAKEUP_EVNT=02020202
     INDIRECT_CTX_5_WAKEUP_EVNT=02020202 INDIRECT_CTX_6_WAKEUP_EVNT=cc000002
     INDIRECT_CTX_7_WAKEUP_EVNT=cc0000cc ACTIVE_CTX_WAKEUP_EVNT=    cc0001cc
     IXP Register Dump (2 of 2):    [Overall: 2 of 2]

    Report Date:09-06-12  Time:08:40:04
    ------------------------------------------------------------------------
;

    tekelecstp 09-06-12 08:40:31 GMT  EAGLE 41.1.0
    ------------------------------------------------------------------------
    STH: Received a BOOT IXP2350-Obituary reply for restart
        Card 1109   Module hiprop_init.  Line  489  Class 0001
        IXP Register Dump (3 of 3):    [Overall: 6 of 7]

     ************ Microengine 3 Registers ************
     USTORE_ERROR_STATUS=       02020202 ALU_OUTPUT=                02020202
     CTX_ARB_CNTL=              02020202 CTX_ENABLES=               02020202
     CC_ENABLE=                 02020202
     INDIRECT_CTX_STS0:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS1:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS2:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS3:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS4:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS5:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     INDIRECT_CTX_STS6:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
```

```
     INDIRECT_CTX_STS7:      SEG=0  ACNO=02  RR=0  CTX_PC=0064
     ACTIVE_CTX_STS: SEG=0  ACNO=02  AB=0  ACTXPC=0064
     INDIRECT_CTX_0_SIG_EVNT=   02020202 INDIRECT_CTX_1_SIG_EVNT=   02020202
     INDIRECT_CTX_2_SIG_EVNT=   02020202 INDIRECT_CTX_3_SIG_EVNT=   02020202
     INDIRECT_CTX_4_SIG_EVNT=   02020202 INDIRECT_CTX_5_SIG_EVNT=   02020202
     INDIRECT_CTX_6_SIG_EVNT=   02020202 INDIRECT_CTX_7_SIG_EVNT=   02020202
     ACTIVE_CTX_SIG_EVNT=       02020202 INDIRECT_CTX_0_WAKEUP_EVNT=02020202
     INDIRECT_CTX_1_WKEUP_EVNT= 02020202 INDIRECT_CTX_2_WAKEUP_EVNT=02020202
     INDIRECT_CTX_3_WAKEUP_EVNT=02020202 INDIRECT_CTX_4_WAKEUP_EVNT=02020202
     INDIRECT_CTX_5_WAKEUP_EVNT=02020202 INDIRECT_CTX_6_WAKEUP_EVNT=02020202
     INDIRECT_CTX_7_WAKEUP_EVNT=02020202 ACTIVE_CTX_WAKEUP_EVNT=    02020202

     ************ DDR SDRAM Registers ************
     DU_CONTROL=                04031000 DU_ERROR_STATUS_1=         20018544
     DU_ERROR_STATUS_2=         a3003426 DU_ECC_TEST=               00000000
     DU_INIT=                   00000100 DU_CNTR_2=                 38000000
     DDR_RCOMP_CSR=             60000000 PMOS_RCOMP_MEAS=           8f000000
     NMOS_RCOMP_MEAS=           9f000005 PMOS_RCOMP_OVRD_REG_1=     00000016
     NMOS_RCOMP_OVRD_REG_1=     00000000 PMOS_NMOS_SCOMP_OVRD_1=    002d0000
     SLEW_RATE_IDX_SEL_REG_1=   39009c00 CTL_PMOS_PULL_UP_OFST=     010000db
     CTL_PMOS_PULL_DW_OFST=     01000000 CKE_PMOS_PULL_UP_OFST=     01000000
     CKE_NMOS_PULL_DW_OFST=     01000000 CK_PMOS_PULL_UP_OFST=      01000000
     CK_NMOS_PULL_DW_OFST=      01000000 DQ_PMOS_PULL_UP_OFST=      01000000
     DQ_NMOS_PULL_DW_OFST=      01000000 PMOS_NMOS_RCOMP_OVRD=      00000000
     PMOS_RCOMP_OVRD_REG_2=     00000000 NMOS_RCOMP_OVRD_REG_2=     00000000
     PMOS_RCOMP_OVRD_REG_3=     00000000 NMOS_RCOMP_OVRD_REG_3=     00000000
     PMOS_RCOMP_OVRD_REG_4=     00000000 NMOS_RCOMP_OVRD_REG_4=     00000000
     PMOS_NMOS_SCOMP_OVRD_2=    00000000 RCVEN_PMOS_PULL_UP_OFST=   01000000
     RCVEN_NMOS_PULL_DW_OFST=   01000000 GMII_PMOS_PULL_UP_OFST=    01000000
     GMII_NMOS_PULL_DW_OFST=    01000000 SLEW_RATE_IDX_SEL_REG_2=   06000000
     SETUP_AND_CTRL_REG=        00000000 DDR_ACIO_RX_DDL_SETTINGS=  13000000
     DDR_RX_DESKEW=             13000013 DDR_RDDLYSEL_RECVEN=       13000000

    Report Date:09-06-12  Time:08:40:04
    -------------------------------------------------------------------------
;

    tekelecstp 09-06-12 08:40:31 GMT  EAGLE 41.1.0
    -------------------------------------------------------------------------
    STH: Received a BOOT IXP2350-Obituary reply for restart
        Card 1109   Module hiprop_init.  Line  489  Class 0001
        Instruction Trace Dump (1 of 1):    [Overall: 7 of 7]

    Length: 415
    0000  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0010  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0020  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0030  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0040  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0050  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0060  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0070  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0080  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0090  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    00a0  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    00b0  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    00c0  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    00d0  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    00e0  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    00f0  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0100  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0110  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0120  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0130  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
```

```
    0140  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0150  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0160  02 02 02 02 02 02 02 02 02 02 02 02 02 02 02 02  ................
    0170  02 00 00 cc cc 00 00 cc cc 01 00 cc cc 00 00 cc  ................
    0180  cc 00 00 cc cc 58 fa 12 00 0a b8 6d 00 6c fd 12  .....X.....m.l..
    0190  00 fa 00 00 00 00 70 fd 7f cc cc cc cc cc cc     ......p........

    Report Date:09-06-12  Time:08:40:04
    --------------------------------------------------------------------------
;
```

Related Commands

act-alm-trns, *dact-alm-trns*, *rept-stat-clk*, *rept-stat-trbl*, *rls-alm*, *rtrv-trbl*

rtrv-pct

Display Point Code and CIC Translation entries

Use this command to display Point Code and CIC Translations.

Parameters

ecice (optional)

The end of the Emulated Circuit Identification Code range.

Range:

*0 - 4294967295, **

- *0-4095* —ITU TUP/ISUP
- *0-16383* —ANSI ISUP
- *0-4294967295* —ANSI Q.BICC

Default:

*

ecics (optional)

The start of the Emulated Circuit Identification Code range.

Range:

*0 - 4294967295, **

- *0-4095* —ITU TUP/ISUP
- *0-16383* —ANSI ISUP
- *0-4294967295* —ANSI Q.BICC

Default:

*

epc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

epca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

epci (optional)

ITU international destination point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

epcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

filtpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster me*mber (*ni-nc-ncm*).

Synonym:

filtpca

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

The asterisk (*) value is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni=001–005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006–255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni =006–255*.

The point code *000-000-000* is not a valid point code.

filtpci (optional)

ITU international destination point code with subfields *zone-area-id*.

Range:

*0-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

filtpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*).

Range:

*16363, aa-zz, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

rcice (optional)

The end of the Real Circuit Identification Code range.

Range:

*0 - 4294967295, **

- *0-4095* —ITU TUP/ISUP
- *0-16383* —ANSI ISUP
- *0-4294967295* —ANSI Q.BICC

Default:

*

rcics (optional)

The start of the Real Circuit Identification Code range.

Range:

*0 - 4294967295, **

- *0-4095* —ITU TUP/ISUP
- *0-16383* —ANSI ISUP
- *0-4294967295* —ANSI Q.BICC

Default:

*

realpc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Range:

realpci (optional)

ITU international destination point code with subfields *zone-area-id*.

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

realpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc, m1-m2-m3-m4-gc*).

Range:

0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to 14

relcause (optional)

Release Cause

Range:

0 - 127

Default:

0

si (optional)

Service Indicator

Range:

0

NM

3

SCCP

5

ISUP

4

TUP

13

ANSI Q. BICC

***

Default:

*

ssn (optional)

SCCP Subsystem number

Range:

*0 - 255, **

Default:

*

Example

```
rtrv-pct:epc=1-1-1
rtrv-pct:realpc=2-2-2
```

Dependencies

If the ssn or ecics parameter is specified, then the si parameter must be specified.

A full point code must be specified as the value for the realpc/realpca/realpci/realpcn and epc/epca/epci/epcn parameters.

The value specified for the ecice/rcice parameter must be equal to or greater than the value specified for the ecics/rcics parameter, respectively.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters must have the same domain.

The values specified for the realpc/realpca/realpci/realpcn and filtpc/filtpca/filtpci/filtpcn parameters must have at least one route for each value defined in the Route table.

If a groupcode is specified then the values specified for the realpc, filtpc, and epc parameters must have the same group code.

A spare point code cannot be specified as a value for the epci/epcn, filtpci/filtpcn, and realpci/realpcn parameters.

The ecics or rcics parameter must be specified before the relcause parameter can be specified.

The si=3 parameter must be specified before the ssn parameter can be specified.

If the ecice or rcice parameter is specified, then the ecics or rcics parameter must be specified, respectively.

If the ecics, ecice, and rcics parameters are specified, then the rcice parameter must be specified.

A value of 4, 5, or 13 must be specified for the si parameter before the ecice/ecics and rcice/rcics parameters can be specified.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters cannot be same as the STP point code.

The values specified for the epc/epca/epci/epcn, filtpc/filtpca/filtpci/filtpcn, and realpc/realpca/realpci/realpcn parameters cannot be same as the STP capability point code.

The epc/epca/epci/epcn or realpc/realpca/realpci/realpcn parameter must be specified if any other optional parameter is specified.

The values specified for the ecics/ecice and rcics/rcice parameters must be within the range specified by the parameter definition.

The difference between the values specified for the ecice and ecics parameters must be equal to the difference between the values specified for the rcice and rcics parameters.

A value of 5 or 13 must be specified for the si parameter before the relcause parameters can be specified.

The values specified for the realpc/realpca/realpci/realpcn and filtpc/filtpca/filtpci/filtpcn parameters must already exist in the Route table.

The ssn and cic parameters cannot be specified together in the command.

If the ecics, rcics, and rcice parameters are specified, then the ecice parameter must be specified.

If the same value is specified for the epc and realpc parameters, then the values specified for the ecics/ecice and rcics/rcice parameters cannot indicate the same range.

Only one of the filtpc/filtpca/filtpci/filtpcn parameters can be specified in the command.

The value specified for the epc/epci/epcn parameter cannot be the same as a secondary point code.

Output

`rtrv-pct`

```
    tekelecstp 10-08-26 11:31:14 EST  EAGLE 43.0.0

       EPCA             FILTPCA          REALPCA      SI  SSN  RELCAUSE
       001-001-001      *                002-002-002   4  ---   10

       ECICS = 10          ECICE = 20
       RCICS = 30          RCICE = 40

       EPCI             FILTPCI          REALPCI      SI  SSN  RELCAUSE
       1-001-2          2-002-2          2-002-2       3   10  ---

       ECICS = ----------  ECICE = ----------
       RCICS = ----------  RCICE = ----------

       EPCN             FILTPCN          REALPCN      SI  SSN  RELCAUSE
       00300            *                00200         *  ---  ---

       ECICS = ----------  ECICE = ----------
       RCICS = ----------  RCICE = ----------

    Unique EPC    is 3 of 250
    Unique RealPC is 3 of 250

    PCT table is (3 of 1000) 1% full.

;
```

Related Commands

dlt-pct , *ent-pct*

rtrv-ppsopts

Retrieve Prepaid SMS Options

Use this command to display Prepaid Short Message Service options from the PPSOPTS table.

Parameters

ppt (optional)

Prepaid portability type. An IN platform.

Range:

1 - 32

Example

```
rtrv-ppsopts
```

```
rtrv-ppsopts:ppt=2
```

Dependencies

The Prepaid SMS Intercept Ph1, IDP A-Party Routing, or IDP Service Key Routing feature must be enabled and turned on before this command can be entered.

The Prepaid SMS Options Table must be available.

Output

Set ID values are displayed only if the Flexible GTT Load Sharing (FGTTLS) feature is enabled.

This example displays Prepaid SMS options for a specific Prepaid Type:

```
rtrv-ppsopts:ppt=1
```

```
    tekelecstp 08-12-17 15:07:01 EST  EAGLE 40.1.0

    Prepaid SMS Options
    -------------------
    BPARTYCHK     = OFF
    PPT       PCA/PCI/PCN            SSN    RI
    ---       --------------------   ----   ---
    1         PCI:    1-001-1        1      GT

;
```

This example displays Prepaid SMS options for all Prepaid Types:

```
rtrv-ppsopts
```

```
    tekelecstp 08-12-17 15:11:22 EST  EAGLE 40.1.0

    Prepaid SMS Options
    -------------------
    BPARTYCHK     = OFF
    PPT       PCA/PCI/PCN            SSN    RI
    ---       --------------------   ----   ---
    1         PCI:    1-001-1        1      GT
```

```
2          PCI:    1-001-2        1      SSN
3          --------------------   NONE   GT
4          --------------------   NONE   GT
5          --------------------   NONE   GT
6          --------------------   NONE   GT
7          --------------------   NONE   GT
8          --------------------   NONE   GT
9          --------------------   NONE   GT
10         --------------------   NONE   GT
11         --------------------   NONE   GT
12         --------------------   NONE   GT
13         --------------------   NONE   GT
14         --------------------   NONE   GT
15         --------------------   NONE   GT
16         --------------------   NONE   GT
17         --------------------   NONE   GT
18         --------------------   NONE   GT
19         --------------------   NONE   GT
20         --------------------   NONE   GT
21         --------------------   NONE   GT
22         --------------------   NONE   GT
23         --------------------   NONE   GT
24         --------------------   NONE   GT
25         --------------------   NONE   GT
26         --------------------   NONE   GT
27         --------------------   NONE   GT
28         --------------------   NONE   GT
29         --------------------   NONE   GT
30         --------------------   NONE   GT
31         --------------------   NONE   GT
32         --------------------   NONE   GT

GTA
---
1110
1111
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
NONE
```

```
    NONE
    NONE

;
```

This example displays Prepaid SMS options for a specific Prepaid Type when the FGTTLS feature is enabled:

```
rtrv-ppsopts:ppt=2
```

```
    tekelecstp 08-12-17 15:07:01 EST  EAGLE 40.1.0

    Prepaid SMS Options
    -------------------
    BPARTYCHK     = OFF
    PPT       PCA/PCI/PCN            SSN    RI        Set ID
    ---       --------------------   ---    ---       ------
    2         PCI:    1-001-1        1      SSN       DFLT

;
```

This example displays Prepaid SMS options for all Prepaid Type when the FGTTLS feature is enabled:

```
rtrv-ppsopts
```

```
   tekelecstp 08-12-17 15:26:17 EST  EAGLE 40.1.0

    Prepaid SMS Options
    -------------------
    BPARTYCHK     = OFF
    PPT       PCI/PCN                SSN    RI        Set ID
    ---       --------------------   ----   ---       ------
    1         PCI:    1-001-1        1      SSN       DFLT
    2         --------------------   NONE   GT        DFLT
    3         --------------------   NONE   GT        DFLT
    4         --------------------   NONE   GT        DFLT
    5         --------------------   NONE   GT        DFLT
    6         --------------------   NONE   GT        DFLT
    7         --------------------   NONE   GT        DFLT
    8         --------------------   NONE   GT        DFLT
    9         --------------------   NONE   GT        DFLT
    10        --------------------   NONE   GT        DFLT
    11        --------------------   NONE   GT        DFLT
    12        --------------------   NONE   GT        DFLT
    13        --------------------   NONE   GT        DFLT
    14        --------------------   NONE   GT        DFLT
    15        --------------------   NONE   GT        DFLT
    16        --------------------   NONE   GT        DFLT
    17        --------------------   NONE   GT        DFLT
    18        --------------------   NONE   GT        DFLT
    19        --------------------   NONE   GT        DFLT
    20        --------------------   NONE   GT        DFLT
    21        --------------------   NONE   GT        DFLT
    22        --------------------   NONE   GT        DFLT
    23        --------------------   NONE   GT        DFLT
    24        --------------------   NONE   GT        DFLT
    25        --------------------   NONE   GT        DFLT
    26        --------------------   NONE   GT        DFLT
    27        --------------------   NONE   GT        DFLT
    28        --------------------   NONE   GT        DFLT
```

```
    29        --------------------   NONE   GT        DFLT
    30        --------------------   NONE   GT        DFLT
    31        --------------------   NONE   GT        DFLT
    32        --------------------   NONE   GT        DFLT

    GTA
    ---
    1122
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE
    NONE

;
```

Legend

- **PPT**—Prepaid Portability Type
- **PCI**—ITU international point code for an IN platform
- **PCN**—ITU national point code for an IN platform
- **RI**—Routing indicator for an IN platform
- **SETID**—MAP Set ID or MRN Set ID based on the RI value
- **GTA**—Entity addresses for up to 32 IN platforms. An unprovisioned GTA has a value of *none*.
- **SSN**—Subsystem Number

Related Commands

chg-ppsopts

rtrv-prefix Retrieve Prefix

Use this command to retrieve provisioned prefix information for all supported features or for a specified feature.

Parameters

feature (optional)

Feature Name. The name of an enabled controlled feature supported by this command. The parameter value must match the feature name as it is displayed in the `rtrv-ctrl-feat` command output.

Range:

*a*zzzzzzzzzzzzzzzzzzzzzzzz

1 alphabetic character and up to 24 optional alphanumeric characters and spaces, enclosed in double quotation marks. The parameter value is not case-sensitive; upper case or lower case or both can be entered.

Part or all of the feature name can be entered. If part of the feature name is specified, the entry must start with the first letter of the name, and must contain enough of the name to uniquely identify the feature. For example, there are two feature names that begin with "GSM MAP." Enough additional characters to identify which GSM MAP feature is being entered (at least "GSM MAP SR" to identify the "GSM MAP SRI Redirect" feature). This command supports the following controlled features:

- GSM MAP SRI Redirect
- ISUP NP for EPAP

Example

Retrieve provisioned prefix information for all supported features.

```
rtrv-prefix
```

Retrieve prefix information for the GSM MAP SRI Redirect feature.

```
rtrv–prefix:feature="GSM MAP SRI Redirect"
```

Dependencies

The feature name must be the name of an enabled controlled feature as it is displayed in the `rtrv-ctrl-feat` command output. The following controlled features are supported by this command:

- GSM MAP SRI Redirect
- ISUP NP for EPAP

Notes

None

Output

This example retrieves the provisioned prefix information for all features. Additional information is displayed in the function column for prefix numbers 6 and 7 of the "ISUP NP with EPAP" feature.

`rtrv-prefix`

```
    rlghncxa03w 14-09-20 09:04:14 EST  EAGLE 46.1.0

    Feature                 NUM  Prefix          Function
    ------------------------------------------------------------------------
    GSM MAP SRI Redirect      1   1a1a
    GSM MAP SRI Redirect      2   ffff
    GSM MAP SRI Redirect      3   1234
    GSM MAP SRI Redirect      26  1224
    ISUP NP with EPAP         1   3b4c
    ISUP NP with EPAP         6   886             Insertion Country Code
    ISUP NP with EPAP         7   0               Deletion Condition

    FEATPFX table is (7 of 256) 2% full

;
```

This example retrieves provisioned prefix information for the "GSM MAP SRI Redirect" feature. The table capacity for the total number of entries in use is reported, not just the number of entries displayed. No additional information is displayed in the Function column for this feature.

`rtrv-prefix:feature="GSM MAP SRI Redirect"`

```
    rlghncxa03w 14-09-20 09:04:14 EST  EAGLE 46.1.0

    Feature                 NUM  Prefix          Function
    ------------------------------------------------------------------------
    GSM MAP SRI Redirect      1   1a1a
    GSM MAP SRI Redirect      2   ffff
    GSM MAP SRI Redirect      3   1234
    GSM MAP SRI Redirect      26  1224
    GSM MAP SRI Redirect      32  1204

    FEATPFX table is (6 of 256) 2% full
;
```

Related Commands

chg-prefix, *dlt-prefix*, *rtrv-ctrl-feat*

rtrv-rmt-appl

Retrieve Remote Application

Use this command to retrieve a list of remote application assignments.

Parameters

This command has no parameters.

Example

```
rtrv-rmt-appl
```

Dependencies

None

Notes

None

Output

```
rtrv-rmt-appl
```

```
    rlghncxa03w 05-01-07 12:05:33 EST  EAGLE 31.12.0
       IPCA             SI SSN
       003-003-003       3 100, 110-119, 200
                         5

       IPCI             SI SSN
       3-003-3           3 5, 50-100, 250
                         5

       IPCN             SI SSN
       16380             3 250
                         5

       IPCN24           SI SSN
       100-200-100       5
;
```

```
rtrv-rmt-appl
```

```
    rlghncxa03w 05-01-07 12:05:33 EST  EAGLE 31.12.0
       IPCA             SI SSN
     p-001-001-001       3 5-102

       IPCI             SI SSN
    ps-2-002-2           5

       IPCN             SI SSN
     s-16380             3 250

       IPCN24           SI SSN
;
```

```
rtrv-rmt-appl
```

```
    tekelecstp 13-07-02 15:53:27 EST  45.0.0-64.69.0
    rtrv-rmt-appl
    Command entered at terminal #4.

       IPCA             SI SSN

       IPCI             SI SSN

       IPCN             SI SSN

       IPCN24           SI SSN

       IPCN16           SI SSN
       001-02-03         5

;
```

Legend

- **IPC/IPCA/IPCI/IPCN/IPCN24/IPCN16**—End node's internal point code.
- **SI**—Service indicator value that designates which user part is assigned to the IPC.
- **SSN**—SCCP subsystem number.
- Point code subtype prefixes—
  - *s*- Spare point code
  - *p*- Private point code
  - *ps*- Private and spare point code

Related Commands

dlt-rmt-appl, *ent-rmt-appl*

rtrv-rte Retrieve Route

This command is used to display the parameter information for the route entries in the database.

Asterisks can be specified to select and display only point codes that have the same point code subfields. See the "Notes" section for this command for details.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

clli (optional)

Common Language Location Identifier. This parameter specifies the Common Language Location Identifier assigned to the link.

Range:

ayyyyyyyyyy

1 alphabetic character followed by 10 alphanumeric characters

Default:

No value given

dpc (optional)

ANSI destination point code with subfields network indicator-network cluster-network cluster member (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, *, **, ****

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk values *, **, and *** are not valid for the *ni* subfield.

If ** or *** is specified for the *nc* subfield, either *, **, or *** must be specified for the *ncm* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc=000* is not valid if *ni=001-005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006-255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni= 006-255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code.

dpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

*s-, p-, ps, 0-16383, aa-zz, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

An asterisk (*) can be specified for the node (*nnnnn* or every member of a flexible point code) or for the group code (*gc*) only when group codes are present in the point codes.

An asterisk (*) can be specified either for the node or for the group code, but not both.

prefix—s-, p-, ps-

*nnnnn—0-16383, **

*gc—aa-zz, **

m1-m2-m3-m4—0-14 for each member; values must sum to 14; or *-*-*-* when the point code includes a group code.

dpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*. The *prefix* indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*). The *prefix* indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p
un---000---127
sna---000---15
mna---000---31

lsn (optional)

Linkset name

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Default:

Display all

mode (optional)

The method used to display the output report.

Range:

full

pcst (optional)

Point code subtype. If selected, this parameter causes the command to display only the point codes that have no subtype prefix, or display only the point codes that have the specified subtype prefix.

Range:

none

Display all point codes that do not have subtype prefixes

s

Display only spare point codes

p

Display only private point codes

ps

Display only private and spare point codes

pctype (optional)

Point code domain. This parameter displays the point codes of the specified domain type.

Range:

ansi

itui

itun

itun24

Example

```
rtrv-rte
rtrv-rte:dpc=240-012-004:lsn=ls000001
rtrv-rte:clli=dp1:lsn=ls000001
rtrv-rte:dpc=140-012-008
rtrv-rte:clli=dp1rtrv-rte
rtrv-rte:dpcn=3-15-15-15-fr
rtrv-rte:lsn=e1m3itun
rtrv-rte:dpcn24=10-100-14
rtrv-rte:pcst=s
rtrv-rte:pcst=none
rtrv-rte:pctype=ansi
rtrv-rte:pctype=itun24:pcst=none
rtrv-rte:dpc=1-1-**
rtrv-rte:dpc=1-1-***
rtrv-rte:dpc=1-**-*
rtrv-rte:dpc=1-***-*
rtrv-rte:dpc=1-**-*:lsn=ab64
rtrv-rte:dpc=1-**-*:lsn=xx64
rtv-rte:dpcn=1000-*
rtrv-rte:dpcn=1000-*:lsn=dpcn64
rtrv-rte:dpcn=p-*-aa
rtrv-rte:dpcn=s-9000-*
rtrv-rte:pctype=itun16:pcst=none
```

Dependencies

The value of the dcp/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must exist in the Destination Point Code table.

The value specified for the lsn parameter must exist in the routeset of the destination if the dpc parameter is specified.

If the dpcn parameter is specified, its format must match the format that was assigned with the `chg-stpopts` command npcfmti parameter.

If the pctype parameter has a value of *ansi* or *itun24*, then the pcst parameter cannot have a value of *s* or *ps*.

The pctype and pcst parameters cannot be specified in the same command with the destination point code, alias point code, secondary point code, clli, msar=only, and ncai parameters.

When using network routing, if the destination point code has a value of * in the *nc* field, the *ncm* field must also be * (for example, dpc=21-*-*).

The value of the dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be a valid point code.

If the clli parameter is specified, then the value must exist in the Route table.

All link sets currently assigned to a route set must still be equipped.

All link sets must be defined in the route set.

The database must be consistent.

The value specified for the lsn parameter must already be assigned to the specified routeset.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Asterisks in ANSI Point Codes

Two asterisks in the *ncm* subfield of a cluster point code produces a summary report that shows all point code destinations residing in the given cluster (for example, *20-2-**).This does not include the specified cluster point code (for example, *20-2-**).

Three asterisks in the *ncm* subfield of a cluster point code (for example, *20-2-***) produces a summary report that shows all point code destinations residing in the given network cluster. The specified cluster point code is also displayed if it exists.

If the linkset name is specified and the dpc/dpca parameter *ncm* subfield is specified with asterisks, all route entries are displayed that have the specified linkset and that match the specified dpc/dpca parameter subfield values.

Asterisks in ITU-N Duplicate Point Codes and Flexible Format Point Codes

When the ITU Duplicate Point Code (ITUDUPPC) feature is on,

- An asterisk (*) can be specified for the group code of an ITU-N duplicate point code to display all ITU-N point codes that have the specified node value (for example, *10101-**).
- An asterisk (*) can be specified for the node of an ITU-N duplicate point code to display all ITU-N point codes that have the specified group code value (for example, **-ab*).

When the ITUDUPPC feature is on and the STP flexible point code option (npcfmti) is used to change the ITU-N point format to four members (*m1-m2-m3-m4-gc*),

- An asterisk (*) can be specified for the group code of an ITU-N flexible point code to display all ITU-N point codes that have the specified point code value (for example, 15)
- An asterisk (*) can be specified for every member of the ITU-N flexible point code to display all ITU-N flexible point codes that have the same group code (for example, *, **-15-*-*-*-ab* is not valid).

Output

In these command output examples, the point code prefixes *s-*, *p-*, and *ps-* indicate that the point code is a spare point code, a private point code, or a private and spare point, respectively.

Abbreviated output is indicated by 3 vertical dots as shown:

.

.

.

This example displays output when the Route table is provisioned. The example displays abbreviated output.

`rtrv-rte`

```
tekelecstp 10-10-15 14:52:32 EST  EAGLE 43.0.0
rtrv-rte
Command entered at terminal #4.
Extended Processing Time may be Required

   DPCA             ALIASI           ALIASN/N24    RTX   CLLI
                                     LSN           RC    APCA
   001-001-000   --------------   --------------   No    stp1
                                     e2e1          10    001-001-000
   003-001-000   --------------   --------------   No    mstp
                                     e2e3          10    003-001-000
   004-001-000   --------------   --------------   No    stp4
                                     e2e4          10    004-001-000
   007-001-000   --------------   --------------   No    stp7
                                     e2e7          10    007-001-000
   002-101-001   --------------   --------------   No    ssp201
                                     e2m1s1        10    002-101-001
                                     e2e3          20    003-001-000
   002-102-001   --------------   --------------   No    ssp202
                                     e2m1s2        10    002-102-001
                                     e2e3          20    003-001-000
   001-101-001   --------------   --------------   No    ssp101
                                     e2e1          10    001-001-000
                                     e2e4          20    004-001-000
                                     e2e3          30    003-001-000
   .
   .
   .
   200-200-*     --------------   --------------   No    cluster2
   005-006-001   --------------      005-006-001   No    -----------
   001-001-001   --------------   --------------   No    dstn01
                                     lsn01         10    001-001-001
 p-001-001-001   --------------   --------------   No    dstn01p
   001-001-002      1-001-2       --------------   No    dstn02
                                     lsn02         10    001-001-002
 p-001-001-002      1-011-2       --------------   No    dstn02p
   001-001-003    s-1-001-3       --------------   No    dstn03
                                     lsn03         10    001-001-003
 p-001-001-003    s-1-011-3       --------------   No    dstn03p
   001-001-004   --------------      02060-aa      No    dstn04
                                     lsn04         10    001-001-004
 p-001-001-004   --------------      01060-aa      No    dstn04p
   001-070-001   --------------   --------------   No    tgtansi001
```

```
                                    lsn01         10    001-001-001
                                    lsn02         20    001-001-002
                                    lsn03         30    001-001-003
                                    lsn04         40    001-001-004
     .
     .
     .
     200-002-001   --------------   --------------   Yes   rtxroute001
                                    lsn12         10    001-002-004
     040-001-*     --------------   --------------   No    myncaibeno
     040-010-*     --------------   --------------   No    myncaibeno2
     010-*-*       --------------   --------------   No    -----------
     040-*-*       --------------   --------------   No    -----------
     040-001-001   --------------   --------------   No    noncluster1
     040-001-002   --------------   --------------   No    noncluster2

     DPCI             ALIASA           ALIASN/N24    RTX   CLLI
                                       LSN           RC    APCI
   s-4-002-0          010-001-001    s-08228-aa      No    -----------
     2-010-0        --------------   --------------   No    dstn13
                                    lsn13         10    2-010-0
   p-2-010-0        --------------   --------------   No    dstn13p
     2-010-1          002-010-001    --------------   No    dstn14
                                    lsn14         10    2-010-1
   p-2-010-1          002-100-001    --------------   No    dstn14p
     2-010-2        --------------      04178-aa      No    dstn15
                                       lsn15         10    2-010-2
   p-2-010-2        --------------      08178-aa      No    dstn15p
     2-010-3        --------------    s-04179-aa      No    dstn16
                                       lsn16         10    2-010-3
   p-2-010-3        --------------    s-08179-aa      No    dstn16p
     2-070-1        --------------   --------------   No    tgtitui001
                                    lsn13         10    2-010-0
                                    lsn14         20    2-010-1
                                    lsn15         30    2-010-2
                                    lsn16         40    2-010-3
     2-010-4        --------------      002-010-004   No    dstn17
                                       lsn17         10    2-010-4
   p-2-010-4        --------------      002-100-004   No    dstn17p
     .
     .
     .
   s-2-020-0        --------------   --------------   No    dstn21
                                    lsn21         10    s-2-020-0
  ps-2-020-0        --------------   --------------   No    dstn21p
   s-2-020-1          002-020-001    --------------   No    dstn22
                                    lsn22         10  s-2-020-1
  ps-2-020-1          002-200-001    --------------   No    dstn22p
   s-2-020-2        --------------      04258-aa      No    dstn23
                                       lsn23         10  s-2-020-2
  ps-2-020-2        --------------      08258-aa      No    dstn23p
   s-2-020-3        --------------    s-04259-aa      No    dstn24
                                       lsn24         10  s-2-020-3
  ps-2-020-3        --------------    s-08259-aa      No    dstn24p
   s-2-070-3        --------------   --------------   No    tgtitui003
                                    lsn21         10  s-2-020-0
                                    lsn22         20  s-2-020-1
                                    lsn23         30  s-2-020-2
                                    lsn24         40  s-2-020-3
     .
     .
     .

     DPCI             ALIASI           ALIASN/N24    RTX   CLLI
```

```
                                    LSN           RC    APCI
   3-030-0       s-3-030-0       --------------   No    dstn29
                                    lsn29         10    3-030-0
 p-3-030-0       s-3-031-0       --------------   No    dstn29p
   3-030-1       s-3-030-1          06385-aa      No    dstn30
                                    lsn30         10    3-030-1
 p-3-030-1       s-3-031-1          07385-aa      No    dstn30p
   3-030-2       s-3-030-2        s-06386-aa      No    dstn31
                                    lsn31         10    3-030-2
 p-3-030-2       s-3-031-2        s-07386-aa      No    dstn31p
   3-070-1       s-3-070-1       --------------   No    tgtitui005
                                    lsn29         10    3-030-0
                                    lsn30         20    3-030-1
                                    lsn31         30    3-030-2
   3-030-3       s-3-030-3          003-030-003   No    dstn32
                                    lsn32         10    3-030-3
 p-3-030-3       s-3-031-3          003-031-003   No    dstn32p
   3-070-2       s-3-070-2       --------------   No    tgtitui006
                                    lsn32         10    3-030-3
                                    lsn33         20    3-030-4
                                    lsn34         30    3-030-5
 s-3-040-2         3-040-2       --------------   No    dstn35
                                    lsn35         10  s-3-040-2
ps-3-040-2         3-041-2       --------------   No    dstn35p
 s-3-040-3         3-040-3          06467-aa      No    dstn36
                                    lsn36         10  s-3-040-3
ps-3-040-3         3-041-3          07467-aa      No    dstn36p
 s-3-040-4         3-040-4        s-06468-aa      No    dstn37
                                    lsn37         10  s-3-040-4
ps-3-040-4         3-041-4        s-07468-aa      No    dstn37p
 s-3-040-5         3-040-5          003-040-005   No    dstn38
                                    lsn38         10  s-3-040-5
ps-3-040-5         3-041-5          003-041-005   No    dstn38p

   DPCI            ALIASN           ALIASN        RTX   CLLI
                                    LSN           RC    APCI
   3-030-4       s-06388-aa         06388-aa      No    dstn33
                                    lsn33         10    3-030-4
 p-3-030-4       s-07388-aa         07388-aa      No    dstn33p
   3-030-5         06389-aa       s-06389-aa      No    dstn34
                                    lsn34         10    3-030-5
 p-3-030-5         07389-aa       s-07389-aa      No    dstn34p
 s-3-040-6       s-06471-aa         06471-aa      No    dstn39
                                    lsn39         10  s-3-040-6
ps-3-040-6       s-07471-aa         07471-aa      No    dstn39p
 s-3-040-7         06472-aa       s-06472-aa      No    dstn40
                                    lsn40         10  s-3-040-7
ps-3-040-7         07472-aa       s-07472-aa      No    dstn40p

   DPCN            ALIASA           ALIASI        RTX   CLLI
                                    LSN           RC    APCN
   06157-aa        020-005-002   --------------   No    -----------
   08192-aa      --------------   --------------   No    dstn41
                                    lsn41         10    08192-aa
 p-08192-aa      --------------   --------------   No    dstn41p
   08193-aa        004-000-001   --------------   No    dstn42
                                    lsn42         10    08193-aa
 p-08193-aa        004-200-001   --------------   No    dstn42p
   08194-aa      --------------      4-000-2       No    dstn43
                                    lsn43         10    08194-aa
 p-08194-aa      --------------      4-040-2       No    dstn43p
   08195-aa      --------------    s-4-000-3       No    dstn44
                                    lsn44         10    08195-aa
 p-08195-aa      --------------    s-4-040-3       No    dstn44p
```

```
   08753-aa      --------------   --------------   No    tgtitun001
                                     lsn41         10    08192-aa
                                     lsn42         20    08193-aa
                                     lsn43         30    08194-aa
                                     lsn44         30    08195-aa
   08196-aa         004-000-004      4-000-4       No    dstn45
                                     lsn45         10    08196-aa
 p-08196-aa         004-200-004      4-040-4       No    dstn45p
   08197-aa         004-000-005    s-4-000-5       No    dstn46
                                     lsn46         10    08197-aa
 p-08197-aa         004-200-005    s-4-040-5       No    dstn46p
   08754-aa      --------------   --------------   No    tgtitun002
                                     lsn45         10    08196-aa
                                     lsn46         20    08197-aa
                                     lsn47         30    08198-aa
                                     lsn48         30    08199-aa
 s-08272-aa      --------------   --------------   No    dstn49
                                     lsn49         10  s-08272-aa
ps-08272-aa      --------------   --------------   No    dstn49p
 s-08273-aa         004-010-001   --------------   No    dstn50
                                     lsn50         10  s-08273-aa
ps-08273-aa         004-200-010   --------------   No    dstn50p
 s-08274-aa      --------------      4-010-2       No    dstn51
                                     lsn51         10  s-08274-aa
ps-08274-aa      --------------      4-050-2       No    dstn51p
 s-08275-aa      --------------    s-4-010-3       No    dstn52
                                     lsn52         10  s-08275-aa
ps-08275-aa      --------------    s-4-050-3       No    dstn52p
   .
   .
   .

   DPCN             ALIASI           ALIASI        RTX   CLLI
                                     LSN           RC    APCN
   08198-aa       s-4-000-6          4-000-6       No    dstn47
                                     lsn47         10    08198-aa
 p-08198-aa       s-4-040-6          4-040-6       No    dstn47p
   08199-aa         4-000-7        s-4-000-7       No    dstn48
                                     lsn48         10    08199-aa
 p-08199-aa         4-040-7        s-4-040-7       No    dstn48p
 s-08278-aa       s-4-010-6          4-010-6       No    dstn55
                                     lsn55         10  s-08278-aa
ps-08278-aa       s-4-050-6          4-050-6       No    dstn55p
 s-08279-aa         4-010-7        s-4-010-7       No    dstn56
                                     lsn56         10  s-08279-aa
ps-08279-aa         4-050-7        s-4-050-7       No    dstn56p
 s-08379-aa       s-4-058-7          4-058-7       Yes   rtxroute003
                                     lsn55         80  s-08278-aa
   08198-fr       s-4-005-7          4-005-7       No    dstn47dupfr
   08198-tk         4-006-0        s-4-006-0       No    dstn47duptk

   DPCN             ALIASN           ALIASI        RTX   CLLI
                                     LSN           RC    APCN
   12688-aa       s-12688-aa       --------------  No    dstn57
                                     lsn57         10    12688-aa
 p-12688-aa       s-13688-aa       --------------  No    dstn57p
   12689-aa       s-12689-aa         6-050-1       No    dstn58
                                     lsn58         10    12689-aa
 p-12689-aa       s-13689-aa         6-060-1       No    dstn58p
   12690-aa       s-12690-aa       s-6-050-2       No    dstn59
                                     lsn59         10    12690-aa
 p-12690-aa       s-13690-aa       s-6-060-2       No    dstn59p
 s-12691-aa         12691-aa       --------------  No    dstn60
                                     lsn60         10  s-12691-aa
```

```
    ps-12691-aa         13691-aa      --------------   No    dstn60p
     s-12692-aa         12692-aa         6-050-4       No    dstn61
                                         lsn61         10  s-12692-aa
    ps-12692-aa         13692-aa         6-060-4       No    dstn61p
     s-12693-aa         12693-aa       s-6-050-5       No    dstn62
                                         lsn62         10  s-12693-aa
    ps-12693-aa         13693-aa       s-6-060-5       No    dstn62p
     s-08272-fr         08300-fr      --------------   No    dstn49dupfr
     s-08272-tk         08300-tk         4-006-7       No    dstn49duptk
       DPCN24           ALIASA           ALIASI        RTX   CLLI
                                         LSN           RC    APCN24
       003-003-004      003-003-003      3-003-4       No    -----------
       006-005-001   --------------   --------------   No    dstn63
                                         lsn63         10    006-005-001
     p-006-005-001   --------------   --------------   No    dstn63p
       006-005-002      006-005-002   --------------   No    dstn64
                                         lsn64         10    006-005-002
     p-006-005-002      006-005-020   --------------   No    dstn64p
       006-005-003   --------------      6-005-3       No    dstn65
                                         lsn65         10    006-005-003
     p-006-005-003   --------------      6-050-3       No    dstn65p
       006-070-001   --------------   --------------   No    tgtitun24a
                                         lsn63         10    006-005-001
                                         lsn64         20    006-005-002
                                         lsn65         30    006-005-003
       006-005-004   --------------    s-6-005-4       No    dstn66
                                         lsn66         10    006-005-004
     p-006-005-004   --------------    s-6-050-4       No    dstn66p
       006-005-005      006-005-005      6-005-5       No    dstn67
                                         lsn67         10    006-005-005
     p-006-005-005      006-005-050      6-050-5       No    dstn67p
       006-070-002   --------------   --------------   No    tgtitun24b
                                         lsn66         10    006-005-004
                                         lsn67         20    006-005-005

;
```

This example displays the output when the Route table is empty:

`rtrv-rte`

```
    tekelecstp 08-01-01 12:31:35 EST  EAGLE 38.0.0
    rtrv-rte
    Command entered at terminal #4.

    No routes meeting the requested criteria were found

;
```

This example retrieves a route by linkset name:

`rtrv-rte:lsn=e2e1`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:lsn=e2e1
    Command entered at terminal #4.
    Extended Processing Time may be Required

    LSN           DPCA          RC
    e2e1          001-001-000   10
```

```
                  001-101-001   10
                  004-101-001   20
                  100-100-*     10
                  100-100-001   10

;
```

This example retrieves a route by linkset name and destination point code:

`rtrv-rte:dpc=4-101-1:lsn=e2e1`

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0
    LSN           DPCA          RC
    e2e1          004-101-001   20
;
```

In this example, the `chg-stpopts:npcfmti` value is set to 7-4-3:

`rtrv-rte:dpcn=127-15-7`

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCN            ALIASA          ALIASI       LSN        RC    APCN
       127-15-7     --------------  --------------  ls1        10    100-10-2
                                                   RTX: No    CLLI: -----------

;
```

In this example, the `chg-stptopts:npcfmti` value is set to 11-1-1-1 and the ITUDUPPC feature is on:

`rtrv-rte:lsn=ls3`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:lsn=ls3
    Command entered at terminal #4.
    Extended Processing Time may be Required

    LSN           DPCN          RC
    lsn47         1024-1-1-0-aa 10
                  1094-0-1-0-aa 30

;
```

In this example, the `chg-stpopts:npcfmti` value is set to 2-4-4-4 and the ITUDUPPC feature is on:

`rtrv-rte:dpcn=s-2-00-05-00-tk`

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCN             ALIASN           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
     s-2-00-05-00-tk    2-00-06-12-tk    4-006-7       No    dstn49duptk

;
```

In this example, the `chg-stpopts:npcfmti` value is set to 11-1-1-1 and the ITUDUPPC feature is on:

`rtrv-rte:lsn=e1m3itun`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:lsn=e1m3itun
    Command entered at terminal #4.
    Extended Processing Time may be Required

    LSN           DPCN          RC
    e1m3itun      2047-1-1-1-pe 10

;
```

This example contains a route with 24-bit ITU-N point codes:

`rtrv-rte:lsn=lsn66`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:lsn=lsn66
    Command entered at terminal #4.
    Extended Processing Time may be Required

    LSN           DPCN24        RC
    lsn66         006-005-004   10
                  006-070-002   10

;
```

This example displays ANSI point codes:

`rtrv-rte:pctype=ansi`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pctype=ansi
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA             ALIASI           ALIASN/N24    RTX   CLLI
                                         LSN           RC    APCA
       001-001-000   --------------   --------------   No    stp1
                                         e2e1          10    001-001-000
       003-001-000   --------------   --------------   No    mstp
                                         e2e3          10    003-001-000
       004-001-000   --------------   --------------   No    stp4
                                         e2e4          10    004-001-000
       007-001-000   --------------   --------------   No    stp7
                                         e2e7          10    007-001-000
       002-101-001   --------------   --------------   No    ssp201
                                         e2m1s1        10    002-101-001
                                         e2e3          20    003-001-000
       002-102-001   --------------   --------------   No    ssp202
                                         e2m1s2        10    002-102-001
                                         e2e3          20    003-001-000
       001-101-001   --------------   --------------   No    ssp101
                                         e2e1          10    001-001-000
                                         e2e4          20    004-001-000
                                         e2e3          30    003-001-000
       003-101-001   --------------   --------------   No    ssp301
```

```
                                   e2m1s3        10    003-101-001
                                   e2e3          20    003-001-000
     004-101-001   --------------   --------------   No    ssp401
                                   e2e4          10    004-001-000
                                   e2e1          20    001-001-000
     007-101-001   --------------   --------------   No    ssp701
                                   e2e7          10    007-001-000
     100-100-*     --------------   --------------   No    cluster1
                                   e2e1          10    001-001-000
                                   e2e3          20    003-001-000
     100-100-001   --------------   --------------   No    -----------
                                   e2e1          10    001-001-000
     200-200-*     --------------   --------------   No    cluster2
     005-006-001   --------------      005-006-001   No    -----------
     001-001-001   --------------   --------------   No    dstn01
                                      lsn01         10    001-001-001
   p-001-001-001   --------------   --------------   No    dstn01p
     001-001-002      1-001-2       --------------   No    dstn02
                                      lsn02         10    001-001-002
   p-001-001-002      1-011-2       --------------   No    dstn02p
     001-001-003    s-1-001-3       --------------   No    dstn03
                                      lsn03         10    001-001-003
   p-001-001-003    s-1-011-3       --------------   No    dstn03p
     001-001-004   --------------      0257-1-0-0-aa No    dstn04
                                      lsn04         10    001-001-004
   p-001-001-004   --------------      0132-1-0-0-aa No    dstn04p
     001-070-001   --------------   --------------   No    tgtansi001
                                      lsn01         10    001-001-001
                                      lsn02         20    001-001-002
                                      lsn03         30    001-001-003
                                      lsn04         40    001-001-004
     001-001-005   --------------    s-0257-1-0-1-aa No    dstn05
                                      lsn05         10    001-001-005
   p-001-001-005   --------------    s-0132-1-0-1-aa No    dstn05p
     001-001-006   --------------      001-001-006   No    dstn06
                                      lsn06         10    001-001-006
   p-001-001-006   --------------      001-011-006   No    dstn06p
     001-001-007      1-001-7          0257-1-1-1-aa No    dstn07
                                      lsn07         10    001-001-007
   p-001-001-007      1-011-7          0132-1-1-1-aa No    dstn07p
     001-002-000      1-002-0        s-0258-0-0-0-aa No    dstn08
                                      lsn08         10    001-002-000
   p-001-002-000      1-012-0        s-0133-0-0-0-aa No    dstn08p
     001-070-002   --------------   --------------   No    tgtansi002
                                      lsn05         10    001-001-005
                                      lsn06         20    001-001-006
                                      lsn07         30    001-001-007
                                      lsn08         40    001-002-000
     001-002-001    s-1-002-1          0258-0-0-1-aa No    dstn09
                                      lsn09         10    001-002-001
   p-001-002-001    s-1-012-1          0133-0-0-1-aa No    dstn09p
     001-002-002    s-1-002-2        s-0258-0-1-0-aa No    dstn10
                                      lsn10         10    001-002-002
   p-001-002-002    s-1-012-2        s-0133-0-1-0-aa No    dstn10p
     001-002-003      1-002-3          001-002-003   No    dstn11
                                      lsn11         10    001-002-003
   p-001-002-003      1-012-3          001-012-003   No    dstn11p
     001-002-004    s-1-002-4          001-002-004   No    dstn12
                                      lsn12         10    001-002-004
   p-001-002-004    s-1-012-4          001-012-004   No    dstn12p
     001-070-003   --------------   --------------   No    tgtansi003
                                      lsn09         10    001-002-001
                                      lsn10         20    001-002-002
                                      lsn11         30    001-002-003
```

```
                                        lsn12         40    001-002-004
      200-002-001   --------------   --------------   Yes   rtxroute001
      040-001-*     --------------   --------------   No    myncaibeno
      040-010-*     --------------   --------------   No    myncaibeno2
      010-*-*       --------------   --------------   No    -----------
      040-*-*       --------------   --------------   No    -----------
      040-001-001   --------------   --------------   No    noncluster1
      040-001-002   --------------   --------------   No    noncluster2

;
```

This example displays ITU-I point codes:

`rtrv-rte:pctype=itui`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pctype=itui
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCI             ALIASA          ALIASN/N24    RTX   CLLI
                                        LSN           RC    APCI
     s-4-002-0          010-001-001    s-1028-1-0-0-aa No    -----------
       2-010-0       --------------   --------------   No    dstn13
                                        lsn13         10    2-010-0
     p-2-010-0       --------------   --------------   No    dstn13p
       2-010-1          002-010-001   --------------   No    dstn14
                                        lsn14         10    2-010-1
     p-2-010-1          002-100-001   --------------   No    dstn14p
       2-010-2       --------------      0522-0-1-0-aa No    dstn15
                                        lsn15         10    2-010-2
     p-2-010-2       --------------      1022-0-1-0-aa No    dstn15p
       2-010-3       --------------    s-0522-0-1-1-aa No    dstn16
                                        lsn16         10    2-010-3
     p-2-010-3       --------------    s-1022-0-1-1-aa No    dstn16p
       2-070-1       --------------   --------------   No    tgtitui001
                                        lsn13         10    2-010-0
                                        lsn14         20    2-010-1
                                        lsn15         30    2-010-2
                                        lsn16         40    2-010-3
       2-010-4       --------------      002-010-004   No    dstn17
                                        lsn17         10    2-010-4
     p-2-010-4       --------------      002-100-004   No    dstn17p
       2-010-5          002-010-005      0522-1-0-1-aa No    dstn18
                                        lsn18         10    2-010-5
     p-2-010-5          002-100-005      1022-1-0-1-aa No    dstn18p
       2-010-6          002-010-006    s-0522-1-1-0-aa No    dstn19
                                        lsn19         10    2-010-6
     p-2-010-6          002-100-006    s-1022-1-1-0-aa No    dstn19p
       2-010-7          002-010-007      002-010-007   No    dstn20
                                        lsn20         10    2-010-7
     p-2-010-7          002-100-007      002-100-007   No    dstn20p
       2-070-2       --------------   --------------   No    tgtitui002
                                        lsn17         10    2-010-4
                                        lsn18         20    2-010-5
                                        lsn19         30    2-010-6
                                        lsn20         40    2-010-7
     s-2-020-0       --------------   --------------   No    dstn21
                                        lsn21         10  s-2-020-0
    ps-2-020-0       --------------   --------------   No    dstn21p
     s-2-020-1          002-020-001   --------------   No    dstn22
                                        lsn22         10  s-2-020-1
```

```
ps-2-020-1          002-200-001   --------------   No    dstn22p
 s-2-020-2       --------------      0532-0-1-0-aa No    dstn23
                                     lsn23          10  s-2-020-2
ps-2-020-2       --------------      1032-0-1-0-aa No    dstn23p
 s-2-020-3       --------------    s-0532-0-1-1-aa No    dstn24
                                     lsn24          10  s-2-020-3
ps-2-020-3       --------------    s-1032-0-1-1-aa No    dstn24p
 s-2-070-3       --------------   --------------   No    tgtitui003
                                     lsn21          10  s-2-020-0
                                     lsn22          20  s-2-020-1
                                     lsn23          30  s-2-020-2
                                     lsn24          40  s-2-020-3
 s-2-020-4       --------------      002-020-004    No    dstn25
                                     lsn25          10  s-2-020-4
ps-2-020-4       --------------      002-200-004    No    dstn25p
 s-2-020-5          002-020-005      0532-1-0-1-aa No    dstn26
                                     lsn26          10  s-2-020-5
ps-2-020-5       --------------   --------------   No    dstn26p
 s-2-020-6          002-020-006    s-0532-1-1-0-aa No    dstn27
                                     lsn27          10  s-2-020-6
ps-2-020-6          002-200-005      1032-1-0-1-aa No    dstn27p
 s-2-020-7          002-020-007      002-020-007    No    dstn28
                                     lsn28          10  s-2-020-7
ps-2-020-7          002-200-007      002-200-007    No    dstn28p
 s-2-070-4       --------------   --------------   No    tgtitui004
                                     lsn25          10  s-2-020-4
                                     lsn26          20  s-2-020-5
                                     lsn27          30  s-2-020-6
                                     lsn28          40  s-2-020-7
 s-3-070-3       --------------   --------------   No    tgtitui007
                                     lsn35          10  s-3-040-2
                                     lsn36          20  s-3-040-3
                                     lsn37          30  s-3-040-4
 s-3-070-4       --------------   --------------   No    tgtitui008
                                     lsn38          10  s-3-040-5
                                     lsn39          20  s-3-040-6
                                     lsn40          30  s-3-040-7
 s-2-029-6          002-029-006    s-0533-1-0-1-aa Yes   rtxroute002
                                     lsn26          5   s-2-020-5

   DPCI              ALIASI           ALIASN/N24    RTX   CLLI
                                      LSN           RC    APCI
   3-030-0         s-3-030-0       --------------   No    dstn29
                                     lsn29          10    3-030-0
 p-3-030-0         s-3-031-0       --------------   No    dstn29p
   3-030-1         s-3-030-1          0798-0-0-1-aa No    dstn30
                                     lsn30          10    3-030-1
 p-3-030-1         s-3-031-1          0923-0-0-1-aa No    dstn30p
   3-030-2         s-3-030-2       s-0798-0-1-0-aa No    dstn31
                                     lsn31          10    3-030-2
 p-3-030-2         s-3-031-2       s-0923-0-1-0-aa No    dstn31p
   3-070-1         s-3-070-1       --------------   No    tgtitui005
                                     lsn29          10    3-030-0
                                     lsn30          20    3-030-1
                                     lsn31          30    3-030-2
   3-030-3         s-3-030-3          003-030-003    No    dstn32
                                     lsn32          10    3-030-3
 p-3-030-3         s-3-031-3          003-031-003    No    dstn32p
   3-070-2         s-3-070-2       --------------   No    tgtitui006
                                     lsn32          10    3-030-3
                                     lsn33          20    3-030-4
                                     lsn34          30    3-030-5
 s-3-040-2           3-040-2       --------------   No    dstn35
                                     lsn35          10  s-3-040-2
```

```
    ps-3-040-2          3-041-2       --------------   No    dstn35p
     s-3-040-3          3-040-3          0808-0-1-1-aa No    dstn36
                                         lsn36          10  s-3-040-3
    ps-3-040-3          3-041-3          0933-0-1-1-aa No    dstn36p
     s-3-040-4          3-040-4        s-0808-1-0-0-aa No    dstn37
                                         lsn37          10  s-3-040-4
    ps-3-040-4          3-041-4        s-0933-1-0-0-aa No    dstn37p
     s-3-040-5          3-040-5          003-040-005   No    dstn38
                                         lsn38          10  s-3-040-5
    ps-3-040-5          3-041-5          003-041-005   No    dstn38p

       DPCI             ALIASN           ALIASN        RTX   CLLI
                                         LSN           RC    APCI
       3-030-4        s-0798-1-0-0-aa    0798-1-0-0-aa No    dstn33
                                         lsn33          10    3-030-4
     p-3-030-4        s-0923-1-0-0-aa    0923-1-0-0-aa No    dstn33p
       3-030-5          0798-1-0-1-aa  s-0798-1-0-1-aa No    dstn34
                                         lsn34          10    3-030-5
     p-3-030-5          0923-1-0-1-aa  s-0923-1-0-1-aa No    dstn34p
     s-3-040-6        s-0808-1-1-1-aa    0808-1-1-1-aa No    dstn39
                                         lsn39          10  s-3-040-6
    ps-3-040-6        s-0933-1-1-1-aa    0933-1-1-1-aa No    dstn39p
     s-3-040-7          0809-0-0-0-aa  s-0809-0-0-0-aa No    dstn40
                                         lsn40          10  s-3-040-7
    ps-3-040-7          0934-0-0-0-aa  s-0934-0-0-0-aa No    dstn40p

;
```

This example displays ITU-N point codes:

`rtrv-rte:pctype=itun`

```
    eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pctype=itun
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCN             ALIASA           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
       06157-aa         020-005-002   --------------   No    -----------
       08192-aa      --------------   --------------   No    dstn41
                                         lsn41          10    08192-aa
     p-08192-aa      --------------   --------------   No    dstn41p
       08193-aa         004-000-001   --------------   No    dstn42
                                         lsn42          10    08193-aa
     p-08193-aa         004-200-001   --------------   No    dstn42p
       08194-aa      --------------      4-000-2       No    dstn43
                                         lsn43          10    08194-aa
     p-08194-aa      --------------      4-040-2       No    dstn43p
       08195-aa      --------------    s-4-000-3       No    dstn44
                                         lsn44          10    08195-aa
     p-08195-aa      --------------    s-4-040-3       No    dstn44p
       08753-aa      --------------   --------------   No    tgtitun001
                                         lsn41          10    08192-aa
                                         lsn42          20    08193-aa
                                         lsn43          30    08194-aa
                                         lsn44          30    08195-aa
       08196-aa         004-000-004      4-000-4       No    dstn45
                                         lsn45          10    08196-aa
     p-08196-aa         004-200-004      4-040-4       No    dstn45p
       08197-aa         004-000-005    s-4-000-5       No    dstn46
                                         lsn46          10    08197-aa
```

```
  p-08197-aa         004-200-005    s-4-040-5       No    dstn46p
    08754-aa       --------------   --------------  No    tgtitun002
                                      lsn45         10    08196-aa
                                      lsn46         20    08197-aa
                                      lsn47         30    08198-aa
                                      lsn48         30    08199-aa
  s-08272-aa       --------------   --------------  No    dstn49
                                      lsn49         10  s-08272-aa
 ps-08272-aa       --------------   --------------  No    dstn49p
  s-08273-aa         004-010-001    --------------  No    dstn50
                                      lsn50         10  s-08273-aa
 ps-08273-aa         004-200-010    --------------  No    dstn50p
  s-08274-aa       --------------      4-010-2      No    dstn51
                                      lsn51         10  s-08274-aa
 ps-08274-aa       --------------      4-050-2      No    dstn51p
  s-08275-aa       --------------    s-4-010-3      No    dstn52
                                      lsn52         10  s-08275-aa
 ps-08275-aa       --------------    s-4-050-3      No    dstn52p
  s-08755-aa       --------------   --------------  No    tgtitun003
                                      lsn49         10  s-08272-aa
                                      lsn50         20  s-08273-aa
                                      lsn51         30  s-08274-aa
                                      lsn52         30  s-08275-aa
  s-08276-aa         004-010-004      4-010-4      No    dstn53
                                      lsn53         10  s-08276-aa
 ps-08276-aa         004-200-040      4-050-4      No    dstn53p
  s-08277-aa         004-010-005    s-4-010-5      No    dstn54
                                      lsn54         10  s-08277-aa
 ps-08277-aa         004-200-050    s-4-050-5      No    dstn54p
  s-08756-aa       --------------   --------------  No    tgtitun004
                                      lsn53         10  s-08276-aa
                                      lsn54         20  s-08277-aa
                                      lsn55         30  s-08278-aa
                                      lsn56         30  s-08279-aa
    08757-aa       --------------   --------------  No    tgtitun005
                                      lsn57         10    12688-aa
                                      lsn58         20    12689-aa
                                      lsn59         30    12690-aa
  s-08758-aa       --------------   --------------  No    tgtitun006
                                      lsn60         10  s-12691-aa
                                      lsn61         20  s-12692-aa
                                      lsn62         30  s-12693-aa
    08199-fr       --------------    s-4-006-1      No    dstn48dupfr
    08199-tk       --------------      4-006-2      No    dstn48duptk
    08198-nz       --------------   --------------  No    dstn47dupnz
  s-08273-fr       --------------      4-006-3      No    dstn50dupfr

    DPCN             ALIASI           ALIASI        RTX   CLLI
                                      LSN           RC    APCN
    08198-aa        s-4-000-6         4-000-6       No    dstn47
                                      lsn47         10    08198-aa
  p-08198-aa        s-4-040-6         4-040-6       No    dstn47p
    08199-aa          4-000-7       s-4-000-7       No    dstn48
                                      lsn48         10    08199-aa
  p-08199-aa          4-040-7       s-4-040-7       No    dstn48p
  s-08278-aa        s-4-010-6         4-010-6       No    dstn55
                                      lsn55         10  s-08278-aa
 ps-08278-aa        s-4-050-6         4-050-6       No    dstn55p
  s-08279-aa          4-010-7       s-4-010-7       No    dstn56
                                      lsn56         10  s-08279-aa
 ps-08279-aa          4-050-7       s-4-050-7       No    dstn56p
  s-08379-aa        s-4-058-7         4-058-7       Yes   rtxroute003
                                      lsn55         80  s-08278-aa
    08198-fr        s-4-005-7         4-005-7       No    dstn47dupfr
```

```
       08198-tk         4-006-0        s-4-006-0       No    dstn47duptk

       DPCN             ALIASN           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
       12688-aa       s-12688-aa       --------------  No    dstn57
                                         lsn57         10    12688-aa
     p-12688-aa       s-13688-aa       --------------  No    dstn57p
       12689-aa       s-12689-aa         6-050-1       No    dstn58
                                         lsn58         10    12689-aa
     p-12689-aa       s-13689-aa         6-060-1       No    dstn58p
       12690-aa       s-12690-aa        s-6-050-2      No    dstn59
                                         lsn59         10    12690-aa
     p-12690-aa       s-13690-aa        s-6-060-2      No    dstn59p
     s-12691-aa         12691-aa       --------------  No    dstn60
                                         lsn60         10   s-12691-aa
    ps-12691-aa         13691-aa       --------------  No    dstn60p
     s-12692-aa         12692-aa         6-050-4       No    dstn61
                                         lsn61         10   s-12692-aa
    ps-12692-aa         13692-aa         6-060-4       No    dstn61p
     s-12693-aa         12693-aa        s-6-050-5      No    dstn62
                                         lsn62         10   s-12693-aa
    ps-12693-aa         13693-aa        s-6-060-5      No    dstn62p
     s-08272-fr         08300-fr       --------------  No    dstn49dupfr
     s-08272-tk         08300-tk         4-006-7       No    dstn49duptk
;
```

This example displays ANSI point codes that have the private point code subtype prefix (p-):

`rtrv-rte:pctype=ansi:pcst=p`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pctype=ansi:pcst=p
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA             ALIASI           ALIASN/N24    RTX   CLLI
                                         LSN           RC    APCA
     p-001-001-001   --------------   --------------  No    dstn01p
     p-001-001-002      1-011-2       --------------  No    dstn02p
     p-001-001-003    s-1-011-3       --------------  No    dstn03p
     p-001-001-004   --------------      01060-aa     No    dstn04p
     p-001-001-005   --------------    s-01061-aa     No    dstn05p
     p-001-001-006   --------------      001-011-006  No    dstn06p
     p-001-001-007      1-011-7          01063-aa     No    dstn07p
     p-001-002-000      1-012-0        s-01064-aa     No    dstn08p
     p-001-002-001    s-1-012-1          01065-aa     No    dstn09p
     p-001-002-002    s-1-012-2        s-01066-aa     No    dstn10p
     p-001-002-003      1-012-3          001-012-003  No    dstn11p
     p-001-002-004    s-1-012-4          001-012-004  No    dstn12p

;
```

This example displays ITU-I point codes that have the private and spare point code subtype prefix (ps-):

`rtrv-rte:pctype=itui:pcst=ps`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pctype=itui:pcst=ps
    Command entered at terminal #4.
```

```
    Extended Processing Time may be Required

       DPCI             ALIASA           ALIASN/N24    RTX   CLLI
                                         LSN           RC    APCI
    ps-2-020-0       --------------   --------------   No    dstn21p
    ps-2-020-1          002-200-001   --------------   No    dstn22p
    ps-2-020-2       --------------      08258-aa      No    dstn23p
    ps-2-020-3       --------------    s-08259-aa      No    dstn24p
    ps-2-020-4       --------------      002-200-004   No    dstn25p
    ps-2-020-5       --------------   --------------   No    dstn26p
    ps-2-020-6          002-200-005      08261-aa      No    dstn27p
    ps-2-020-7          002-200-007      002-200-007   No    dstn28p

       DPCI             ALIASI           ALIASN/N24    RTX   CLLI
                                         LSN           RC    APCI
    ps-3-040-2          3-041-2       --------------   No    dstn35p
    ps-3-040-3          3-041-3          07467-aa      No    dstn36p
    ps-3-040-4          3-041-4        s-07468-aa      No    dstn37p
    ps-3-040-5          3-041-5          003-041-005   No    dstn38p

       DPCI             ALIASN           ALIASN        RTX   CLLI
                                         LSN           RC    APCI
    ps-3-040-6        s-07471-aa         07471-aa      No    dstn39p
    ps-3-040-7          07472-aa       s-07472-aa      No    dstn40p

;
```

This example displays ITU-N point codes that have the spare point code subtype prefix (s-):

`rtrv-rte:pctype=itun:pcst=s`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pctype=itun:pcst=s
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCN             ALIASA           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
     s-08272-aa       --------------   --------------   No    dstn49
                                         lsn49         10  s-08272-aa
     s-08273-aa          004-010-001   --------------   No    dstn50
                                         lsn50         10  s-08273-aa
     s-08274-aa       --------------      4-010-2       No    dstn51
                                         lsn51         10  s-08274-aa
     s-08275-aa       --------------    s-4-010-3       No    dstn52
                                         lsn52         10  s-08275-aa
     s-08755-aa       --------------   --------------   No    tgtitun003
                                         lsn49         10  s-08272-aa
                                         lsn50         20  s-08273-aa
                                         lsn51         30  s-08274-aa
                                         lsn52         30  s-08275-aa
     s-08276-aa          004-010-004      4-010-4       No    dstn53
                                         lsn53         10  s-08276-aa
     s-08277-aa          004-010-005    s-4-010-5       No    dstn54
                                         lsn54         10  s-08277-aa
     s-08756-aa       --------------   --------------   No    tgtitun004
                                         lsn53         10  s-08276-aa
                                         lsn54         20  s-08277-aa
                                         lsn55         30  s-08278-aa
                                         lsn56         30  s-08279-aa
     s-08758-aa       --------------   --------------   No    tgtitun006
                                         lsn60         10  s-12691-aa
```

```
                                      lsn61         20  s-12692-aa
                                      lsn62         30  s-12693-aa
     s-08273-fr      --------------   4-006-3       No    dstn50dupfr

       DPCN             ALIASI        ALIASI        RTX   CLLI
                                      LSN           RC    APCN
     s-08278-aa       s-4-010-6       4-010-6       No    dstn55
                                      lsn55         10  s-08278-aa
     s-08279-aa         4-010-7      s-4-010-7      No    dstn56
                                      lsn56         10  s-08279-aa
     s-08379-aa       s-4-058-7       4-058-7       Yes   rtxroute003
                                      lsn55         80  s-08278-aa

       DPCN             ALIASN        ALIASI        RTX   CLLI
                                      LSN           RC    APCN
     s-12691-aa         12691-aa    --------------  No    dstn60
                                      lsn60         10  s-12691-aa
     s-12692-aa         12692-aa      6-050-4       No    dstn61
                                      lsn61         10  s-12692-aa
     s-12693-aa         12693-aa     s-6-050-5      No    dstn62
                                      lsn62         10  s-12693-aa
     s-08272-fr         08300-fr    --------------  No    dstn49dupfr
     s-08272-tk         08300-tk      4-006-7       No    dstn49duptk
;
```

This example displays point codes that have no point code subtype prefix. This example displays abbreviated output.

`rtrv-rte:pcst=none`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pcst=none
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA             ALIASI          ALIASN/N24    RTX   CLLI
                                        LSN           RC    APCA
       001-001-000   --------------   --------------  No    stp1
                                        e2e1          10    001-001-000
       003-001-000   --------------   --------------  No    mstp
                                        e2e3          10    003-001-000
       004-001-000   --------------   --------------  No    stp4
                                        e2e4          10    004-001-000
       007-001-000   --------------   --------------  No    stp7
                                        e2e7          10    007-001-000
       002-101-001   --------------   --------------  No    ssp201
                                        e2m1s1        10    002-101-001
                                        e2e3          20    003-001-000
       .
       .
       .
       200-200-*     --------------   --------------  No    cluster2
       005-006-001   --------------     005-006-001   No    -----------
       001-001-001   --------------   --------------  No    dstn01
                                        lsn01         10    001-001-001
       001-001-002      1-001-2       --------------  No    dstn02
                                        lsn02         10    001-001-002
       001-001-003    s-1-001-3       --------------  No    dstn03
                                        lsn03         10    001-001-003
       001-001-004   --------------     02060         No    dstn04
                                        lsn04         10    001-001-004
       001-070-001   --------------   --------------  No    tgtansi001
```

```
                                   lsn01         10    001-001-001
                                   lsn02         20    001-001-002
                                   lsn03         30    001-001-003
                                   lsn04         40    001-001-004
001-001-005   --------------    s-02061         No    dstn05
                                   lsn05         10    001-001-005
.
.
.
010-*-*       --------------   --------------   No    dstnnrtison

DPCI             ALIASA          ALIASN/N24    RTX   CLLI
                                   LSN           RC    APCI
2-010-0       --------------   --------------   No    dstn13
                                   lsn13         10    2-010-0
2-010-1          002-010-001   --------------   No    dstn14
                                   lsn14         10    2-010-1
2-010-2       --------------      04178         No    dstn15
                                   lsn15         10    2-010-2
2-010-3       --------------    s-04179         No    dstn16
                                   lsn16         10    2-010-3
2-070-1       --------------   --------------   No    tgtitui001
                                   lsn13         10    2-010-0
                                   lsn14         20    2-010-1
                                   lsn15         30    2-010-2
                                   lsn16         40    2-010-3
2-010-4       --------------      002-010-004   No    dstn17
                                   lsn17         10    2-010-4
.
.
.

DPCI             ALIASI          ALIASN/N24    RTX   CLLI
                                   LSN           RC    APCI
3-030-0        s-3-030-0       --------------   No    dstn29
                                   lsn29         10    3-030-0
3-030-1        s-3-030-1          06385         No    dstn30
                                   lsn30         10    3-030-1
3-030-2        s-3-030-2        s-06386         No    dstn31
                                   lsn31         10    3-030-2
3-070-1        s-3-070-1       --------------   No    tgtitui005
                                   lsn29         10    3-030-0
                                   lsn30         20    3-030-1
                                   lsn31         30    3-030-2
3-030-3        s-3-030-3          003-030-003   No    dstn32
                                   lsn32         10    3-030-3
3-070-2        s-3-070-2       --------------   No    tgtitui006
                                   lsn32         10    3-030-3
                                   lsn33         20    3-030-4
                                   lsn34         30    3-030-5

DPCI             ALIASN          ALIASN        RTX   CLLI
                                   LSN           RC    APCI
3-030-4        s-06388            06388         No    dstn33
                                   lsn33         10    3-030-4
3-030-5          06389          s-06389         No    dstn34
                                   lsn34         10    3-030-5

DPCN             ALIASA          ALIASI        RTX   CLLI
                                   LSN           RC    APCN
06157            020-005-002   --------------   No    -----------
08192         --------------   --------------   No    dstn41
                                   lsn41         10    08192
08193            004-000-001   --------------   No    dstn42
```

```
                                    lsn42         10    08193
      08194         --------------      4-000-2       No    dstn43
                                    lsn43         10    08194
      08195         --------------    s-4-000-3       No    dstn44
                                    lsn44         10    08195
      08753         --------------   --------------   No    tgtitun001
                                    lsn41         10    08192
                                    lsn42         20    08193
                                    lsn43         30    08194
                                    lsn44         30    08195
      .
      .
      .
      DPCN             ALIASI          ALIASI        RTX   CLLI
                                       LSN           RC    APCN
      08198          s-4-000-6         4-000-6       No    dstn47
                                       lsn47         10    08198
      08199            4-000-7       s-4-000-7       No    dstn48
                                       lsn48         10    08199
      DPCN             ALIASN          ALIASI        RTX   CLLI
                                       LSN           RC    APCN
      12688          s-12688         --------------   No    dstn57
                                       lsn57         10    12688
      12689          s-12689           6-050-1       No    dstn58
                                       lsn58         10    12689
      12690          s-12690         s-6-050-2       No    dstn59
                                       lsn59         10    12690

      DPCN24           ALIASA          ALIASI        RTX   CLLI
                                       LSN           RC    APCN24
      003-003-004      003-003-003     3-003-4       No    -----------
      006-005-001   --------------   --------------   No    dstn63
                                       lsn63         10    006-005-001
      006-005-002      006-005-002   --------------   No    dstn64
                                       lsn64         10    006-005-002
      006-005-003   --------------      6-005-3       No    dstn65
                                       lsn65         10    006-005-003
      006-070-001   --------------   --------------   No    tgtitun24a
                                       lsn63         10    006-005-001
                                       lsn64         20    006-005-002
                                       lsn65         30    006-005-003
      006-005-004   --------------    s-6-005-4       No    dstn66
                                       lsn66         10    006-005-004
      006-005-005      006-005-005     6-005-5       No    dstn67
                                       lsn67         10    006-005-005
      006-070-002   --------------   --------------   No    tgtitun24b
                                       lsn66         10    006-005-004
                                       lsn67         20    006-005-005

;
```

This example displays point codes that have the private point code subtype prefix (p-):

`rtrv-rte:pcst=p`

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pcst=p
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA             ALIASI          ALIASN/N24    RTX   CLLI
```

```
                                        LSN           RC    APCA
p-001-001-001   --------------   --------------   No    dstn01p
p-001-001-002      1-011-2       --------------   No    dstn02p
p-001-001-003    s-1-011-3       --------------   No    dstn03p
p-001-001-004   --------------      01060-aa      No    dstn04p
p-001-001-005   --------------    s-01061-aa      No    dstn05p
p-001-001-006   --------------      001-011-006   No    dstn06p
p-001-001-007      1-011-7          01063-aa      No    dstn07p
p-001-002-000      1-012-0        s-01064-aa      No    dstn08p
p-001-002-001    s-1-012-1          01065-aa      No    dstn09p
p-001-002-002    s-1-012-2        s-01066-aa      No    dstn10p
p-001-002-003      1-012-3          001-012-003   No    dstn11p
p-001-002-004    s-1-012-4          001-012-004   No    dstn12p

  DPCI             ALIASA          ALIASN/N24    RTX   CLLI
                                     LSN           RC    APCI
p-2-010-0       --------------   --------------   No    dstn13p
p-2-010-1          002-100-001   --------------   No    dstn14p
p-2-010-2       --------------      08178-aa      No    dstn15p
p-2-010-3       --------------    s-08179-aa      No    dstn16p
p-2-010-4       --------------      002-100-004   No    dstn17p
p-2-010-5          002-100-005      08181-aa      No    dstn18p
p-2-010-6          002-100-006    s-08182-aa      No    dstn19p
p-2-010-7          002-100-007      002-100-007   No    dstn20p

  DPCI             ALIASI          ALIASN/N24    RTX   CLLI
                                     LSN           RC    APCI
p-3-030-0        s-3-031-0       --------------   No    dstn29p
p-3-030-1        s-3-031-1          07385-aa      No    dstn30p
p-3-030-2        s-3-031-2        s-07386-aa      No    dstn31p
p-3-030-3        s-3-031-3          003-031-003   No    dstn32p

  DPCI             ALIASN          ALIASN        RTX   CLLI
                                     LSN           RC    APCI
p-3-030-4        s-07388-aa         07388-aa      No    dstn33p
p-3-030-5          07389-aa       s-07389-aa      No    dstn34p

  DPCN             ALIASA          ALIASI        RTX   CLLI
                                     LSN           RC    APCN
p-08192-aa      --------------   --------------   No    dstn41p
p-08193-aa         004-200-001   --------------   No    dstn42p
p-08194-aa      --------------      4-040-2       No    dstn43p
p-08195-aa      --------------    s-4-040-3       No    dstn44p
p-08196-aa         004-200-004      4-040-4       No    dstn45p
p-08197-aa         004-200-005    s-4-040-5       No    dstn46p

  DPCN             ALIASI          ALIASI        RTX   CLLI
                                     LSN           RC    APCN
p-08198-aa       s-4-040-6          4-040-6       No    dstn47p
p-08199-aa         4-040-7        s-4-040-7       No    dstn48p

  DPCN             ALIASN          ALIASI        RTX   CLLI
                                     LSN           RC    APCN
p-12688-aa       s-13688-aa      --------------   No    dstn57p
p-12689-aa       s-13689-aa         6-060-1       No    dstn58p
p-12690-aa       s-13690-aa       s-6-060-2       No    dstn59p

  DPCN24           ALIASA          ALIASI        RTX   CLLI
                                     LSN           RC    APCN24
p-006-005-001   --------------   --------------   No    dstn63p
p-006-005-002      006-005-020   --------------   No    dstn64p
p-006-005-003   --------------      6-050-3       No    dstn65p
p-006-005-004   --------------    s-6-050-4       No    dstn66p
p-006-005-005      006-005-050      6-050-5       No    dstn67p
```

```
;
```

This example displays point codes that have the spare point code subtype prefix (s-):

`rtrv-rte:pcst=s`

```
eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
rtrv-rte:pcst=s
Command entered at terminal #4.
Extended Processing Time may be Required

   DPCI             ALIASA          ALIASN/N24    RTX   CLLI
                                    LSN           RC    APCI
 s-4-002-0          010-001-001    s-08228-aa     No    -----------
 s-2-020-0       --------------   --------------   No    dstn21
                                    lsn21         10  s-2-020-0
 s-2-020-1          002-020-001   --------------   No    dstn22
                                    lsn22         10  s-2-020-1
 s-2-020-2       --------------      04258-aa      No    dstn23
                                    lsn23         10  s-2-020-2
 s-2-020-3       --------------    s-04259-aa      No    dstn24
                                    lsn24         10  s-2-020-3
 s-2-070-3       --------------   --------------   No    tgtitui003
                                    lsn21         10  s-2-020-0
                                    lsn22         20  s-2-020-1
                                    lsn23         30  s-2-020-2
                                    lsn24         40  s-2-020-3
 s-2-020-4       --------------      002-020-004   No    dstn25
                                    lsn25         10  s-2-020-4
 s-2-020-5          002-020-005      04261-aa      No    dstn26
                                    lsn26         10  s-2-020-5
 s-2-020-6          002-020-006    s-04262-aa      No    dstn27
                                    lsn27         10  s-2-020-6
 s-2-020-7          002-020-007      002-020-007   No    dstn28
                                    lsn28         10  s-2-020-7
 s-2-070-4       --------------   --------------   No    tgtitui004
                                    lsn25         10  s-2-020-4
                                    lsn26         20  s-2-020-5
                                    lsn27         30  s-2-020-6
                                    lsn28         40  s-2-020-7
 s-3-070-3       --------------   --------------   No    tgtitui007
                                    lsn35         10  s-3-040-2
                                    lsn36         20  s-3-040-3
                                    lsn37         30  s-3-040-4
 s-3-070-4       --------------   --------------   No    tgtitui008
                                    lsn38         10  s-3-040-5
                                    lsn39         20  s-3-040-6
                                    lsn40         30  s-3-040-7
 s-2-029-6          002-029-006    s-04269-aa      Yes   rtxroute002
                                    lsn26         5   s-2-020-5

   DPCI             ALIASI          ALIASN/N24    RTX   CLLI
                                    LSN           RC    APCI
 s-3-040-2          3-040-2       --------------   No    dstn35
                                    lsn35         10  s-3-040-2
 s-3-040-3          3-040-3         06467-aa      No    dstn36
                                    lsn36         10  s-3-040-3
 s-3-040-4          3-040-4        s-06468-aa      No    dstn37
                                    lsn37         10  s-3-040-4
 s-3-040-5          3-040-5         003-040-005   No    dstn38
                                    lsn38         10  s-3-040-5
```

```
      DPCI             ALIASN           ALIASN        RTX   CLLI
                                        LSN           RC    APCI
     s-3-040-6        s-06471-aa        06471-aa      No    dstn39
                                        lsn39         10  s-3-040-6
     s-3-040-7          06472-aa       s-06472-aa     No    dstn40
                                        lsn40         10  s-3-040-7

      DPCN             ALIASA           ALIASI        RTX   CLLI
                                        LSN           RC    APCN
     s-08272-aa      --------------   --------------   No    dstn49
                                        lsn49         10  s-08272-aa
     s-08273-aa         004-010-001   --------------   No    dstn50
                                        lsn50         10  s-08273-aa
     s-08274-aa      --------------      4-010-2       No    dstn51
                                        lsn51         10  s-08274-aa
     s-08275-aa      --------------    s-4-010-3       No    dstn52
                                        lsn52         10  s-08275-aa
     s-08755-aa      --------------   --------------   No    tgtitun003
                                        lsn49         10  s-08272-aa
                                        lsn50         20  s-08273-aa
                                        lsn51         30  s-08274-aa
                                        lsn52         30  s-08275-aa
     s-08276-aa         004-010-004      4-010-4       No    dstn53
                                        lsn53         10  s-08276-aa
     s-08277-aa         004-010-005    s-4-010-5       No    dstn54
                                        lsn54         10  s-08277-aa
     s-08756-aa      --------------   --------------   No    tgtitun004
                                        lsn53         10  s-08276-aa
                                        lsn54         20  s-08277-aa
                                        lsn55         30  s-08278-aa
                                        lsn56         30  s-08279-aa
     s-08758-aa      --------------   --------------   No    tgtitun006
                                        lsn60         10  s-12691-aa
                                        lsn61         20  s-12692-aa
                                        lsn62         30  s-12693-aa
     s-08273-fr      --------------      4-006-3       No    dstn50dupfr

      DPCN             ALIASI           ALIASI        RTX   CLLI
                                        LSN           RC    APCN
     s-08278-aa       s-4-010-6         4-010-6       No    dstn55
                                        lsn55         10  s-08278-aa
     s-08279-aa         4-010-7        s-4-010-7      No    dstn56
                                        lsn56         10  s-08279-aa
     s-08379-aa       s-4-058-7         4-058-7       Yes   rtxroute003
                                        lsn55         80  s-08278-aa

      DPCN             ALIASN           ALIASI        RTX   CLLI
                                        LSN           RC    APCN
     s-12691-aa         12691-aa      --------------   No    dstn60
                                        lsn60         10  s-12691-aa
     s-12692-aa         12692-aa        6-050-4       No    dstn61
                                        lsn61         10  s-12692-aa
     s-12693-aa         12693-aa       s-6-050-5      No    dstn62
                                        lsn62         10  s-12693-aa
     s-08272-fr         08300-fr      --------------   No    dstn49dupfr
     s-08272-tk         08300-tk        4-006-7       No    dstn49duptk
;
```

This example displays point codes that have the private and spare point code subtype prefix (ps-):

```
rtrv-rte:pcst=ps
```

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:pcst=ps
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCI             ALIASA           ALIASN/N24    RTX   CLLI
                                         LSN           RC    APCI
    ps-2-020-0       --------------   --------------   No    dstn21p
    ps-2-020-1          002-200-001   --------------   No    dstn22p
    ps-2-020-2       --------------      08258-aa      No    dstn23p
    ps-2-020-3       --------------    s-08259-aa      No    dstn24p
    ps-2-020-4       --------------      002-200-004   No    dstn25p
    ps-2-020-5       --------------   --------------   No    dstn26p
    ps-2-020-6          002-200-005      08261-aa      No    dstn27p
    ps-2-020-7          002-200-007      002-200-007   No    dstn28p

       DPCI             ALIASI           ALIASN/N24    RTX   CLLI
                                         LSN           RC    APCI
    ps-3-040-2          3-041-2       --------------   No    dstn35p
    ps-3-040-3          3-041-3          07467-aa      No    dstn36p
    ps-3-040-4          3-041-4        s-07468-aa      No    dstn37p
    ps-3-040-5          3-041-5          003-041-005   No    dstn38p

       DPCI             ALIASN           ALIASN        RTX   CLLI
                                         LSN           RC    APCI
    ps-3-040-6        s-07471-aa         07471-aa      No    dstn39p
    ps-3-040-7          07472-aa       s-07472-aa      No    dstn40p

       DPCN             ALIASA           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
    ps-08272-aa      --------------   --------------   No    dstn49p
    ps-08273-aa         004-200-010   --------------   No    dstn50p
    ps-08274-aa      --------------      4-050-2       No    dstn51p
    ps-08275-aa      --------------    s-4-050-3       No    dstn52p
    ps-08276-aa         004-200-040      4-050-4       No    dstn53p
    ps-08277-aa         004-200-050    s-4-050-5       No    dstn54p

       DPCN             ALIASI           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
    ps-08278-aa       s-4-050-6          4-050-6       No    dstn55p
    ps-08279-aa         4-050-7        s-4-050-7       No    dstn56p

       DPCN             ALIASN           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
    ps-12691-aa         13691-aa      --------------   No    dstn60p
    ps-12692-aa         13692-aa         6-060-4       No    dstn61p
    ps-12693-aa         13693-aa       s-6-060-5       No    dstn62p

;
```

```
rtrv-rte:dpc=40-1-***
```

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:dpc=40-1-***
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCA             ALIASI           ALIASN/N24    RTX   CLLI
                                         LSN           RC    APCA
```

```
       040-001-*     --------------   --------------   No    myncaibeno
                                        lsn01          10    001-001-001
       040-001-001   --------------   --------------   No    noncluster1
                                        lsn01          10    001-001-001
       040-001-002   --------------   --------------   No    noncluster2
                                        lsn01          10    001-001-001

;
```

rtrv-rte:dpc=40-***-*:lsn=lsn01

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:dpc=40-***-*:lsn=lsn01
    Command entered at terminal #4.
    Extended Processing Time may be Required

    LSN           DPCA          RC
    lsn01         040-001-*     10
                  040-001-001   10
                  040-001-002   10

;
```

rtrv-rte:dpcn=8199-*

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:dpcn=8199-*
    Command entered at terminal #4.
    Extended Processing Time may be Required

       DPCN             ALIASA           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
       08199-fr      --------------    s-4-006-1       No    dstn48dupfr
       08199-tk      --------------      4-006-2       No    dstn48duptk

       DPCN             ALIASI           ALIASI        RTX   CLLI
                                         LSN           RC    APCN
       08199-aa         4-000-7        s-4-000-7       No    dstn48
                                         lsn48         10    08199-aa

;
```

rtrv-rte:dpcn=8199-*:lsn=lsn48

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

    LSN           DPCN          RC
    lsn48         08199-aa      10

;
```

rtrv-rte:dpcn=p-*-aa

```
    eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
    rtrv-rte:dpcn=p-*-aa
    Command entered at terminal #4.
    Extended Processing Time may be Required
```

```
      DPCN            ALIASA          ALIASI        RTX   CLLI
                                      LSN           RC    APCN
    p-08192-aa      --------------   --------------  No    dstn41p
    p-08193-aa         004-200-001   --------------  No    dstn42p
    p-08194-aa      --------------      4-040-2      No    dstn43p
    p-08195-aa      --------------    s-4-040-3      No    dstn44p
    p-08196-aa         004-200-004      4-040-4      No    dstn45p
    p-08197-aa         004-200-005    s-4-040-5      No    dstn46p

      DPCN            ALIASI          ALIASI        RTX   CLLI
                                      LSN           RC    APCN
    p-08198-aa       s-4-040-6         4-040-6      No    dstn47p
    p-08199-aa         4-040-7        s-4-040-7      No    dstn48p

      DPCN            ALIASN          ALIASI        RTX   CLLI
                                      LSN           RC    APCN
    p-12688-aa       s-13688-aa      --------------  No    dstn57p
    p-12689-aa       s-13689-aa        6-060-1      No    dstn58p
    p-12690-aa       s-13690-aa      s-6-060-2      No    dstn59p

;
```

`rtrv-rte:dpcn=s-9000-*`

```
   eagle10115 10-10-09 10:00:37 EST  EAGLE 43.0.0
   rtrv-rte:dpcn=s-9000-*
   Command entered at terminal #4.
   Extended Processing Time may be Required

      DPCN            ALIASA          ALIASI        RTX   CLLI
                                      LSN           RC    APCN
      09000-fr      --------------    s-4-007-1      No    dstn9xfr
      09000-tk      --------------      4-007-2      No    dstn9xtk

      DPCN            ALIASI          ALIASI        RTX   CLLI
                                      LSN           RC    APCN
      09000-aa         4-001-7        s-4-000-7      No    dstn9x
                                        lsn9x        10    09000-aa

;
```

This example displays output when the *full* mode is requested. This example displays abbreviated output.

`rtrv-rte:mode=full`

```
   eagle10115 10-10-29 10:00:37 EST  EAGLE 43.0.0
   rtrv-rte:mode=full
   Command entered at terminal #4.
   Extended Processing Time may be Required

      DPCA            ALIASI          ALIASN/N24    RTX   CLLI
                                      LSN           RC    APCA
      001-001-000   --------------   --------------  No    stp1
                                        e2e1         10    001-001-000
      003-001-000   --------------   --------------  No    mstp
                                        e2e3         10    003-001-000
      004-001-000   --------------   --------------  No    stp4
                                        e2e4         10    004-001-000
```

```
  007-001-000   --------------   --------------   No    stp7
                                    e2e7          10    007-001-000
  002-101-001   --------------   --------------   No    ssp201
                                    e2m1s1        10    002-101-001
                                    e2e3          20    003-001-000
  .
  .
  .
  200-200-*     --------------   --------------   No    cluster2
  005-006-001   --------------      005-006-001   No    -----------
  001-001-001   --------------   --------------   No    dstn01
                                    lsn01         10    001-001-001
p-001-001-001   --------------   --------------   No    dstn01p
  001-001-002      1-001-2       --------------   No    dstn02
                                    lsn02         10    001-001-002
p-001-001-002      1-011-2       --------------   No    dstn02p
  001-001-003    s-1-001-3       --------------   No    dstn03
                                    lsn03         10    001-001-003
p-001-001-003    s-1-011-3       --------------   No    dstn03p
  001-001-004   --------------      02060-aa      No    dstn04
                                    lsn04         10    001-001-004
p-001-001-004   --------------      01060-aa      No    dstn04p
  001-070-001   --------------   --------------   No    tgtansi001
                                    lsn01         10    001-001-001
                                    lsn02         20    001-001-002
                                    lsn03         30    001-001-003
                                    lsn04         40    001-001-004
  001-001-005   --------------    s-02061-aa      No    dstn05
                                    lsn05         10    001-001-005
p-001-001-005   --------------    s-01061-aa      No    dstn05p
  001-001-006   --------------      001-001-006   No    dstn06
                                    lsn06         10    001-001-006
  .
  .
  .
  200-002-001   --------------   --------------   Yes   rtxroute001
                                    lsn12         10    001-002-004
                   OPCA
                   001-001-001      lsn11         15    001-002-003
                   001-002-001      lsn10         99    001-002-002
                   CIC - ECIC
                   0     9          lsn10         1     001-002-002
                   10    16383      lsn10         2     001-002-002
                   SI
                   3                lsn12         1     001-002-004
                   9                lsn12         21    001-002-004
                   11               lsn12         9     001-002-004
  .
  .
  .

  DPCI             ALIASA          ALIASN/N24    RTX   CLLI
                                   LSN           RC    APCI
s-4-002-0          010-001-001    s-08228-aa     No    -----------
  2-010-0       --------------   --------------   No    dstn13
                                    lsn13         10    2-010-0
p-2-010-0       --------------   --------------   No    dstn13p
  2-010-1          002-010-001   --------------   No    dstn14
                                    lsn14         10    2-010-1
p-2-010-1          002-100-001   --------------   No    dstn14p
  2-010-2       --------------      04178-aa      No    dstn15
                                    lsn15         10    2-010-2
p-2-010-2       --------------      08178-aa      No    dstn15p
  2-010-3       --------------    s-04179-aa      No    dstn16
```

```
                                          lsn16         10    2-010-3
    p-2-010-3       --------------    s-08179-aa      No    dstn16p
      2-070-1       --------------   --------------   No    tgtitui001
                                          lsn13         10    2-010-0
                                          lsn14         20    2-010-1
                                          lsn15         30    2-010-2
                                          lsn16         40    2-010-3
      2-010-4       --------------      002-010-004   No    dstn17
                                          lsn17         10    2-010-4
      .
      .
      .
    s-2-020-0       --------------   --------------   No    dstn21
                                          lsn21         10  s-2-020-0
   ps-2-020-0       --------------   --------------   No    dstn21p
    s-2-020-1          002-020-001   --------------   No    dstn22
                                          lsn22         10  s-2-020-1
   ps-2-020-1          002-200-001   --------------   No    dstn22p
    s-2-020-2       --------------      04258-aa      No    dstn23
                                          lsn23         10  s-2-020-2
   ps-2-020-2       --------------      08258-aa      No    dstn23p
    s-2-020-3       --------------    s-04259-aa      No    dstn24
                                          lsn24         10  s-2-020-3
   ps-2-020-3       --------------    s-08259-aa      No    dstn24p
    s-2-070-3       --------------   --------------   No    tgtitui003
                                          lsn21         10  s-2-020-0
                                          lsn22         20  s-2-020-1
                                          lsn23         30  s-2-020-2
                                          lsn24         40  s-2-020-3
      .
      .
      .
    s-2-029-6          002-029-006    s-04269-aa      Yes   rtxroute002
                                          lsn26         5   s-2-020-5
                       OPCI
                       3-030-0            lsn27         28  s-2-020-6
                       CIC - ECIC
                       34    44           lsn27         6   s-2-020-6
                       45    55           lsn27         16  s-2-020-6
                       SI
                       3                  lsn27         7   s-2-020-6
                       15                 lsn27         14  s-2-020-6

      DPCI             ALIASI             ALIASN/N24    RTX   CLLI
                                          LSN           RC    APCI
      3-030-0        s-3-030-0        --------------   No    dstn29
                                          lsn29         10    3-030-0
    p-3-030-0        s-3-031-0        --------------   No    dstn29p
      3-030-1        s-3-030-1           06385-aa      No    dstn30
                                          lsn30         10    3-030-1
    p-3-030-1        s-3-031-1           07385-aa      No    dstn30p
      3-030-2        s-3-030-2         s-06386-aa      No    dstn31
                                          lsn31         10    3-030-2
    p-3-030-2        s-3-031-2         s-07386-aa      No    dstn31p
      3-070-1        s-3-070-1        --------------   No    tgtitui005
                                          lsn29         10    3-030-0
                                          lsn30         20    3-030-1
                                          lsn31         30    3-030-2
      3-030-3        s-3-030-3           003-030-003   No    dstn32
                                          lsn32         10    3-030-3
    p-3-030-3        s-3-031-3           003-031-003   No    dstn32p
      3-070-2        s-3-070-2        --------------   No    tgtitui006
                                          lsn32         10    3-030-3
                                          lsn33         20    3-030-4
```

```
                                    lsn34          30    3-030-5
 s-3-040-2          3-040-2       --------------   No    dstn35
                                    lsn35          10  s-3-040-2
ps-3-040-2          3-041-2       --------------   No    dstn35p
 s-3-040-3          3-040-3          06467-aa      No    dstn36
                                    lsn36          10  s-3-040-3
ps-3-040-3          3-041-3          07467-aa      No    dstn36p
 s-3-040-4          3-040-4        s-06468-aa      No    dstn37
                                    lsn37          10  s-3-040-4
ps-3-040-4          3-041-4        s-07468-aa      No    dstn37p
 s-3-040-5          3-040-5          003-040-005   No    dstn38
                                    lsn38          10  s-3-040-5
ps-3-040-5          3-041-5          003-041-005   No    dstn38p

   DPCI              ALIASN           ALIASN        RTX   CLLI
                                      LSN           RC    APCI
   3-030-4         s-06388-aa         06388-aa      No    dstn33
                                      lsn33         10    3-030-4
 p-3-030-4         s-07388-aa         07388-aa      No    dstn33p
   3-030-5           06389-aa       s-06389-aa      No    dstn34
                                      lsn34         10    3-030-5
 p-3-030-5           07389-aa       s-07389-aa      No    dstn34p
 s-3-040-6         s-06471-aa         06471-aa      No    dstn39
                                      lsn39         10  s-3-040-6
ps-3-040-6         s-07471-aa         07471-aa      No    dstn39p
 s-3-040-7           06472-aa       s-06472-aa      No    dstn40
                                      lsn40         10  s-3-040-7
ps-3-040-7           07472-aa       s-07472-aa      No    dstn40p

   DPCN              ALIASA           ALIASI        RTX   CLLI
                                      LSN           RC    APCN
   06157-aa          020-005-002    --------------  No    -----------
   08192-aa       --------------    --------------  No    dstn41
                                      lsn41         10    08192-aa
 p-08192-aa       --------------    --------------  No    dstn41p
   08193-aa          004-000-001    --------------  No    dstn42
                                      lsn42         10    08193-aa
 p-08193-aa          004-200-001    --------------  No    dstn42p
   08194-aa       --------------       4-000-2      No    dstn43
                                      lsn43         10    08194-aa
 p-08194-aa       --------------       4-040-2      No    dstn43p
   08195-aa       --------------     s-4-000-3      No    dstn44
                                      lsn44         10    08195-aa
 p-08195-aa       --------------     s-4-040-3      No    dstn44p
   08753-aa       --------------    --------------  No    tgtitun001
                                      lsn41         10    08192-aa
                                      lsn42         20    08193-aa
                                      lsn43         30    08194-aa
                                      lsn44         30    08195-aa
   08196-aa          004-000-004       4-000-4      No    dstn45
                                      lsn45         10    08196-aa
 p-08196-aa          004-200-004       4-040-4      No    dstn45p
   08197-aa          004-000-005     s-4-000-5      No    dstn46
                                      lsn46         10    08197-aa
 p-08197-aa          004-200-005     s-4-040-5      No    dstn46p
   08754-aa       --------------    --------------  No    tgtitun002
                                      lsn45         10    08196-aa
                                      lsn46         20    08197-aa
                                      lsn47         30    08198-aa
                                      lsn48         30    08199-aa
 s-08272-aa       --------------    --------------  No    dstn49
                                      lsn49         10  s-08272-aa
ps-08272-aa       --------------    --------------  No    dstn49p
 s-08273-aa          004-010-001    --------------  No    dstn50
```

```
                                        lsn50         10  s-08273-aa
    ps-08273-aa         004-200-010   --------------  No    dstn50p
     s-08274-aa      --------------     4-010-2       No    dstn51
                                        lsn51         10  s-08274-aa
    ps-08274-aa      --------------     4-050-2       No    dstn51p
     s-08275-aa      --------------    s-4-010-3      No    dstn52
                                        lsn52         10  s-08275-aa
    ps-08275-aa      --------------    s-4-050-3      No    dstn52p
     s-08755-aa      --------------   --------------  No    tgtitun003
                                        lsn49         10  s-08272-aa
                                        lsn50         20  s-08273-aa
                                        lsn51         30  s-08274-aa
                                        lsn52         30  s-08275-aa
       .
       .
       .

       DPCN             ALIASI          ALIASI        RTX   CLLI
                                        LSN           RC    APCN
       08198-aa       s-4-000-6         4-000-6       No    dstn47
                                        lsn47         10    08198-aa
     p-08198-aa       s-4-040-6         4-040-6       No    dstn47p
       08199-aa         4-000-7        s-4-000-7      No    dstn48
                                        lsn48         10    08199-aa
     p-08199-aa         4-040-7        s-4-040-7      No    dstn48p
     s-08278-aa       s-4-010-6         4-010-6       No    dstn55
                                        lsn55         10  s-08278-aa
    ps-08278-aa       s-4-050-6         4-050-6       No    dstn55p
     s-08279-aa         4-010-7        s-4-010-7      No    dstn56
                                        lsn56         10  s-08279-aa
    ps-08279-aa         4-050-7        s-4-050-7      No    dstn56p
     s-08379-aa       s-4-058-7         4-058-7       Yes   rtxroute003
                                        lsn55         80  s-08278-aa
                        OPCN
                      s-08278-aa        lsn62         8   s-12693-aa
                        CIC - ECIC
                        99    100       lsn62         9   s-12693-aa
                        999   1989      lsn62         99  s-12693-aa
                        SI
                        4               lsn56         29  s-08279-aa
                        14              lsn56         44  s-08279-aa
       08198-fr       s-4-005-7         4-005-7       No    dstn47dupfr
       08198-tk         4-006-0        s-4-006-0      No    dstn47duptk
       DPCN             ALIASN          ALIASI        RTX   CLLI
                                        LSN           RC    APCN
       12688-aa       s-12688-aa      --------------  No    dstn57
                                        lsn57         10    12688-aa
     p-12688-aa       s-13688-aa      --------------  No    dstn57p
       .
       .
       .

       DPCN24           ALIASA          ALIASI        RTX   CLLI
                                        LSN           RC    APCN24
       003-003-004      003-003-003     3-003-4       No    -----------
       006-005-001    --------------  --------------  No    dstn63
                                        lsn63         10    006-005-001
     p-006-005-001    --------------  --------------  No    dstn63p
        .
        .
        .
;
```

This example contains a route with 16-bit ITU-N point codes:

```
rtrv-rte:lsn=lsn66
```

```
    tekelecstp 10-10-09 10:00:37 EST  EAGLE 45.1.0
    rtrv-rte:lsn=lsn66
    Command entered at terminal #4.
    Extended Processing Time may be Required

    LSN           DPCN16        RC
    lsn66         006-005-004   10
                  006-004-002   10

;
```

Legend

- **DPC, DPCA, DPCI, DPCN, DPCN24, DPCN16**—Destination point code to be reached through this route
- **ALIAS, ALIASA, ALIASI, ALIASN/N24, ALIASN16**—Alias associated with the route
- **CLLI**—CLLI associated with the route
- **LSN**—Name of the linkset assigned to this route
- **RC**—Relative cost (priority) assigned to the route
- **APC, APCA, APCI, APCN, APCN24, APCN16**—Point code of the STP or SSP that is directly adjacent to the linkset. The point code may or may not be the same as the destination point code assigned to this route.

Related Commands

chg-dstn, *chg-rte*, *dlt-dstn*, *dlt-rte*, *ent-dstn*, *ent-rte*, *rept-stat-dstn*, *rept-stat-rte*, *rtrv-dstn*

rtrv-rtx

Retrieve Exception Route

Use this command to retrieve one or more exception route entries. Because all parameters are optional, the retrieve examines the entire Route table to find all entries that match the specified parameters. Entries with CIC-ECIC range values that fall in the range specified by the cic and ecic parameters are displayed.

Parameters

cic (optional)

Starting Circuit Identification Code. This parameter is used alone or together with the ecic parameter as exception routing criteria for the specified exception route.

Range:

0 - 16383

class (optional)

Exception routing class. This parameter displays all exception route sets provisioned for the specified class.

Range:

opc

ilsn

cic

si

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

dpca

Range:

*p-, 000-255, *, **, ****

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk values *, **, and *** are not valid for the *ni* subfield.

If ** or *** is specified for the *nc* subfield, either *, **, or *** must be specified for the *ncm* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc=000* is not valid if *ni=001-005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006-255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni= 006-255*.

The point code *000-000-000* is not a valid point code.

dpci (optional)

Destination Point Code. ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

*s-, p-, ps, 0-16383, aa-zz, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

An asterisk (*) can be specified for the node (*nnnnn* or every member of a flexible point code) or for the group code (*gc*) only when group codes are present in the point codes.

An asterisk (*) can be specified either for the node or for the group code, but not both.

prefix—s-, p-, ps-

*nnnnn—0-16383, **

*gc—aa-zz, **

m1-m2-m3-m4—0-14 for each member; values must sum to 14; or *-*-*-* when the point code includes a group code.

dpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p
un---000---127
sna---000---15
mna---000---31

ecic (optional)

Ending Circuit Identification Code. This parameter, together with the cic parameter, defines the CIC range that is used as exception routing criteria for the specified exception route.

Range:

0 - 16383

ilsn (optional)

Incoming Link Set Name. The parameter value is used as part of the exception routing criteria for the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters.

lsn (optional)

Link Set Name. The linkset associated with the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters.

opc (optional)

ANSI origination point code with subfields *network indicator-network cluster-network cluster member* (ni-nc-ncm). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Range:

*p-, 000-255, *, **, ****

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk values *, **, and *** are not valid for the *ni* subfield.

If ** or *** is specified for the *nc* subfield, either *, **, or *** must be specified for the *ncm* subfield.

When `chg-sid:pctype=ansi` is specified, *ni=000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc=000* is not valid if *ni=001-005*.

When `chg-sid:pctype=ansi` is specified, *nc=000* is valid if *ni=006-255*.

When `chg-sid:pctype=ansi` is specified, *ni-*-** is valid if *ni= 006-255*.

The point code *000-000-000* is not a valid point code.

opci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

*s-, p-, ps, 0-16383, aa-zz, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

An asterisk (*) can be specified for the node (*nnnnn* or every member of a flexible point code) or for the group code (*gc*) only when group codes are present in the point codes.

An asterisk (*) can be specified either for the node or for the group code, but not both.

prefix—s-, p-, ps-

*nnnnn—0-16383, **

*gc—aa-zz, **

m1-m2-m3-m4—0-14 for each member; values must sum to 14; or *-*-*-* when the point code includes a group code.

opcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

si (optional)

Service Indicator. This parameter is used as part of the exception routing criteria for the specified exception route.

Range:

3 - 15

Example

```
rtrv-rtx:dpca=1-1-1
rtrv-rtx:opca=6-*-*
rtrv-rtx:ilsn=lset4
rtrv-rtx:si=5
rtrv-rtx:cic=0:ecic=16383
rtrv-rtx:dpcn16=121-10-25
```

Dependencies

Only one of the opc, ilsn, cic, si, or class parameters can be specified.

If the ecic parameter is specified, the cic parameter must also be specified.

The ecic parameter value cannot be less than the cic parameter value.

The Origin-Based MTP Routing feature must be enabled and turned on before this command can be entered.

The linkset name, as defined by the ilsn or lsn parameter, must exist.

The value specified for the destination point code must be a full point code and not a cluster or network point code.

Notes

** can be used in the network cluster member (*ncm*) subfield of dpc/dpca and opc/opca parameters to retrieve all point codes residing in (members of) a given network cluster (*ni-nc*).

** can be used in the network cluster (*nc*) subfield of dpc/dpca and opc/opca parameters to retrieve all point codes residing in (members of) a given network (*ni*).

*** can be used in the network cluster member (*ncm*) subfield of dpc/dpca/opc/opca parameters to retrieve all point codes residing in (members of) a given network cluster (*ni-nc*), and the network cluster address (if any).

*** can be used in the network cluster (*nc*) subfield of dpc/dpca and opc/opca parameters to retrieve all point codes residing in (members of) a given network (*ni*), and the network address (if any).

* is allowed only for retrieves (for example, `rtrv-rtx:dpcn=*-aa` or `rtrv-rtx:opcn=*-xy`) on ITU-N DPCs and ITU-N OPCs if the ITUDUPPC feature is on. ** and *** are not allowed for ITU-N DPCs and OPCs (for example, dpcn=**-xy is rejected). The node and group code cannot both be * (dpcn=*-* is rejected).

Output

This example retrieves all provisioned exception routes:

`rtrv-rtx`

```
eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

   DPCA             RTX-CRITERIA     LSN           RC    APC

   200-002-001      OPCA
                    001-001-001      lsn11         15    001-002-003
                    001-002-001      lsn10         99    001-002-002

                    CIC - ECIC
                    0     9          lsn10         1     001-002-002
                    10    16383      lsn10         2     001-002-002

                    SI
                    3                lsn12         1     001-002-004
                    9                lsn12         21    001-002-004
                    11               lsn12         9     001-002-004

   DPCI             RTX-CRITERIA     LSN           RC    APC

 s-2-029-6          OPCI
                    3-030-0          lsn27         28  s-2-020-6
```

```
                      CIC - ECIC
                      34    44         lsn27         6   s-2-020-6
                      45    55         lsn27         16  s-2-020-6
                      SI
                      3                lsn27         7   s-2-020-6
                      15               lsn27         14  s-2-020-6

       DPCN           RTX-CRITERIA     LSN           RC    APC

     s-08379-aa       OPCN
                    s-08278-aa         lsn62         8   s-12693-aa

                      CIC - ECIC
                      99    100        lsn62         9   s-12693-aa
                      999   1989       lsn62         99  s-12693-aa

                      SI
                      4                lsn56         29  s-08279-aa
                      14               lsn56         44  s-08279-aa

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  188
        EXCEPTION DPC(s):              17
        NETWORK DPC(s):                 2
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 211
        CAPACITY (% FULL):             11%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 216
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves all exception routes provisioned for a specific DPC:

`rtrv-rtx:dpcn=s-08379-aa`

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0
       DPCN           RTX-CRITERIA     LSN           RC    APC

     s-08379-aa       OPCN
                    s-08278-aa         lsn62         8   s-12693-aa

                      CIC - ECIC
                      99    100        lsn62         9   s-12693-aa
                      999   1989       lsn62         99  s-12693-aa

                      SI
                      4                lsn56         29  s-08279-aa
                      14               lsn56         44  s-08279-aa

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  188
        EXCEPTION DPC(s):              17
        NETWORK DPC(s):                 2
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 211
        CAPACITY (% FULL):             11%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 216
```

```
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves all provisioned exception routes for a specific exception criteria:

`rtrv-rtx:dpcn=s-08379-aa:opcn=s-08278-aa`

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCN             RTX-CRITERIA     LSN           RC    APC

     s-08379-aa         OPCN
                      s-08278-aa         lsn62         8   s-12693-aa

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  188
        EXCEPTION DPC(s):              17
        NETWORK DPC(s):                 2
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 211
        CAPACITY (% FULL):             11%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 216
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves all provisioned exception routes for a specific exception criteria:

`rtrv-rtx:dpci=s-2-029-6:cic=45:ecic=55`

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCI             RTX-CRITERIA     LSN           RC    APC

     s-2-029-6          CIC - ECIC
                        45    55         lsn27         16  s-2-020-6

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  188
        EXCEPTION DPC(s):              17
        NETWORK DPC(s):                 2
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 211
        CAPACITY (% FULL):             11%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 216
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves exception routes for a specific class:

```
rtrv-rtx:opc=1-1-1
```

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCA             RTX-CRITERIA     LSN           RC    APC
       200-002-001      OPCA
                        001-001-001      lsn11         15    001-002-003

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  188
        EXCEPTION DPC(s):              17
        NETWORK DPC(s):                 2
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 211
        CAPACITY (% FULL):             11%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 216
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves exception routes for a specific linkset:

```
rtrv-rtx:lsn=lsn27
```

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCI             RTX-CRITERIA     LSN           RC    APC

     s-2-029-6          OPCI
                        3-030-0          lsn27         28  s-2-020-6

                        CIC - ECIC
                        34    44         lsn27         6   s-2-020-6
                        45    55         lsn27         16  s-2-020-6

                        SI
                        3                lsn27         7   s-2-020-6
                        15               lsn27         14  s-2-020-6

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  188
        EXCEPTION DPC(s):              17
        NETWORK DPC(s):                 2
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 211
        CAPACITY (% FULL):             11%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 216
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves exception routes for the network cluster members of an OPC:

```
rtrv-rtx:opc=40-**-*
```

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0
```

```
       DPCA             RTX-CRITERIA     LSN           RC    APC
       002-002-003      OPCA
                        040-001-001      bd1           10    002-002-002
                        040-001-002      bd1           15    002-002-002
                        040-001-*        bd1           5     002-002-002

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  190
        EXCEPTION DPC(s):              21
        NETWORK DPC(s):                 2
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 217
        CAPACITY (% FULL):             11%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 216
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves exception routes for all cluster member plus itself of an OPC:

```
rtrv-rtx:opc=40-***-*
```

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCA             RTX-CRITERIA     LSN           RC    APC

       002-002-003      OPCA
                        040-001-001      bd1           10    002-002-002
                        040-001-002      bd1           15    002-002-002
                        040-*-*          bd1           0     002-002-002
                        040-001-*        bd1           5     002-002-002

    DESTINATION ENTRIES ALLOCATED:   2000
        FULL DPC(s):                  190
        EXCEPTION DPC(s):              21
        NETWORK DPC(s):                 2
        CLUSTER DPC(s):                 4
        TOTAL DPC(s):                 217
        CAPACITY (% FULL):             11%
    ALIASES ALLOCATED:               12000
        ALIASES USED:                 216
        CAPACITY (% FULL):              2%
    X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves route exceptions by criteria class:

```
rtrv-rtx:class=cic
```

```
    eagle10115 08-12-09 10:00:37 EST  EAGLE 40.1.0

       DPCA             RTX-CRITERIA     LSN           RC    APC
       200-002-001      CIC - ECIC
                        0     9          lsn10         1     001-002-002
                        10    16383      lsn10         2     001-002-002
```

```
      DPCI             RTX-CRITERIA     LSN           RC    APC

    s-2-029-6          CIC - ECIC
                       34    44         lsn27         6   s-2-020-6
                       45    55         lsn27         16  s-2-020-6

      DPCN             RTX-CRITERIA     LSN           RC    APC

    s-08379-aa         CIC - ECIC
                       99    100        lsn62         9   s-12693-aa
                       999   1989       lsn62         99  s-12693-aa

   DESTINATION ENTRIES ALLOCATED:   2000
       FULL DPC(s):                  188
       EXCEPTION DPC(s):              17
       NETWORK DPC(s):                 2
       CLUSTER DPC(s):                 4
       TOTAL DPC(s):                 211
       CAPACITY (% FULL):             11%
   ALIASES ALLOCATED:               12000
       ALIASES USED:                 216
       CAPACITY (% FULL):              2%
   X-LIST ENTRIES ALLOCATED:         500

;
```

This example retrieves exception routes for a specific class:

`rtrv-rtx:opcn16=121-10-15`

```
   eagle10115 08-12-13 10:00:37 EST  EAGLE 45.1.0

      DPCN16           RTX-CRITERIA     LSN           RC    APC
      200-002-001      OPCN16
                       121-010-015      lsn11         15    001-002-003

   DESTINATION ENTRIES ALLOCATED:   2000
       FULL DPC(s):                  188
       EXCEPTION DPC(s):              17
       NETWORK DPC(s):                 2
       CLUSTER DPC(s):                 4
       TOTAL DPC(s):                 211
       CAPACITY (% FULL):             11%
   ALIASES ALLOCATED:               12000
       ALIASES USED:                 216
       CAPACITY (% FULL):              2%
   X-LIST ENTRIES ALLOCATED:         500

;
```

Related Commands

chg-rtx, *dlt-rtx*, *ent-rtx*, *rept-stat-rtx*

rtrv-sccp-msg

Retreive Configured SCCP messages

Use this command to display the configured SCCP message parameter values.

Parameters

msgn (optional)

Message number. The number of the SCCP message.

Range:

1 - 10

Example

```
rtrv-sccp-msg:msgn=1
```

Dependencies

The GTT feature must be turned on before this command can be entered.

Notes

None

Output

```
rtrv-sccp-msg:msgn=1
```

```
tekelecstp 10-03-02 16:17:34 EST  EAGLE 42.0.0
MSG =  1
ACTIVE = YES
OPC  =    010-010-010
DPC  =    010-010-001
SELID =   6

CDPA_GTI = 2
CDPA_TT  = 0
CDPA_SSN = 6
CDPC     =    010-010-010
CDPA_NP  = 1    ( e164 )
CDPA_NAI = 1     ( sub )
CDPA_GTA = 1234567890

CGPA_GTI = 2
CGPA_TT  = 0
CGPA_SSN = 8
CGPC     =    020-020-020
CGPA_NP  = 1    ( e164 )
CGPA_NAI = 1     ( sub )
CGPA_GTA = 1234567890

LSN      = ls111
EAGLEGEN = NO

TCAP_FAMILY =  67
```

```
    TCAP_OPCODE = 32

    TCAP_PACKAGE = bgn  (0x62)

    TCAP_ACN  =  6-7-8-9-3

;
```

Related Commands

chg-sccp-msg, *tst-msg*

rtrv-sccp-serv

Retrieve SCCP Service

Use this command to display the SCCP Service application relationship information maintained by the EAGLE.

Parameters

serv (optional)

Name of the service to be retrieved.

Range:

gflex

G-Flex (GSM Flexible Numbering)

gport

G-Port (GSM Mobile Number Portability)

mnp

Mobile Number Portability

Dependencies

The A-Port or IGM feature must be enabled before the serv=mnp parameter can be specified.

The G-Flex feature must be enabled before the serv=gflex parameter can be specified.

The G-Port feature must be enabled before the serv=gport parameter can be specified.

Notes

Point codes are grouped by service in the output.

Output

The number of entries reported in use for the SCCPSRV table includes an entry for each point code network type. This entry is not displayed with the point code entries in the output. For example, if 3 ANSI point codes are used, the reported number of ANSI entries is 4.

This example displays output when no supporting features are turned on, and the SCCP Service table is empty:

```
rtrv-sccp-serv
```

```
    tekelecstp 06-10-30 09:26:14 EST  EAGLE 36.0.0
    No Entries Found.

;
```

This example displays output when the G-Port feature is turned on, and the SCCP Service table is empty:

```
rtrv-sccp-serv
```

```
    tekelecstp 06-10-30 09:26:14 EST  EAGLE 36.0.0

       -------------------------------------
       Service     : GPORT
       State       : Offline
       GTT Option  : Yes
       -------------------------------------

    SCCPSRV  table is (0 of 384) 0% full.

;
```

This example displays output when the G-Port and G-Flex features are turned on, and the SCCP Service table is empty:

```
rtrv-sccp-serv
```

```
    tekelecstp 06-10-30 09:26:47 EST  EAGLE 36.0.0

       -------------------------------------
       Service     : GFLEX
       State       : Offline
       GTT Option  : Yes
       -------------------------------------

       -------------------------------------
       Service     : GPORT
       State       : Offline
       GTT Option  : Yes
       -------------------------------------
    SCCPSRV  table is (0 of 384) 0% full.
;
```

This example displays output when the G-Port and G-Flex features are turned on, and the service set contains ANSI point codes:

```
rtrv-sccp-serv
```

```
    tekelecstp 06-10-30 09:30:02 EST  EAGLE 36.0.0

       --------------------------------------
       Service     : GFLEX
       State       : Offline
       GTT Option  : Yes
       --------------------------------------

       --------------------------------------
       Service     : GPORT
       State       : Offline
       GTT Option  : Yes
       --------------------------------------

       ANSI PC       RC
       001-001-001   01
       001-001-002   01
       001-001-003   01

    SCCPSRV  table is (4 of 384) 1% full.
;
```

This example displays output when the G-Port and G-Flex services are turned on, and the service set contains ANSI and ITU-I point codes:

```
rtrv-sccp-serv
```

```
    tekelecstp 06-10-30 09:32:30 EST  EAGLE 36.0.0

       --------------------------------------
       Service     : GFLEX
       State       : Offline
       GTT Option  : Yes
       --------------------------------------

       --------------------------------------
       Service     : GPORT
       State       : Offline
       GTT Option  : Yes
       --------------------------------------

       ANSI PC       RC
       001-001-001   01
       001-001-002   01
       001-001-003   01

       ITUI PC       RC
       2-001-1       02
       2-001-2       02
       2-001-3       02

    SCCPSRV  table is (8 of 384) 2% full.
;
```

This example displays output when the GPORT and GFLEX services are ONLINE, and the service set contains ANSI, ITU, and ITU-N point codes:

```
rtrv-sccp-serv
```

```
    tekelecstp 06-10-30 09:37:03 EST  EAGLE 36.0.0
       --------------------------------------
       Service     : GFLEX
       State       : Online
       GTT Option  : Yes
       --------------------------------------

       ITUN PC       RC
       00001         02

       --------------------------------------
       Service     : GPORT
       State       : Online
       GTT Option  : Yes
       --------------------------------------

       ANSI PC       RC
       001-001-001   01
       001-001-002   01
       001-001-003   01

       ITUI PC       RC
       2-001-1       02
       2-001-2       02
       2-001-3       02

    SCCPSRV  table is (10 of 384) 3% full.

;
```

This example displays output when the A-Port or IGM feature is enabled, and the MNP and GFLEX services are ONLINE. This example also displays spare point codes:

```
rtrv-sccp-serv
```

```
    tekelecstp 06-10-30 09:37:03 EST  EAGLE 36.0.0

       --------------------------------------
       Service     : GFLEX
       State       : Online
       GTT Option  : Yes
       --------------------------------------

       ITUN PC       RC
       00001         02

       --------------------------------------
       Service     : MNP
       State       : Online
       GTT Option  : Yes
       --------------------------------------

       ANSI PC       RC
       001-001-001   01
       001-001-002   01
       001-001-003   01

       ITUI PC       RC
       2-001-1       02
```

```
       2-001-2       02
       2-01-3        02

       ITUI SPARE    RC
     s-4-201-0       10
     s-4-201-1       10

       ITUN SPARE    RC
     s-2-102-0-aa    10
     s-2-102-1-aa    10

    SCCPSRV  table is (16 of 384) 4% full.

;
```

Related Commands

chg-sccp-serv, *dlt-sccp-serv*

rtrv-sccpopts

Retrieve SCCP Options

Use this command to display the current value of one or more of the SCCP option indicators maintained in the STP options table.

Parameters

This command has no parameters.

Example

`rtrv-sccpopts`

Dependencies

None.

Notes

None.

Output

This example displays output when the Origin-based MTP Routing feature is turned on.
`rtrv-sccpopts`

```
    tekelecstp 10-02-15 14:07:11 EST  EAGLE 42.0.0

    SCCP              OPTIONS
    ------------------------------
```

```
    CLASS1SEQ         off
    CCLEN             1
    ACLEN             3
    INTLUNKNNAI       no
    SUBDFRN           off
    MOBRSCCPOPC       MTP
    DFLTGTTMODE       CdPA

;
```

The example displays output when the Transaction-based GTT Loadsharing feature is enabled.

`rtrv-sccpopts`

```
    tekelecstp 10-02-15 14:07:11 EST  EAGLE 42.0.0

    SCCP                     OPTIONS
    ------------------------------
    CLASS1SEQ                   on
    CCLEN                        1
    ACLEN                        3
    INTLUNKNNAI                 no
    SUBDFRN                    off
    TGTT0                     NONE
    TGTT1                     NONE
    TGTTUDTKEY                MTP
    TGTTXUDTKEY               MTP

;
```

This example displays output when the GSM MAP Screening feature is turned on, and GSM MAP Screening is enabled for TCAP_Continue and TCAP_End messages.

`rtrv-sccpopts`

```
    tekelecstp 10-02-15 14:07:11 EST  EAGLE 42.0.0

   SCCP                     OPTIONS
    ------------------------------
    CLASS1SEQ                  off
    CCLEN                        1
    ACLEN                        3
    INTLUNKNNAI                yes
    SUBDFRN                    off
    DFLTGTTMODE                CdPA
    GMSTCAPCE                   on

;
```

This example displays output when the ANSI/ITU SCCP Conversion feature is enabled.

`rtrv-sccpopts`

```
    tekelecstp 09-06-15 14:07:11 EST  EAGLE 41.1.0

    SCCP                     OPTIONS
    ------------------------------
    CLASS1SEQ                   on
    CCLEN                        1
    ACLEN                        3
    INTLUNKNNAI                 no
    SUBDFRN                    off
```

```
    DFLTGTTMODE                CdPA
    CNVAINAT                      1
    TGTT0                      NONE
    TGTT1                 UDT,XUDT
    TGTTUDTKEY                 MTP
    TGTTXUDTKEY                MTP

;
```

This example displays output when the FLOBR feature is turned on.

`rtrv-sccpopts`

```
    tekelecstp 10-04-04 05:46:41 EST  EAGLE 41.0.0

    SCCP                    OPTIONS
    -------------------------------
    CLASS1SEQ                   off
    DFLTGTTMODE   FLOBRCdPA,FLOBRCgPA
    DFLTFALLBACK                yes

;
```

`rtrv-sccpopts`

```
    tekelecstp 10-04-06 15:11:29 EST  Eagle 42.0.0

    SCCP                    OPTIONS
    -------------------------------
    CLASS1SEQ                   off
    CCLEN                         0
    ACLEN                         0
    INTLUNKNNAI                  no
    DFLTGTTMODE                CdPA
    MTPRGTT                     off
    MTPRGTTFALLBK          mtproute
    UNQGTTSEL             bestmatch

;
```

This example displays output when the ANSI/ITU SCCP Conversion feature is turned ON.

`rtrv-sccpopts`

```
    tekelecstp 12-05-18 14:26:24 EST EAGLE 45.0.0

    SCCP                    OPTIONS
    -------------------------------
    CLASS1SEQ                   off
    CCLEN                         0
    ACLEN                         0
    INTLUNKNNAI                  no
    SUBDFRN                     off
    DFLTGTTMODE                CdPA
    CNVAINAT                      1
    MTPRGTT                     off
    MTPRGTTFALLBK          mtproute
    UNQGTTSEL             bestmatch
    DELCCPREFIX              pfxwcc
    CNVCLGITU                   off

;
```

This example displays output when EPAP Data Split feature enabled.

rtrv-sccpopts

```
   tekelecstp 12-07-11 14:51:24 EST  EAGLE 45.0.0
    rtrv-sccpopts
    Command entered at terminal #4.

    SCCP                     OPTIONS
    ------------------------------
    CLASS1SEQ                  off
    CCLEN                        0
    ACLEN                        0
    INTLUNKNNAI                 no
    SUBDFRN                    off
    DFLTGTTMODE               CdPA
    CNVAINAT                     1
    MOBRSCCPOPC                MTP
    TGTT0                     NONE
    TGTT1                     NONE
    TGTTUDTKEY                 MTP
    TGTTXUDTKEY                MTP
    GMSTCAPCE                  off
    DFLTFALLBACK                no
    MTPRGTT                    off
    MTPRGTTFALLBK          mtproute
    UNQGTTSEL             bestmatch
    DELCCPREFIX              pfxwcc
    GTTDIST                      dn

;
```

This example displays output when Dual ExAP Config feature enabled.

rtrv-sccpopts

```
    tekelecstp 12-07-11 14:52:24 EST  EAGLE 45.0.0
    rtrv-sccpopts
    Command entered at terminal #4.

    SCCP                     OPTIONS
    ------------------------------
    CLASS1SEQ                  off
    CCLEN                        0
    ACLEN                        0
    INTLUNKNNAI                 no
    SUBDFRN                    off
    DFLTGTTMODE               CdPA
    CNVAINAT                     1
    MOBRSCCPOPC                MTP
    TGTT0                     NONE
    TGTT1                     NONE
    TGTTUDTKEY                 MTP
    TGTTXUDTKEY                MTP
    GMSTCAPCE                  off
    DFLTFALLBACK                no
    MTPRGTT                    off
    MTPRGTTFALLBK          mtproute
    UNQGTTSEL             bestmatch
    DELCCPREFIX              pfxwcc
    GTTDIST                    elap

;
```

Related Commands

chg-sccpopts

rtrv-scr-aftpc

Retrieve Allowed Affected Point Code

Use this command to show the allowed affected point code (AFTPC) screening references in the AFTPC entity set.

Parameters

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all AFTPC screening references.

Range:

yes

no

Default:

no

area (optional)

ITU international area. The *area* in the point code represented by *zone-area-id*.

Range:

*000 - 255, **

*the full range of values from 000–255

id (optional)

ITU international ID. The ID in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 31, **

* —the full range of values from 0–31

msa (optional)

24-bit ITU national main signaling area. The main signaling area in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

nc (optional)

Network cluster identifier value. This parameter displays entries containing the specific cluster of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 000-255

Default:

Display all

ncm (optional)

Network cluster member identifier value. This parameter displays entries containing this specific cluster member of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 000-255

Default:

Display all

ni (optional)

Network identifier value. This parameter displays entries containing this specific network of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 000-255

Default:

Display all

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A.

Range:

*00000 - 16383, **

* —the full range of values from 00000–16383

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

stop—The gateway screening process ends and the message proceeds through normal routing.

Default:

Display all

nsr (optional)

The next screening reference parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national main number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 15, **

* —the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The signaling point in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

sr (optional)

The AFTPC screening reference name

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

ssa (optional)

24-bit ITU national sub signaling area. The ssa specified in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 000-255

ssn (optional)

Subsystem number.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all.

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by `un-sna-mna`.

Range:

*0 -- 127, **

* —the full range of values from 0–127

zone (optional)

ITU international zone. The zone in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

Example

```
rtrv-scr-aftpc
rtrv-scr-aftpc:sr=iec:ni=240:nc=001:ncm=010&&014:ssn=012
rtrv-scr-aftpc:sr=iec
rtrv-scr-aftpc:all=yes
rtrv-scr-aftpc:sr=iec:ni=240:nc=001:ncm=010:ssn=012:actname=copy
rtrv-scr-aftpc:sr=aft1
rtrv-scr-aftpc:sr=aft1:zone=1:area=2:id=3:nsfi=stop:ssn=1:pcst=s
rtrv-scr-aftpc:sr=aft2:un=1:sna=2:mna=3
```

Dependencies

If the nsfi parameter is specified, the parameter value must be stop.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If nc=* is specified, ncm=* must be specified.

If ni=* is specified, nc=* and nc=* must be specified.

If zone=* is specified, area=* and id=* must be specified.

If area=* is specified, id=* must be specified.

If msa=* is specified, ssa=* and sp=* must be specified.

If ssa=* is specified, sp=* must be specified.

If un=* is specified, sna=* and mna=* must be specified.

If sna=* is specified, mna=* must be specified.

The character *c* is not a valid value for the ni, nc, ncm, zone, area, id, msa, ssa, sp, un, sna, mna, and npc parameters.

The nsr parameter cannot be specified if the actname parameter is specified.

The nsr parameter cannot be specified if the nsfi=stop parameter is specified.

The value of the actname parameter must be defined in the gateway screening stop action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

If the actname parameter is specified with the sr parameter, the specified value for the actname parameter must be assigned to that screening reference name.

If specified, the sr parameter value must exist in the AFTPC screen entity set.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16, and ITU-N24 point codes.

Any specified ni, nc, ncm, zone, area, id, msa, ssa, sp, un, sna, mna, ncp, nsfi, and nsr parameters must already exist in the AFTPC entity for the screening reference.

If the pcst parameter is specified, point codes with the specified subtype prefix (no prefix or s-) must exist in the database.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

A range of values is defined by separating the values that define the range by two ampersands (*&&*) for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

If no parameters are specified, a list of allowed AFTPC references is produced indicating whether they are referenced or not.

If only the all=yes parameter is specified, detailed information for every rule in every allowed AFTPC screening table is displayed.

If the all parameter is specified and other parameters are also specified, the all parameter is ignored.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix ot has the spare point code prefix.

Output

`rtrv-scr-aftpc`

```
    rlghncxa03w 03-03-13 13:12:38 EST  EAGLE 31.3.0
    SCREEN = ALLOWED AFTPC
    SR    REF  RULES
    IEC   YES     2
    WRD2  YES     1
    WRD3  NO      4
    WRD4  YES     9
;
```

```
rtrv-scr-aftpc:sr=iec:ni=240:nc=001:ncm=010&&014:ssn=012:actname=copy
```

```
    rlghncxa03w 03-03-14 15:23:18 EST  EAGLE 31.3.0
    SCREEN = ALLOWED AFTPC
    SR    NI       NC       NCM      SSN      NSFI    NSR/ACT
    IEC   240      001      010&&012 012      STOP    COPY
;
```

```
rtrv-scr-aftpc:sr=aft1:zone=1:area=2:id=3:nsfi=stop:ssn=1:pcst=s
```

```
    tekelecstp 05-01-05 10:19:51 EST  EAGLE 31.12.0
    SCREEN = ALLOWED AFTPC
    SR      ZONE   AREA     ID       SSN      NSFI    NSR/ACT
    aft1  s-1      002      3        1        STOP    ------
;
```

```
rtrv-scr-aftpc:sr=aft1
```

```
    tekelecstp 05-01-05 10:19:51 EST  EAGLE 31.12.0
    SCREEN = ALLOWED AFTPC
    SR      ZONE   AREA     ID       SSN      NSFI    NSR/ACT
    aft1  s-2      002      3        1        STOP    ------

    SR      NPC                      SSN      NSFI    NSR/ACT
    aft1  s-00128                    1        STOP    ------
;
```

```
rtrv-scr-aftpc:sr=aft2
```

```
    eaglestp 28-02-13 10:19:51 EST  EAGLE 45.1.0
    SCREEN = ALLOWED AFTPC
    SR     UN     SNA    MNA      SSN      NSFI    NSR/ACT
    aft2   001    02     01       1        STOP    ------
;
```

Legend

For a summary report:

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. If you need a more detailed output, use the `rtrv-scr-blkdpc:all=yes` command, or specify the specific screening reference.
- **RULES**—Number of screening rules in that screening table

For a detailed report:

- **SCREEN = ALLOWED AFTPC**—Screen type
- **SR**—Identifies the various screen sets being used. It can be up to four characters in length
- **NI-NC-NCM**—Point code referenced within the screen. For international point codes, these columns are ZONE - AREA - ID . For 24-bit ITU national point codes, these columns are MSA - SSA - SP. For 16-bit ITU national point codes, these columns are UN - SNA - MNA. For national point codes, these columns become the single column NPC.
- **SSN**—Subsystem number associated with the point code identified by*ni-nc-ncm*

- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR –up to four characters) or action to be taken (ACT –up to six characters), if the message passes this screen

Related Commands

chg-scr-aftpc, *dlt-scr-aftpc*, *ent-scr-aftpc*

rtrv-scr-blkdpc Retrieve Blocked DPC

Use this command to show the blocked destination point code (BLKDPC) screening references in the BLKDPC entity set.

Parameters

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all blocked DPC screening references.

Range:

yes

no

Default:

no

area (optional)

ITU international area. The area in the point code specified by *zone-area-id*.

Range:

*000 - 255, **

* —the full range of values from 000–255

id (optional)

ITU international ID. The ID in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 31, **

* —the full range of values from 0–31

msa (optional)

24-bit ITU national main signaling area. The main signaling area in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

nc (optional)

Network cluster identifier value. This parameter displays entries containing the specific cluster of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

Display all

ncm (optional)

Network cluster member identifier value. This parameter displays entries containing the specific cluster member of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ni (optional)

Network identifier value. This parameter displays entries containing the specific network of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255.

Default:

Display all

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A.

Range:

*00000 - 16383, **

* —the full range of values from 00000–16383

nsfi (optional)

This parameter specifies the next screening category used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

cgpa

Allowed calling party address is the next screening category

destfld

Allowed destination field (DESTFLD) is the next screening category

fail

The received message should be discarded.

isup

ISUP message type (ISUP) is the next screening category

stop

The gateway screening process ends and the message proceeds through normal routing

Default:

Display all

nsr (optional)

The next screening reference parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process. This parameter is mandatory if nsfi is other than *stop* or *fail* and cannot be entered if nsfi is *stop* or *fail*, or the copy=yes parameter is specified.

Range:

ayyy 1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pcst (optional)

Point code subtype. This parameter specifies whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national main number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 15, **

* —the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. This parameter specifies the signaling point in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

sr (optional)

The BLKDPC screening reference name

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all.

ssa (optional)

24-bit ITU national sub signaling area. The sub signaling area specified in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 000-255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0 -- 127, **

* —the full range of values from 0–127

zone (optional)

ITU international zone. The zone in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

Example

```
rtrv-scr-blkdpc
rtrv-scr-blkdpc:sr=iec:ni=240:nc=001:ncm=010&&018:nsfi=stop:actname=rdct
rtrv-scr-blkdpc:sr=iec
rtrv-scr-blkdpc:all=yes
rtrv-scr-blkdpc:sr=bdp1:npc=128:nsfi=fail:pcst=s
rtrv-scr-blkdpc:sr=bl01:un=1:sna=2:mna=3
```

Dependencies

A complete point code must be specified, and must be one and only one of the five point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, un-sna-mna, or npc, except in the special case of entering *c* for "continue."

If the ni=c parameter is specified, then the nc and the ncm parameters must have a value of *c* or must not be specified. If the ni=c parameter is specified, and the nc and the ncm parameters are not specified, then the nc and ncm parameters default to a value of *c*.

If the zone=c parameter is specified, then the area and id parameters must have a value of *c* or must not be specified. If the zone=c parameter is specified, and the area and the id parameters are not specified, then the area and id parameters default to a value of *c*.

If the msa=c parameter is specified, then the ssa and sp parameters must have a value of *c* or must not be specified. If the msa=c parameter is specified, and the ssa and the sp parameters are not specified, then the ssa and sp parameters default to a value of *c*.

If the un=c parameter is specified, then the sna and mna parameters must have a value of *c* or must not be specified. If the un=c parameter is specified, and the sna and the mna parameters are not specified, then the sna and mna parameters default to a value of *c*.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the value of the nsfi parameter is *stop* or *fail*, then the nsr parameter cannot be specified.

If the actname parameter is specified, the nsr parameter cannot be specified.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

If the actname parameter is specified with the sr parameter, the specified value for the actname parameter must be assigned to that screening reference name.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

If the ni parameter is specified as an asterisk (ni=*) or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the ncm parameter is specified as a single value, or a range other than the full range of 000 – 255, the ni and the nc parameters must be specified with a single value.

The value of the sr parameter must already exist in the BLKDPC entity set.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

Any specified id, mna or sp parameter must already exist in the database.

If the pcst parameter is specified, point codes with the specified subtype prefix (no prefix or s-) must exist in the database.

Any specified nc parameter must already exist in the database

Any specified ncm parameter must already exist in the database

Any specified zone, un or msa parameter must already exist in the database.

Any specified ni parameter must already exist in the database

Any specified nsr parameter must already exist in the database

Any specified nsfi parameter must already exist in the database

Any specified npc parameter must already exist in the database

Any specified area, sna, or ssa parameter must already exist in the database.

Any specified pcst parameter must already exist in the database

If the zone=* parameter is specified, then the area=* and id=* parameters must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If no parameters are specified, a list of blocked DPC screening references is displayed indicating whether they are referenced or not.

If only the all=yes parameter is specified, detailed information for every rule in every blocked DPC screening table is output.

If the all parameter is specified and other parameters are also specified, the all parameter is ignored.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The character *c* is used in the blocked DPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the blocked DPC screens. When screening for a blocked DPC and the point code being screened does not match any of the point codes in the blocked DPC screens, the message is not rejected and the screening process continues. There must be an entry in the blocked DPC screens to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr . The point code has the value *c*.

If the character *c* is specified for any subfield of a three-subfield point code, all three subfields must have the value *c*. No other values can be used. For example, a point code *c* is not allowed. The point code must be *c* . The asterisk (*) value cannot be used with the character *c* (for example, a point code *c* is not allowed).

In all cases, if *c* for "continue" is entered for the first subfield in the point code, the other subfields default to *c* in the database.

When the point code does not match any entries in the blocked DPC screens, the screening process is directed to the screening reference with the point code *c* . The nsfi and nsr in this entry are examined to determine the next step in the screening process.

The spare point code subtype prefix *s-* is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`rtrv-scr-blkdpc`

```
    rlghncxa03w 03-03-13 13:12:38 EST  EAGLE 31.3.0
    SCREEN = BLOCKED DPC
    SR    REF  RULES
    IEC   YES     2
    WRD2  YES     1
    WRD3  NO      4
    WRD4  YES     9
;
```

`rtrv-scr-blkdpc:sr=iec:ni=240:nc=001:ncm=010&&018`

```
    rlghncxa03w 03-03-13 13:13:21 EST  EAGLE 31.3.0
    SCREEN = BLOCKED DPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   240      001      010&&020 STOP    -------
;
```

`rtrv-scr-blkdpc:actname=rdct`

```
    rlghncxa03w 03-03-13 13:13:21 EST  EAGLE 31.3.0
    SCREEN = BLOCKED DPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   C        C        C        STOP    RDCT
;
```

`rtrv-scr-blkdpc:nsr=is02`

```
    tekelecstp 02-08-30 09:25:54 EST  EAGLE 30.0.0
    rtrv-scr-blkdpc:nsr=is02
    Command entered at terminal #4.
    SCREEN = BLOCKED DPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    bdp3  C        C        C        ISUP    is02
;
```

`rtrv-scr-blkdpc:sr=bdp1:npc=128:nsfi=fail`

```
    tekelecstp 05-01-25 15:57:51 EST  EAGLE 31.12.0
    SCREEN = BLOCKED DPC
    SR      NPC                     NSFI    NSR/ACT
    bdp1  s-00128                   FAIL    -------
;
```

`rtrv-scr-blkdpc:sr=bl01`

```
    tekelecstp 13-07-05 16:48:31 EST  45.0.0-64.69.0
    rtrv-scr-blkdpc:sr=bl01
    Command entered at terminal #4.
    SCREEN = BLOCKED DPC
    SR      UN       SNA     MNA     NSFI    NSR/ACT
    bl01    004      05      06      FAIL    -------
    bl01    C        C       C       STOP    ------

;
```

Legend

For a summary report:

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. For more detailed output, use the `rtrv-scr-blkdpc:all=yes` command, or specify the specific screening reference.

- **RULES**—Number of screening rules in that screening table

For a detailed report:

- **SCREEN = BLOCKED DPC—**Screen type
- **SR**—Identifies the screen sets being used. It can be up to four characters in length.
- **NI - NC - NCM**—Point code referenced within the screen. For international point codes, columns are ZONE - AREA - ID. For 24-bit ITU national point codes, columns are MSA-SSA-SP. For 16-bit ITU national point codes, columns are UN-SNA-MNA. For national point codes, columns become the single column NPC.
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-scr-blkdpc, *dlt-scr-blkdpc*, *ent-scr-blkdpc*

rtrv-scr-blkopc

Retrieve Blocked OPC

Use this command to show the blocked originating point code (BLKOPC) screening references in the BLKOPC entity set.

Parameters

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none—Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all blocked OPC screening references.

Range:

yes

no

Default:

no

area (optional)

ITU international area. The area in the point code represented by *zone-area-id*.

Range:

*000 - 255, **

*— the full range of values from 000–255

id (optional)

ITU international ID. The ID in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 31, **

* —the full range of values from 0–31

msa (optional)

24-bit ITU national main signaling area. The main signaling area in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

nc (optional)

Network cluster identifier value. This parameter displays entries containing this specific cluster of the point code represented by *ni-nc-ncm*.

Range:

0 - 255

* —the full range of values from 0–255

Default:

Display all

ncm (optional)

Network cluster member identifier value. This parameter displays entries containing this specific cluster member of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ni (optional)

Network identifier value. This parameter displays entries containing this specific network of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A.

Range:

*00000 - 16383, **

* —the full range of values from 00000–16383

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

cgpa

Allowed calling party address is the next screening category

stop

The gateway screening process ends and the message proceeds through normal routing.

fail

The received message should be discarded.

sio

Allowed SIO is the next screening category.

dpc

Allowed DPC is the next screening category.

blkdpc

Blocked DPC is the next screening category.

Default:

Display all

nsr (optional)

The next screening reference parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process. This parameter is mandatory if nsfi is other than *stop* or *fail*. The nsr parameter cannot be entered if nsfi is *stop* or *fail*, or the copy=yes parameter is specified.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national main number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 15, **

* —the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The signaling point in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

sr (optional)

The BLKOPC screening reference name

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all.

ssa (optional)

24-bit ITU national sub signaling area. The sub signaling area is specified in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 000-255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by `un-sna-mna`.

Range:

*0 -- 127, **

* —the full range of values from 0–127

zone (optional)

ITU international zone. The zone in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

*—the full range of values from 0–7

Example

```
rtrv-scr-blkopc
rtrv-scr-blkopc:sr=iec:ni=240:nc=001:ncm=010&&018:actname=copy
rtrv-scr-blkopc:sr=iec
rtrv-scr-blkopc:all=yes
rtrv-scr-blkopc:sr=bop1:npc=128:nsfi=fail
rtrv-scr-blkopc:sr=bop1:zone=2:area=2:id=3:nsfi=fail:pcst=s
rtrv-scr-blkopc:sr=bop1:un=121:sna=10:mna=17:nsfi=fail:pcst=s
```

Dependencies

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

Any specified ni, nc, ncm, zone, area, id, msa, ssa, sp, ncp, nsfi, un, sna, mna, and nsr parameters must already exist in the database.

If the pcst parameter is specified, point codes with the specified subtype prefix (no prefix or *s*-) must exist in the database.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the nsr parameter is specified, then the actname parameter cannot be specified.

If the value of the nsfi parameter is *stop* or *fail*, then the nsr parameter cannot be specified.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the value *c* is specified for any subfield of a three-subfield point code, then all three subfields must have a value of *c* (*c-c-c*). No other values, including asterisks can be used.

If the value of the first subfield is *c*, then the other subfields default to *c* in the database.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

If the actname parameter is specified with the screening reference name parameter, the specified value for the actname parameter must be assigned to that screening reference name.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the nc=* parameter is specified, then the ncm=* parameter must be specified.

If the ni=* parameter is specified, then the nc=* and ncm=* parameters must be specified.

If the zone=* parameter is specified, then the area=* and id=* parameters must be specified.

If the msa=* parameter is specified, then the ssa=* and sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and mna=* parameters must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

If no parameters are specified, a list of blocked OPC references is displayed indicating whether they are referenced or not.

If only the all=yes parameter is specified, detailed information for every rule in every blocked OPC screening table is displayed.

If the all parameter is specified and other parameters are also specified, the all parameter is ignored.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

For point codes with three subfields, the value *c* (continue) is used as a place holder. If the point code is not found in this screen set, the continue value points to the nsfi and nsr to be applied next.

The character *c* is used in the blocked OPC screens to allow the screening process to continue for messages with point codes that do not match any point codes in the blocked OPC screens. When screening for a blocked OPC and the point code being screened does not match any of the point codes in the blocked OPC screens, the message is not rejected and the screening process continues. There must be an entry in the blocked OPC screens to allow the screening process to continue. This entry consists of a screening reference, point code, nsfi, and nsr . The point code *c*.

When the point code does not match any entries in the blocked OPC screens, the screening process is directed to the screening reference with the point code *c*. The nsfi and nsr in this entry are examined to determine the next step in the screening process.

The spare point code subtype prefix s- is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`rtrv-scr-blkopc`

```
    rlghncxa03w 03-03-13 13:12:38 EST  EAGLE 31.3.0
    SCREEN = BLOCKED OPC
    SR    REF  RULES
    IEC   YES     2
    WRD2  YES     1
    WRD3  NO      4
    WRD4  YES     9
;
```

`rtrv-scr-blkopc:sr=iec:ni=240:nc=001:ncm=010&&018`

```
    rlghncxa03w 03-03-13 13:13:21 EST  EAGLE 31.3.0
    SCREEN = BLOCKED OPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   240      001      010&&020 FAIL    -------
;
```

`rtrv-scr-blkopc:actname=cncf`

```
    rlghncxa03w 03-03-13 10:34:07 EST  EAGLE 31.3.0
    SCREEN = BLOCKED OPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   C        C        C        STOP    CNCF
;
```

`rtrv-scr-blkopc:all=yes`

```
    rlghncxa03w 03-03-13 10:34:07 EST  EAGLE 31.3.0
    SCREEN = BLOCKED OPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   240      001      010      FAIL    -------
    IEC   241      010      *        FAIL    -------

    SR    ZONE     AREA     ID       NSFI    NSR/ACT
    IEC   1        003      4        FAIL    -------
```

```
    IEC   1        003      5        FAIL    -------

    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   C        C        C        STOP    CRNCF

    SR    NI       NC       NCM      NSFI    NSR/ACT
    WRD2  243      015      001      FAIL    -------
    WRD2  243      105      002      FAIL    -------
    WRD2  C        C        C        STOP    CNCF
;
```

`rtrv-scr-blkopc:sr=bo01:nsfi=sio:nsr=si01:msa=c:ssa=c:sp=c`

```
    tekelecstp 03-03-25 15:57:07 EST  EAGLE 31.0.0
    SCREEN = BLOCKED OPC
    SR    MSA      SSA      SP       NSFI    NSR/ACT
    bo01  C        C        C        SIO     si01
;
```

`rtrv-scr-blkopc:sr=bop1`

```
    tekelecstp 05-01-25 15:57:07 EST  EAGLE 31.12.0
    SCREEN = BLOCKED OPC
    SR      ZONE   AREA     ID       NSFI    NSR/ACT
    bop1  s-2      002      3        FAIL    -------

    SR      NPC                      NSFI    NSR/ACT
    bop1  s-00128                    FAIL    -------

    SR      ZONE   AREA     ID       NSFI    NSR/ACT
    bop1    C      C        C        STOP    ------
;
```

`rtrv-scr-blkopc:sr=iec:un=120:sna=10:mna=15`

```
    rlghncxa03w 03-03-13 13:13:21 EST  EAGLE 45.0.0
    SCREEN = BLOCKED OPC
    SR    UN       SNA       MNA      NSFI    NSR/ACT
    IEC   120      10        15       FAIL    -------
;
```

Legend

For a summary report:

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. If you need a more detailed output, use the `rtrv-scr-blkopc:all=yes` command, or specify the specific screening reference.
- **RULES**—Number of screening rules in that screening table.

For a detailed report:

- **SCREEN = BLOCKED OPC**—Screen type
- **SR**—Identifies the various screen sets being used. It can be up to four characters in length.

- **NI - NC - NCM**—Point code referenced within the screen. For international point codes, these columns are ZONE - AREA - ID. For 24-bit ITU national point codes, these columns are MSA-SSA-SP. For the 16-bit ITU national point codes, these columns are UN-SNA-MNA. For national point codes, these columns become the single column NPC .
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen

Related Commands

chg-scr-blkopc, *dlt-scr-blkopc*, *ent-scr-blkopc*

rtrv-scr-cdpa

Retrieve Allowed Called Party Address

Use this command to show the allowed called party address (CDPA) screening references in the CDPA entity set.

Parameters

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none—Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all allowed CDPA screening references.

Range:

yes

no

Default:

no

area (optional)

ITU international area. The area in the point code represented by *zone-area-id*.

Range:

*000 - 255, **

*—the full range of values from 000–255

id (optional)

ITU international ID. The ID in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by `un-sna-mna`.

Range:

*0 -- 31, **

* —the full range of values from 0–31

msa (optional)

24-bit ITU national main signaling area. The main signaling area specified in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* — the full range of values from 000-255

nc (optional)

Network cluster identifier value. This parameter displays entries containing this specific cluster of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ncm (optional)

Network cluster member identifier value. This parameter displays entries containing this specific cluster member of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ni (optional)

Network identifier value. This parameter displays entries containing this specific network of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A.

Range:

*00000 - 16383, **

* —the full range of values from 00000–16383

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

aftpc

Allowed affected point code is the next screening category

stop

The gateway screening process ends and the message proceeds through normal routing

Default:

Display all

nsr (optional)

The next screening reference parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process. This parameter is mandatory if nsfi is other than *stop* or *fail*. This parameter cannot be entered if nsfi is *stop* or *fail*, or the copy=yes parameter is specified.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pcst (optional)

Point code subtype indicator. This parameter indicates whether the ITU international or ITU national point codes to be displayed must have the spare point code prefix (s-).

Range:

none

No spare point code prefix required

s

Spare point code prefix required

Default:

none

scmgfid (optional)

SCCP management (SCMG) format ID, which consists of a 1-octet field and uniquely defines the function and format of each SCMG message. The following SCCP message types are screened against the Allowed CDPA table and all others are passed: UDT, UDTS, XUDT, XUDTS

Range:

1 - 255, *

*—the full range of values from 1-255

Default:

All SCMG format IDs are shown.

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

0 -- 15, *

* —the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The signaling point in the point code represented by *msa-ssa-sp*.

Range:

000 - 255, *

* —the full range of values from 000-255

sr (optional)

Displays all allowed CDPA screening references.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all.

ssa (optional)

24-bit ITU national sub signaling area. The sub signaling area specified in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 000-255

ssn (optional)

Subsystem number.

Range:

*0 - 255, **

* — the full range of values from 0–255

Default:

Display all.

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0 -- 127, **

* —the full range of values from 0–127

zone (optional)

ITU international zone. The zone in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

Example

```
rtrv-scr-cdpa
rtrv-scr-cdpa:sr=iec:ni=240:nc=001:ncm=010:ssn=001
rtrv-scr-cdpa:sr=iec:ni=240:nc=001:ssn=002&&005
rtrv-scr-cdpa:sr=iec
rtrv-scr-cdpa:sr=iec:actname=copy
rtrv-scr-cdpa:sr=cdp1:zone=1:area=2:id=3:ssn=1:nsfi=stop:scmgfid=1:pcst=s
rtrv-scr-cdpa:sr=cdp1
rtrv-scr-cdpa:sr=cdp2:un=1:sna=2:mna=3
```

Dependencies

If the actname parameter is specified, the nsr parameter cannot be specified.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

The nsr parameter cannot be specified when nsfi=stop .

If zone=* is specified, area=* and id=* must be specified.

If area is specified or respecified as an asterisk, id must also be an asterisk.

If msa=* is specified, ssa=* and sp=* must be specified.

If ssa=* is specified, sp=* must be specified.

If un=* is specified, sna=* and mna=* must be specified.

If sna=* is specified, mna=* must be specified.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the ncm parameter is specified as a single value, or a range other than the full range of 000 – 255, the ni and the nc parameters must be specified with a single value.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the actname parameter is specified with the screening reference name parameter, the specified value for the actname parameter must be assigned to that screening reference name.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

Any specified ni, nc, ncm, zone, area, id, msa, ssa, sp, un, sna, mna, ncp, nsfi, ri, ssn, and nsr parameters must already exist in the CGPA entity for the screening reference.

If the pcst parameter is specified, point codes with the specified subtype prefix (no prefix or *s*-) must exist in the database.

The specified screening function identifier (nsfi) must be in the allowed CDPA entity set.

If specified, the sr parameter value must exist in the AFTPC screen entity set.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If no parameters are specified, the system displays a summary output.

If only the all=yes parameter is specified, the system displays a detailed output.

If the all parameter and any point code parameter are specified, the all parameter is ignored.

The REF column of the output of this command displays *YES* when the screen is referenced by another screen; otherwise, it displays *NO*.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`rtrv-scr-cdpa:sr=iec:ni=240:nc=001:ncm=010:ssn=001`

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED CDPA
    SR    NI       NC       NCM      SSN      SCMGFID   NSFI   NSR/ACT
    IEC   240      001      010      001      002&&003 STOP    -------
;
```

`rtrv-scr-cdpa:sr=iec:ni=240:nc=001:ssn=002&&005`

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED CDPA
    SR    NI       NC       NCM      SSN      SCMGFID   NSFI   NSR/ACT
    IEC   240      001      010      002      ------   STOP    -------
    IEC   240      001      011      002&&003 ------   STOP    -------
;
```

`rtrv-scr-cdpa:sr=iec`

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED CDPA
    SR    NI       NC       NCM      SSN      SCMGFID   NSFI   NSR/ACT
    IEC   240      001      010      12       ------   STOP    -------
    IEC   241      010      *        *        ------   AFTPC   IAFT
;
```

```
rtrv-scr-cdpa
```

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED CDPA
    SR     REF  RULES
    IEC    YES     2
    WRD2   YES     1
    WRD4   YES     4
;
```

```
rtrv-scr-cdpa:sr=iec:actname=copy
```

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED CDPA
    SR    NI       NC       NCM      SSN      SCMGFID   NSFI   NSR/ACT
    IEC   245      001      010      001      002&&003 STOP    COPY
    IEC   246      001      010      001      002&&003 STOP    COPY

    U0 - CNCF
;
```

```
rtrv-scr-cdpa:sr=cdp1:zone=1:area=2:id=3:ssn=1:nsfi=stop:scmgfid=1:pcst=s
```

```
    rlghncxa03w 05-01-07 12:05:33 EST  EAGLE 31.12.0
    SCREEN = ALLOWED CDPA
    SR      ZONE   AREA     ID       SSN      SCMGFID  NSFI    NSR/ACT
    cdp1  s-1      002      3        1        1        STOP    ------
;
```

```
rtrv-scr-cdpa:sr=cdp1
```

```
    rlghncxa03w 05-01-07 12:05:33 EST  EAGLE 31.12.0
    SCREEN = ALLOWED CDPA
    SR      ZONE   AREA     ID       SSN      SCMGFID  NSFI    NSR/ACT
    cdp1  s-2      002      3        1        1        STOP    ------

    SR      NPC                      SSN      SCMGFID  NSFI    NSR/ACT
    cdp1  s-00128                    1        1        STOP    ------
;
```

```
rtrv-scr-cdpa:sr=cdp2:
```

```
    eaglestp 28-02-13 12:05:33 EST  EAGLE 45.1.0
    SCREEN = ALLOWED CDPA
    SR      UN   SNA     MNA       SSN      SCMGFID  NSFI    NSR/ACT
    cdp2    001  02      01        1        1        STOP    ------
;
```

Legend

For a summary report:

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. For more detailed output, use the `rtrv-scr-cdpa:all=yes` command, or specify the specific screening reference.
- **RULES**—Number of screening rules in that screening table

For a detailed report:

- **SCREEN = ALLOWED CDPA**—Screen type
- **SR**—Screen sets being used. It can be up to four characters in length.
- **NI - NC - NCM**—Point code referenced within the screen. For international point codes, these columns are ZONE - AREA - ID . For 24-bit national point codes, these columns are MSA - SSA - SP. For 16-bit ITU national point codes, these columns are UN - SNA - MNA. For national point codes, these columns become the single column NPC.
- **SSN**—Subsystem number associated with the point code identified by the *ni-nc-ncm*.
- **SCMGFID**—SCMGFID format ID
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-scr-cdpa, *dlt-scr-cdpa*, *ent-scr-cdpa*

rtrv-scr-cgpa

Retrieve Allowed Calling Party Address

Use this command to show the allowed calling party address (CGPA) screening references in the CGPA entity set.

Parameters

Note: The nc, ncm, and ni parameters can be specified as a single value, range of values, or an asterisk (*). An * value indicates the full range of values. The area, id, msa, ni, nsr, ri, sp, ssa, ssn, un, sna, mna, and zone parameters can be specified as a single value or as an *.

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all allowed CGPA screening references.

Range:

yes

no

Default:

no

area (optional)

ITU international area. The area in the point code represented by *zone-area-id*.

Range:

*000 - 255, **

* —the full range of values from 000–255

id (optional)

ITU international ID. The ID in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 31, **

* —the full range of values from 0–31

msa (optional)

24-bit ITU national main signaling area. The main signaling area specified in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

nc (optional)

Network cluster identifier value. This parameter displays entries containing this specific cluster of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* — the full range of values from 0–255

Default:

Display all

ncm (optional)

Network cluster member identifier value. This parameter display entries containing this specific cluster member of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ni (optional)

Network identifier value. This parameter displays entries containing this specific network of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* — the full range of values from 0–255

Default:

Display all

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A.

Range:

*00000 - 16383, **

* —the full range of values from 00000–16383

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range: *cdpa, stop, tt*

cdpa —Allowed called party address point code is the next screening category.

stop —The gateway screening process ends and the message proceeds through normal routing.

tt —Allowed translation type point code is the next screening category.

Default:

Display all

nsr (optional)

The next screening reference parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process. This parameter

is mandatory if nsfi is other than *stop* or *fail*. This parameter cannot be entered if nsfi is *stop* or *fail*, or the copy=yes parameter is specified.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pcst (optional)

Point code subtype indicator. This parameter indicates whether the ITU international or ITU national point codes to be displayed must have the spare point code prefix (s-).

Range:

none

No spare point code prefix required.

s

Spare point code prefix required.

Default:

none

ri (optional)

Routing indicator. Routing instructions to the receiving signaling point. In gateway screening, messages may be screened based on the value of the routing indicator.

Range:

gt

Allow a called party address with a routing indicator value of "global title."

dpc

Allow a called party address with a routing indicator value of "DPC/SSN."

****

Allow both routing indicator values.

Default:

Display all

sccpmt (optional)

SCCP message type.

Range:

9

UDT

10

UDTS

17

XUDT

18

XUDTS

****

All possible allowed values (9, 10, 17, 18)

Default:

Display all SCCP message types

sna (optional)

16-bit ITU national main number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 15, **

* —the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The signaling point in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

sr (optional)

The CGPA screening reference name

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all.

ssa (optional)

24-bit ITU national sub signaling area. The sub signaling area specified in the point code. represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* — the full range of values from 000-255

ssn (optional)

Subsystem number.

Range:

*0 - 255, **

* — the full range of values from 0–255

Default:

Display all.

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0 -- 127, **

* —the full range of values from 0–127

zone (optional)

ITU international zone. The zone in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* — the full range of values from 0–7

Example

```
rtrv-scr-cgpa:sr=iec:ni=240:nc=001:ncm=010:ssn=012
rtrv-scr-cgpa:sr=iec:ni=240:nc=001:ncm=010:actname=copy
rtrv-scr-cgpa:sr=cgp1
rtrv-scr-cgpa:sr=cgpa:zone=1:area=2:id=3:ssn=1:sccpmt=9:ri=*:nsfi=stop:pcst=s
rtrv-scr-cgpa:sr=cgp1:un=1:sna=2:mna=1:ssn=1:sccpmt=9:nsfi=stop:ri=*
```

Dependencies

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the ncm parameter is specified as a single value, or a range other than the full range of 000 – 255, the ni and the nc parameters must be specified with a single value.

If the actname parameter is specified, the nsr parameter cannot be specified.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the actname parameter is specified with the screening reference name parameter, the specified value for the actname parameter must be assigned to that screening reference name.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If zone=* is specified, area=* and id=* must be specified.

If area=* is specified, id=* must be specified.

If msa=* is specified, ssa=* and sp=* must be specified.

If ssa=* is specified or re-specified, sp=* must also be specified.

If un=* is specified, sna=* and mna=* must be specified.

If sna=* is specified, mna=* must be specified.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

Any specified ni, nc, ncm, zone, area, id, msa, ssa, sp, un, sna, mna, ncp, nsfi, ri, ssn, and nsr parameters must already exist in the CGPA entity for the screening reference.

If the pcst parameter is specified, point codes with the specified subtype prefix (no prefix or s-) must exist in the database.

The specified screening reference (sr) must be in the allowed CGPA entity set.

If the nsfi=stop parameter is specified, the nsr parameter cannot be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst and npcst parameters cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the*ACT NAME* field of the `rtrv-gws-actset` command output.

The GWSOA parameter combination should be known and valid.

2483 E2483 Cmd Rej: Unknown / Invalid GWSOA parameter combination

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If no parameters are specified, the system displays a summary output.

If only the all=yes parameter is specified, the system displays a detailed output.

If the all parameter and any point code parameter are specified, the all parameter is ignored.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The spare point code subtype prefix *s-* is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

```
rtrv-scr-cgpa:sr=iec:ni=240:nc=001:ncm=010:ssn=012
```

```
    rlghncxa03w 03-03-14 15:58:16 EST  EAGLE 31.3.0
    SCREEN = ALLOWED CGPA
    SR    NI      NC       NCM      SSN     RI   SCCPMT   NSFI    NSR/ACT
    IEC   240     001      010      012     DPC  009&&010 STOP    -------
;
```

```
rtrv-scr-cgpa:sr=iec:ni=240:nc=001-004:ri=dpc:sccpmt=000&&010
```

```
    rlghncxa03w 03-03-14 15:58:16 EST  EAGLE 31.3.0
    SCREEN = ALLOWED CGPA
    SR    NI      NC       NCM      SSN     RI   SCCPMT   NSFI    NSR/ACT
    IEC   240     001      010      012     DPC  017&&018 STOP    -------
    IEC   240     002&&003 *        004     DPC  009      STOP    -------
;
```

```
rtrv-scr-cgpa:actname=none
```

```
    rlghncxa03w 03-03-14 15:58:16 EST  EAGLE 31.3.0
    SCREEN = ALLOWED CGPA
    SR    NI      NC       NCM      SSN     RI   SCCPMT   NSFI    NSR/ACT
    IEC   240     001      010      012     DPC  017      STOP    -------
    IEC   240     001      010      014     GT   *        STOP    -------
    IEC   241     002      011      014     GT   *        CDPA    CDP1
;
```

```
rtrv-scr-cgpa:sr=cg01:nsfi=tt:nsr=tt01:ri=gt:ssn=1:sccpmt=9:msa=255:ssa=255:sp=255
```

```
    tekelecstp 03-03-05 14:41:37 EST  EAGLE 31.0.0
    SCREEN = ALLOWED CGPA
    SR    MSA      SSA      SP       NSFI    NSR/ACT
    cg01  255      255      255      1        GT   9        TT      tt01
;
```

```
rtrv-scr-cgpa:sr=cgpa:zone=1:area=2:id=3:ssn=1:sccpmt=9:ri=*:nsfi=stop:pcst=s
```

```
    tekelecstp 05-01-05 14:41:37 EST  EAGLE 31.12.0
    SCREEN = ALLOWED CGPA
    SR      ZONE   AREA     ID       SSN      RI   SCCPMT   NSFI    NSR/ACT
    cgpa  s-1      002      3        1        *    9        STOP    ------
;
```

```
rtrv-scr-cgpa:sr=cgp1
```

```
    tekelecstp 05-01-05 14:41:37 EST  EAGLE 31.12.0
    SCREEN = ALLOWED CGPA
```

```
    SR      ZONE   AREA     ID       SSN      RI   SCCPMT   NSFI    NSR/ACT
    cgp1  s-2      002      3        1        *    *        STOP    ------

    SR      NPC                      SSN      RI   SCCPMT   NSFI    NSR/ACT
    cgp1  s-00128                    1        *    *        STOP    ------
;
```

`rtrv-scr-cgpa:sr=cgp1:`

```
    eaglestp 28-02-13 14:41:37 EST  EAGLE 45.1.0
    SCREEN = ALLOWED CGPA
    SR      UN   SNA     MNA       SSN      RI   SCCPMT   NSFI    NSR/ACT
    cgp1    001  02      01        1        *    9        STOP    ------
;
```

Legend

For a summary report:

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. If you need a more detailed output, use the `rtrv-scr-cgpa:all=yes` command, or specify the specific screening reference.
- **RULES**—The number of screening rules in that screening table.

For a detailed report:

- **SCREEN = ALLOWED CGPA**—Screen type
- **SR** —Identifies the screen sets being used. It can be up to four characters in length.
- **NI - NC - NCM**—Point code referenced within the screen. For international point codes, these columns are ZONE - AREA - ID. For 24-bit ITU national point codes, these columns are MSA-SSA-SP. For 16-bit ITU national point codes, these columns are UN - SNA - MNA. For national point codes, these columns become the single column NPC.
- **SSN**—Subsystem number associated with the point code identified by the *ni-nc-ncm*
- **RI**—Routing indicator in the called party address
- **SCCPMT**—SCCP message type
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-scr-cgpa, *dlt-scr-cgpa*, *ent-scr-cgpa*

rtrv-scr-destfld

Retrieve Allowed DESTFLDs

Use this command to show the attributes of one or more allowed affected destination field (DESTFLD) screening references and associated attributes (destination point code, next screening function identifier, next screening function reference) that are allowed to receive SS7 messages from another network.

Parameters

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none—Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all allowed DPC screening references.

Range:

yes

no

Default:

no

area (optional)

ITU international area. The area in the point code represented by *zone-area-id*.

Range:

*000 - 255, **

* —the full range of values from 000–255

Default:

Display all

id (optional)

ITU international ID. The ID in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

Default:

Display all

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 31, **

* —the full range of values from 0–31

msa (optional)

24-bit ITU national main signaling area. The main signaling area in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

nc (optional)

Network cluster identifier value. This parameter displays entries containing the specific cluster of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ncm (optional)

Network cluster member identifier value. This parameter displays entries containing the specific cluster member of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* — the full range of values from 0–255

Default:

Display all

ni (optional)

Network identifier value. This parameter displays entries containing the specific network of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A.

Range:

00000 - 16383

* —the full range of values from 00000–16383

nsfi (optional)

This parameter indicates that the gateway screening process should stop.

Range:

stop

the gateway screening process ends and the message proceeds through normal routing

Default:

Display all screening references

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national main number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 15, **

* —the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The signaling point in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

sr (optional)

The name of the individual DESTFLD screen to be displayed.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all.

ssa (optional)

24-bit ITU national sub signaling area. The sub signaling area in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* —the full range of values from 000-255.

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0 -- 127, **

* —the full range of values from 0–127

zone (optional)

ITU international zone. The zone in the point code represented by *zone-area-id*.

Range: *0 - 7, **

*0 - 255, **

* — the full range of values from 0–7

Example

```
rtrv-scr-destfld
rtrv-scr-destfld:sr=iec:ni=240:nc=001:ncm=010&&018
rtrv-scr-destfld:sr=iec:id=4:actname=cncf
```

```
rtrv-scr-destfld:all=yes
rtrv-scr-destfld:sr=dst1:zone=1:area=2:id=3:nsfi=stop:pcst=s
rtrv-scr-destfld:sr=dst1
rtrv-scr-destfld:sr=iec:un=125:sna=1:mna=10
```

Dependencies

If the actname parameter is specified, the nsfi=stop parameter must be specified.

The nsfi=stop parameter must be specified.

The nsr parameter cannot be specified in the command if the nsfi parameter has a value of *stop* or *fail*.

If the actname parameter is specified, the nsr parameter cannot be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

If the actname parameter is specified with the screening reference name parameter, the specified value for the actname parameter must be assigned to that screening reference name.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the ncm parameter is specified as a single value, or a range other than the full range of 000 – 255, the ni and nc parameters must be specified with a single value.

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the zone=* parameter is specified, then the area=* and the id=* parameters must be specified.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

The specified screening reference (sr) must be in the allowed DESTFLD entity set.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters na, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the pcst parameter is specified, point codes with the specified subtype prefix (no prefix or *s*-) must exist in the database.

Any specified area, sna or ssa parameter must already exist in the database.

Any specified id, sp or mna parameter must already exist in the database.

Any specified zone, un or msa parameter must already exist in the database.

Any specified nc parameter must already exist in the database.

Any specified ncm parameter must already exist in the database.

Any specified ni parameter must already exist in the database.

Any specified npc parameter must already exist in the database.

Any specified nsfi parameter must already exist in the database.

Any specified nsr parameter must already exist in the database.

Any specified pcst parameter must already exist in the database.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, nun, nsna, nmna, and npc parameters cannot have a value of *c*.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If no parameters are specified, the system displays a summary output.

If only the all=yes parameter is specified, the system displays a detailed output.

If the all parameter and any point code parameter are specified, the all parameter is ignored.

The REF column of the output of this command displays *YES* when the screen is referenced by another screen; otherwise, it displays *NO*.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`rtrv-scr-destfld`

```
rlghncxa03w 03-03-13 13:12:38 EST  EAGLE 31.3.0
SCREEN = ALLOWED DESTFLD
SR    REF  RULES
IEC   YES     2
```

```
    WRD2  YES     1
    WRD3  NO      4
    WRD4  YES     9
;
```

rtrv-scr-destfld:sr=iec:ni=240:nc=001:ncm=010&&018

```
    rlghncxa03w 03-03-13 13:13:21 EST  EAGLE 31.3.0
    SCREEN = ALLOWED DESTFLD
    SR    NI       NC       NCM      NSFI   NSR/ACT
    IEC   240      001      010&&020 STOP   -------
;
```

rtrv-scr-destfld:sr=iec:id=4:actname=cncf

```
    rlghncxa03w 03-03-13 13:13:56 EST  EAGLE 31.3.0
    SCREEN = ALLOWED DESTFLD
    SR    ZONE     AREA     ID       NSFI   NSR/ACT
    IEC   1        003      4        STOP   CNCF
;
```

rtrv-scr-destfld:all=yes

```
    rlghncxa03w 03-03-13 13:14:18 EST  EAGLE 31.3.0
    SCREEN = ALLOWED DESTFLD
    SR    NI       NC       NCM      NSFI   NSR/ACT
    IEC   240      001      010      STOP   CNCF
    IEC   241      010      *        STOP   -------

    SR    ZONE     AREA     ID       NSFI   NSR/ACT
    IEC   1        003      4        STOP   -------
    IEC   1        003      5        STOP   CR

    SR    NPC                       NSFI   NSR/ACT
    IEC   00235                     STOP   CNCF
    IEC   00240                     STOP   -------
;
```

rtrv-scr-destfld:sr=dst1:zone=1:area=2:id=3:nsfi=stop:pcst=s

```
    tekelecstp 05-01-06 11:40:26 EST  EAGLE 31.12.0
    SCREEN = ALLOWED DESTFLD
    SR      ZONE   AREA     ID       NSFI    NSR/ACT
    dst1  s-1      002      3        STOP    ------
;
```

rtrv-scr-destfld:sr=dst1

```
    tekelecstp 05-01-06 11:40:26 EST  EAGLE 31.12.0
    SCREEN = ALLOWED DESTFLD
    SR      ZONE   AREA     ID       NSFI    NSR/ACT
    dst1  s-1      002      3        STOP    ------

    SR      NPC                     NSFI    NSR/ACT
    dst1  s-00128                   STOP    ------
```

```
;
```

```
rtrv-scr-destfld:sr=ds01
```

```
    tekelecstp 13-07-05 16:27:55 EST  45.0.0-64.69.0
    rtrv-scr-destfld:sr=ds01
    Command entered at terminal #4.
    SCREEN = ALLOWED DESTFLD
    SR      UN       SNA     MNA     NSFI    NSR/ACT
    ds01    001      14      01      STOP    ------

;
```

Legend

For a summary report:

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. If you need a more detailed output, use the `rtrv-scr-destfld:all=yes` command, or specify the specific screening reference.
- **RULES**—Number of screening rules in that screening table.

For a detailed report:

- **SCREEN = ALLOWED DESTFLD**—Screen type
- **SR**—Identifies the various screen sets being used. It can be up to four characters in length.
- **NI - NC - NCM**—Point code referenced within the screen. For international point codes, these columns are ZONE - AREA - ID. For 24-bit ITU national point codes, these columns are MSA-SSA-SP. For 16-bit ITU national point codes, these columns are UN-SNA-MNA. For national point codes, these columns become the single column NPC.
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-gws-actset, *chg-scr-destfld*, *dlt-scr-destfld*, *ent-scr-destfld*, *rtrv-gws-actset*

rtrv-scr-dpc

Retrieve Allowed DPC

Use this command to show the attributes of one or more allowed DPC screening references and associated attributes (destination point code, next screening function identifier, next screening function reference) that are allowed to receive SS7 messages from another network.

Parameters

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all allowed DPC screening references.

Range:

yes

no

Default:

no

area (optional)

ITU international area. The area in the point code represented by *zone-area-id*.

Range:

*000 - 255, **

*—the full range of values from 000–255

id (optional)

ITU international ID. The ID in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 31, **

* —the full range of values from 0–31

msa (optional)

24-bit ITU national main signaling area. The main signaling area specified in the point code represented by *msa-ssa-sp*.

Range:

000 - 255

* — the full range of values from 000-255

nc (optional)

Network cluster identifier value. This parameter displays entries containing the specific cluster of the point code represented by*ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ncm (optional)

Network cluster member identifier value. This parameter displays entries containing this specific cluster member of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ni (optional)

Network identifier value. This parameter displays entries containing this specific network of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. For multiple-part ITU national point codes, see *Converting ITU National Point Code Formats*.

Range:

*00000 - 16383, **

* —the full range of values from 00000–16383

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category

cgpa

Allowed calling party address is the next screening category.

destfld

Allowed destination field (DESTFLD) is the next screening category.

isup

ISUP message type (ISUP) is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

Display all screening references

nsr (optional)

Next screening reference parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process. This parameter is mandatory if nsfi is other than *stop* or *fail*. The nsr parameter cannot be entered if nsfi is *stop* or *fail*, or the copy=yes parameter is specified.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national main number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 15, **

* —the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The signaling point in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

sr (optional)

The allowed DPC screening reference name

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all.

ssa (optional)

24-bit ITU national sub signaling area. The sub signaling area in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* — the full range of values from 000-255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0 -- 127, **

* —the full range of values from 0–127

zone (optional)

ITU international zone. The zone in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* — the full range of values from 0–7

Example

```
rtrv-scr-dpc
rtrv-scr-dpc:sr=iec:ni=240:nc=001:ncm=010&&018
rtrv-scr-dpc:sr=iec:id=4
rtrv-scr-dpc:all=yes
rtrv-scr-dpc:all=yes:actname=cncf
rtrv-scr-dpc:sr=dpc1:npc=128:nsfi=stop:pcst=s
rtrv-scr-dpc:sr=dpc2:un=1:sna=2:mna=3
```

Dependencies

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

The specified screening reference (sr) must be in the allowed DPC entity set.

Any specified ni parameter must already exist in the allowed DPC entity for the screening reference.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) or for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the pcst parameter is specified, point codes with the specified subtype prefix (no prefix or *s-*) must exist in the database.

If the ni=* parameter is specified, then the nc=* and ncm=* parameters must be specified.

If the nc=* parameter is specified, then the ncm=* parameter must be specified.

If the zone=* parameter is specified, then the area=* and the id=* parameters must be specified.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and the sp=* parameters must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* parameters must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the value of the nsfi=stop parameter is specified, then the nsr parameter cannot be specified.

If the nsr parameter is specified, then the actname parameter cannot be specified.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

If the actname parameter is specified with the screening reference name parameter, the specified value for the actname parameter must be assigned to that screening reference name.

Any specified npc parameter must already exist in the allowed DPC entity for the screening reference.

Any specified ncm parameter must already exist in the allowed DPC entity for the screening reference.

Any specified nc parameter must already exist in the allowed DPC entity for the screening reference.

Any specified nsfi parameter must already exist in the allowed DPC entity for the screening reference.

Any specified nsr parameter must already exist in the allowed DPC entity for the screening reference.

Any specified pcst parameter must already exist in the allowed DPC entity for the screening reference.

Any specified area, sna or ssa parameter must already exist in the allowed DPC entity for the screening reference.

Any specified id, mna or sp parameter must already exist in the allowed DPC entity for the screening reference.

Any specified zone, un or msa parameter must already exist in the allowed DPC entity for the screening reference.

If the nsfi=fail parameter is specified, then the ni, nc, ncm, area, zone, nid, msa, ssa, sp, un, sna, mna, and npc parameters cannot have a value of *c*.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If no parameters are specified, a list of allowed DPC references is displayed indicating whether they are referenced or not.

If a single allowed DPC screening reference is specified, the specified entity set requested is shown.

If all=yes and no other parameter is specified, detailed information for all of the screening reference entities in the allowed DPC entity set are shown.

If the all parameter is specified and other parameters are also specified, the all parameter is ignored.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100 .

The spare point code subtype prefix (s-) is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`rtrv-scr-dpc`

```
rlghncxa03w 03-03-13 13:12:38 EST  EAGLE 31.3.0
SCREEN = ALLOWED DPC
SR    REF  RULES
IEC   YES     2
WRD2  YES     1
WRD3  NO      4
```

```
    WRD4  YES     9
;
```

rtrv-scr-dpc:sr=iec:ni=240:nc=001:ncm=010&&018

```
    rlghncxa03w 03-03-13 13:13:21 EST  EAGLE 31.3.0
    SCREEN = ALLOWED DPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   240      001      010&&020 STOP    -------
;
```

rtrv-scr-dpc:sr=iec:id=4

```
    rlghncxa03w 03-03-13 13:13:56 EST  EAGLE 31.3.0
    SCREEN = ALLOWED DPC
    SR    ZONE     AREA     ID       NSFI    NSR/ACT
    IEC   1        003      4        BLKOPC  blk1
;
```

rtrv-scr-dpc:all=yes

```
    rlghncxa03w 03-03-13 13:14:18 EST  EAGLE 31.3.0
    SCREEN = ALLOWED DPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   240      001      010      STOP    -------
    IEC   241      010      *        CGPA    cg04

    SR    ZONE     AREA     ID       NSFI    NSR/ACT
    IEC   1        003      4        BLKDPC  blk1
    IEC   1        003      5        STOP    -------

    SR    NPC                       NSFI    NSR/ACT
    IEC   00235                     CGPA    cg04
    IEC   00240                     CGPA    cg01
;
```

rtrv-scr-dpc:sr=dpc1:actname=copy

```
    rlghncxa03w 03-03-13 13:16:13 EST  EAGLE 31.3.0
    SCREEN = ALLOWED DPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    dpc1  010      010      010      STOP    COPY
    dpc1  010      010      012      STOP    COPY
;
```

rtrv-scr-dpc:sr=dpc1:npc=128:pcst=s

```
    tekelecstp 05-01-06 11:29:11 EST  EAGLE 31.12.0
    SCREEN = ALLOWED DPC
    SR      NPC                       NSFI    NSR/ACT
    dpc1  s-00128                     STOP    ------
;
```

```
rtrv-scr-dpc:sr=dpc1
```

```
    tekelecstp 05-01-06 11:29:11 EST  EAGLE 31.12.0
    SCREEN = ALLOWED DPC
    SR      ZONE   AREA     ID       NSFI    NSR/ACT
    dpc1  s-1      002      3        STOP    ------

    SR      NPC                      NSFI    NSR/ACT
    dpc1  s-00128                    STOP    ------
;
```

```
dlt-scr-dpc:sr=dpc2:
```

```
eaglestp 28-02-13 13:13:56 EST  EAGLE 45.1.0
    SCREEN = ALLOWED DPC
    SR    UN        SNA     MNA       NSFI    NSR/ACT
    dpc2  001       02      01        STOP    ------
;
```

Legend

For a summary report:

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. For more detailed output, use the `rtrv-scr-dpc:all=yes` command, or specify the specific screening reference.
- **RULES**—Number of screening rules in that screening table

For a detailed report:

- **SCREEN = ALLOWED DPC**—Screen type
- **SR**—Identifies the screen sets being used. It can be up to four characters in length.
- **NI-NC-NCM**—Point code referenced within the screen. For international point codes, these columns are ZONE-AREA-ID. For 24-bit ITU national point codes, these columns are MSA-SSA-SP. For 16-bit ITU national point codes, these columns are UN-SNA-MNA. For national point codes, these columns become the single column NPC.
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-scr-dpc, *chg-gws-actset*, *dlt-scr-dpc*, *ent-scr-dpc*, *rtrv-gws-actset*

rtrv-scr-isup

Retrieve Allowed ISUP Screening Reference

Use this command to display one allowed ISUP screening reference or all allowed ISUP screening references in the Allowed ISUP entity set.

Parameters

actname (optional)

The name of the gateway screening stop action set. Stop actions must be administered using this parameter with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

all (optional)

This parameter displays all allowed ISUP screening references in the Allowed ISUP entity set.

Range:

yes

no

Default:

no

isupmt/tupmt (optional)

ISUP message type or TUP message type in the specified entry. The tupmt parameter is not valid for SEAS. A single value or range of values can be entered.

Range:

*000 - 255, **

*—the entire range of 0-255

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process.

Range: *stop* ,

stop —The gateway screening process ends and the message proceeds through normal routing.

nsr (optional)

Next screening reference.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

No value given

sr (optional)

The individual ISUP screen to be displayed.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Example

```
rtrv-scr-isup:sr=iec:isupmt=1:nisupmt=1&&2
```

```
rtrv-scr-isup:sr=tu01:tupmt=0&&255
```

Dependencies

If the nsfi parameter is specified, the value must be *stop*.

The nsr parameter cannot be specified if the actname parameter is specified.

The nsr parameter cannot be specified if the nsfi=stop parameter is specified.

If sr is specified, the value must exist in the database.

The value of the actname parameter must be defined in the gateway screening stop action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

A range of values for the isupmt or tupmt parameter can be specified by separating the values that define the range by two ampersands (*&&*); for example, isupmt=025&&100 specifies all ISUP message types from 25 - 100. The value to the left of the *&&* must be less than the value to the right of the && in the range.

An asterisk can be used for a parameter value in the `chg/dlt/rtrv-scr-isup` commands only if that parameter value was specified as an asterisk in the `ent-scr-isup` command to define the parameter value.

If no parameters are specified, a list of allowed ISUP references is produced indicating whether they are referenced or not.

Output

`rtrv-scr-isup`

```
tekelecstp 02-09-02 11:10:38 EST  EAGLE 30.0.0
SCREEN = ALLOWED ISUP
SR    REF  RULES
iall  NO      1
```

```
    ibig  NO      1
    iec   NO      2
    is01  YES     1
    is02  YES     1
    isu   NO      1
    isu1  NO      1
    isu2  NO      1
    isw1  NO      1

;
```

rtrv-scr-isup:sr=iall

```
    tekelecstp 02-09-02 11:13:25 EST  EAGLE 30.0.0
    SCREEN = ALLOWED ISUP
    SR   ISUPMT    NSFI    NSR/ACT
    iall *         STOP    ------

;
```

rtrv-scr-isup:sr=iec:isupmt=1&&9

```
    tekelecstp 02-09-02 11:13:25 EST  EAGLE 30.0.0
    SCREEN = ALLOWED ISUP
    SR   ISUPMT    NSFI    NSR/ACT
    iec  001&&002  STOP    ------
    iec  009       STOP    ------

;
```

rtrv-scr-isup:isupmt=*

```
    tekelecstp 02-09-02 11:13:25 EST  EAGLE 30.0.0
    SCREEN = ALLOWED ISUP
    SR   ISUPMT    NSFI    NSR/ACT
    iall *         STOP    ------
    isu2 *         STOP    ------
    isw1 *         STOP    ------

;
```

rtrv-scr-isup:sr=tu01:tupmt=0&&255

```
    tekelecstp 03-11-13 13:10:02 EST  EAGLE 31.4.0
    SCREEN = ALLOWED ISUP
    SR   ISUPMT    NSFI    NSR/ACT
         TUPMT/
    tu01 002       STOP    ------

;
```

rtrv-scr-isup:all=yes

```
    tekelecstp 02-09-13 13:10:02 EST  EAGLE 30.0.0
    SCREEN = ALLOWED ISUP
```

```
    SR   ISUPMT    NSFI    NSR/ACT
    is01 001       STOP    ------
    is02 001&&010  STOP    ------
    is03 *         STOP    ------

;
```

Legend

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. For more detailed output, use the `rtrv-scr-isup:all=yes` command, or specify the specific screening reference.
- **RULES**—Number of screening rules in that screening table

For a detailed report:

- **SCREEN = ALLOWED ISUP**—Screen type
- **SR**—Identifies the various screen sets being used. It can be up to four characters in length.
- **ISUPMT/TUPMT**—ISUP or TUP Message type in the entry
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-scr-isup, *dlt-scr-isup*, *ent-scr-isup*

rtrv-scr-opc Retrieve Allowed OPC

Use this command to show an allowed OPC screening reference and associated attributes (originating point code, next screening function identifier, next screening function reference).

Parameters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all allowed OPC screening references.

Range:

yes

no

Default:

Display all

area (optional)

ITU international area. The area in the point code represented by *zone-area-id*.

Range:

*000 - 255, **

* —the full range of values from 000–255

id (optional)

ITU international ID. The ID in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

mna (optional)

16-bit ITU national main number area. The *mna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 31, **

* —the full range of values from 0–31

msa (optional)

24-bit ITU national main signaling area. The main signaling area in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

nc (optional)

Network cluster identifier value. This parameter displays entries containing this specific cluster of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all

ncm (optional)

Network cluster member identifier value. This parameter displays entries containing this specific cluster member of the point code represented by *ni-nc-ncm*.

Range:

*0 - 255, **

*—the full range of values from 0–255

Default:

Display all

ni (optional)

Network identifier value. This parameter displays entries containing this specific network of the point code represented by *ni-nc-ncm*.

Range:

0 - 255

* —the full range of values from 0–255

Default:

Display all

npc (optional)

ITU national point code.

Note: Gateway screening allows the ITU national point code to be displayed and entered in the database only as a single number. If you are using multiple-part ITU national point codes, see *Converting ITU National Point Code Formats* in Appendix A.

Range:

*00000 - 16383, **

* —the full range of values from 00000–16383

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkopc

Blocked OPC is the next screening category.

sio

Allowed SIO is the next screening category

dpc

Allowed DPC is the next screening category.

blkdpc

Blocked DPC is the next screening category

cgpa

Allowed calling party address is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

Display all screening references

nsr (optional)

Next Screening Reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process. This parameter is mandatory if nsfi is other than *stop* or *fail*. This parameter cannot be specified if nsfi is *stop* or *fail*, or the copy=yes parameter is specified.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pcst (optional)

Point code subtype. This parameter indicates whether the specified ITU international or ITU national point code has no subtype prefix or has the spare point code prefix (s-).

Range:

none

s

Default:

none

sna (optional)

16-bit ITU national sub number area. The *sna* in the point code represented by *un-sna-mna*.

Range:

*0 -- 15, **

* —the full range of values from 0–15

sp (optional)

24-bit ITU national signaling point. The signaling point in the point code represented by *msa-ssa-sp*.

Range:

*000 - 255, **

* —the full range of values from 000-255

sr (optional)

The allowed OPC screening reference name

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all.

ssa (optional)

24-bit ITU national sub signaling area. The sub signaling area i in the point code represented by *msa-ssa-sp*.

Range:

*0 - 255, **

* — the full range of values from 000-255

un (optional)

16-bit ITU-national unit number. The *un* of the point code represented by *un-sna-mna*.

Range:

*0 -- 127, **

* —the full range of values from 0–127

zone (optional)

ITU international zone. The zone in the point code represented by *zone-area-id*.

Range:

*0 - 7, **

* —the full range of values from 0–7

Example

```
rtrv-scr-opc
rtrv-scr-opc:sr=iec:ni=240:nc=001:ncm=010&&018
rtrv-scr-opc:sr=iec:id=4
rtrv-scr-opc:all=yes
rtrv-scr-opc:sr=opc1:actname=cr
rtrv-scr-opc:sr=opc1:npc=128:nsfi=fail:pcst=s
rtrv-scr-opc:sr=opc2:un=1:sna=2:mna=3
```

Dependencies

ANSI point code value 000-000-000 and ITU-International point code value 0-000-0 are not allowed.

If the ni=* parameter is specified, the nc=* and ncm=* parameters must be specified.

If the nc=* parameter is specified, then the ncm=* parameter must be specified.

If the zone=* parameter is specified, then the area=* and id=* parameters must be specified.

If the area=* parameter is specified, then the id=* parameter must be specified.

If the msa=* parameter is specified, then the ssa=* and sp=* parameters must be specified.

If the ssa=* parameter is specified, then the sp=* parameter must be specified.

If the un=* parameter is specified, then the sna=* and the mna=* must be specified.

If the sna=* parameter is specified, then the mna=* parameter must be specified.

If the ni parameter is specified as an asterisk or as a range, the nc and ncm parameters must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as an asterisk, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the nc parameter is specified as a single value or a range, a single value must be specified for the ni parameter.

If the nc parameter is specified as a range, the ncm parameter must be specified as an asterisk or as the full range 000 – 255.

If the ncm parameter is specified as a single value, or a range other than the full range of 000 – 255, the ni and nc parameters must be specified with a single value.

If the nsr parameter is specified, then the actname parameter cannot be specified.

If the actname parameter is specified, the nsfi=stop parameter must be specified.

If the nsfi=stop parameter is specified, then the nsr parameter cannot be specified.

The value of the actname parameter must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

If the actname parameter is specified with the screening reference name parameter, the specified value for the actname parameter must be assigned to that screening reference name.

The specified screening reference must be in the allowed OPC entity set.

The Spare Point Code Support feature must be enabled before the pcst parameter can be specified.

The spare point code subtype prefix (s-) is not supported for ANSI point codes (parameters ni, nc, ncm) or for 24-bit ITU national point codes (parameters msa, ssa, sp) for 16-bit ITU national point codes (parameters un, sna, mna). The pcst parameter cannot be specified for ANSI, ITU-N16 or ITU-N24 point codes.

If the pcst parameter is specified, point codes with the specified subtype prefix (no prefix or *s*-) must exist in the database.

Any specified ni parameter must already exist in the allowed OPC entity for the screening reference.

Any specified nc parameter must already exist in the allowed OPC entity for the screening reference.

Any specified ncm parameter must already exist in the allowed OPC entity for the screening reference.

Any specified npc parameter must already exist in the allowed OPC entity for the screening reference.

Any specified nsfi parameter must already exist in the allowed OPC entity for the screening reference.

Any specified nsr parameter must already exist in the allowed OPC entity for the screening reference.

Any specified pcst parameter must already exist in the allowed OPC entity for the screening reference.

Any specified area, sna or ssa parameter must already exist in the allowed OPC entity for the screening reference.

Any specified id, mna or sp parameter must already exist in the allowed OPC entity for the screening reference.

Any specified zone, un or msa parameter must already exist in the allowed OPC entity for the screening reference.

If the nsfi=fail parameter is specified, then the ni, nc, ncm, area, zone, id, msa, ssa, sp, un, sna, mna, and npc parameters cannot have a value of *c*.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If no parameters are specified, a list of allowed OPC references is produced indicating whether they are referenced or not.

If a single allowed OPC screening reference is specified, the specified entity set requested is shown.

If all=yes and no other parameter is specified, detailed information for all of the screening reference entities in the allowed OPC entity set are shown.

If all is specified and other parameters are also specified, the all parameter is ignored.

An asterisk specified as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

A range of values is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The spare point code subtype prefix *s-* is supported only for ITU international and ITU national point codes. The pcst parameter indicates whether the specified point code has no subtype prefix or has the spare point code prefix.

Output

`rtrv-scr-opc`

```
rlghncxa03w 03-03-13 13:12:38 EST  EAGLE 31.3.0
SCREEN = ALLOWED OPC
SR    REF  RULES
IEC   YES     2
WRD2  YES     1
WRD3  NO      4
```

```
    WRD4  YES     9
;
```

rtrv-scr-opc:sr=iec:ni=240:nc=001:ncm=010&&018

```
    rlghncxa03w 03-03-13 13:13:21 EST  EAGLE 31.3.0
    SCREEN = ALLOWED OPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   240      001      010&&020 STOP    -------
;
```

rtrv-scr-opc:sr=iec:id=4

```
    rlghncxa03w 03-03-13 13:13:56 EST  EAGLE 31.3.0
    SCREEN = ALLOWED OPC
    SR    ZONE     AREA     ID       NSFI    NSR/ACT
    IEC   1        003      4        BLKOPC  blk1
;
```

rtrv-scr-opc:all=yes

```
    rlghncxa03w 03-03-13 13:14:18 EST  EAGLE 31.3.0
    SCREEN = ALLOWED OPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    IEC   240      001      010      STOP    -------
    IEC   241      010      *        CGPA    cg04

    SR    ZONE     AREA     ID       NSFI    NSR/ACT
    IEC   1        003      4        BLKOPC  blk1
    IEC   1        003      5        STOP    -------

    SR    NPC                       NSFI    NSR/ACT
    IEC   00235                     CGPA    cg04
    IEC   00240                     CGPA    cg01

    SR    NI       NC       NCM      NSFI    NSR/ACT
    WRD2  243      015      001      STOP    -------
    WRD3  243      105      002      CGPA    WRD4
;
```

rtrv-scr-opc:sr=opc1:actname=cr

```
    rlghncxa03w 03-03-13 13:16:13 EST  EAGLE 31.3.0
    SCREEN = ALLOWED OPC
    SR    NI       NC       NCM      NSFI    NSR/ACT
    opc1  010      010      010      STOP    CR
    opc1  010      010      012      STOP    CR
;
```

rtrv-scr-opc:sr=op55

```
    tekelecstp 03-03-06 11:30:42 EST  EAGLE 31.0.0
    SR    MSA      SSA      SP       NSFI    NSR/ACT
    op55  007      077      007      BLKOPC  bo55
;
```

```
rtrv-scr-opc:sr=opc1:npc=128:nsfi=fail
```

```
    tekelecstp 05-01-06 11:30:42 EST  EAGLE 31.12.0
    SR      NPC                     NSFI    NSR/ACT
    opc1  s-00128                   FAIL    -------
;
```

```
rtrv-scr-opc:sr=opc2:
```

```
    eaglestp 28-02-13 13:13:56 EST  EAGLE 45.1.0
    SCREEN = ALLOWED OPC
    SR    UN        SNA     MNA       NSFI    NSR/ACT
    opc2  001       02      01        STOP    ------
;
```

Legend

For a summary report:

- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. For more detailed output, use the `rtrv-scr-opc:all=yes` command, or specify the specific screening reference.
- **RULES**—Number of screening rules in that screening table

For a detailed report:

- **SCREEN = ALLOWED OPC**—Screen type
- **SR**—Identifies the various screen sets being used. It can be up to four characters in length
- **NI - NC - NCM**—Point code referenced within the screen. For international point codes, these columns are ZONE-AREA-ID. For 24-bit ITU national point codes, these columns are MSA-SSA-SP. For 16-bit ITU national point codes, these columns are UN-SNA-MNA. For national point codes, these columns become the single column NPC.
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-scr-opc, *chg-gws-actset*, *dlt-scr-opc*, *ent-scr-opc*, *rtrv-gws-actset*

rtrv-scr-sio Retrieve Allowed SIO

Use this command to show the attributes of one or more nic/si/h0/h1 combinations that are allowed for SS7 messages from another network.

Parameters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all allowed SIO screening references.

Range:

yes

no

Default:

no

h0 (optional)

H0 heading code. A single value or a range of values can be specified.

Range:

*0 - 15, **

* — all possible values from 0–15

Default:

Display all

h1 (optional)

H1 heading code. A single value or a range of values can be specified.

Range:

*0 - 15, **

* —all possible values from 0–15

Default:

Display all

nic (optional)

Network indicator code.

Range:

*0 - 3, **

* — all possible values from 0–3

Default:

Display all

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range:

blkdpc

Blocked DPC is the next screening category.

cgpa

Allowed calling party address is the next screening category.

cdpa

Allowed called party address is the next screening category.

destfld

Allowed destination field (DESTFLD) is the next screening category.

dpc

Allowed DPC is the next screening category.

isup

ISUP message type (ISUP) is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

Display all screening references

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process.

This parameter is mandatory if nsfi is other than *stop*; cannot be entered if nsfi=stop.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

pri (optional)

Message priority. A single value or a range of values can be specified.

Range:

0 - 3

* —all possible values from 0–3

Default:

Display all

si (optional)

Service indicator.

Range:

*0 - 15, **

*—all possible values from 0–15

Default:

Display all

sr (optional)

Allowed SIO screening reference name

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

Example

```
rtrv-scr-sio
rtrv-scr-sio:sr=iec:nic=1:si=3:pri=2&&3
rtrv-scr-sio:sr=sio1:nic=1:si=1
rtrv-scr-sio:sr=sio1:nic=1:si=1:h0=1:h1=*
rtrv-scr-sio:sr=sio1:si=1:h0=1:h1=1
rtrv-scr-sio:all=yes
rtrv-scr-sio:sr=iec:nic=1:si=1:actname=crncf
```

Dependencies

If the si parameter is not equal to 00, 01, or 02, the h0 and h1 parameters cannot be specified.

If the nic, si, and h0/h1 parameters are specified, the SIO screening reference must be in the allowed SIO entity set.

The nic parameter must be specified if the si parameter is specified.

The nic and si parameters must be specified if the h0 and h1 parameters are specified.

If an asterisk value is specified for the h0 parameter, the h1 parameter cannot be specified.

If the nsfi=stop parameter is specified, then the nsr parameter cannot be specified.

If the actname parameter is specified, then the nsfi=stop parameter must be specified.

If the nsr parameter is specified, then the actname parameter cannot be specified.

If the actname parameter is specified with the screening reference name parameter, the specified value for the actname parameter must be assigned to that screening reference name.

The value of the actname parameter must be defined in the gateway screening stop action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

If the sr parameters are specified, the SIO screening reference must be in the allowed SIO entity set.

The GWSOA parameter combination should be known and valid.

For SEAS commands, the pri parameter specified must be in the range 0-3, *.

For SEAS commands, the h0 parameter specified must be in the range 0-15, *.

For SEAS commands, the h1 parameter specified must be in the range 0-15, *.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

If no parameters are specified, a list of allowed SIO references is output indicating whether they are referenced or not.

If only the all=yes parameter is specified, detailed information for every rule in every allowed SIO screening table is displayed.

If the all parameter is specified and other parameters are also specified, the all parameter is ignored.

Output

`rtrv-scr-sio`

```
    SCREEN = ALLOWED SIO
    SR    REF  RULES
    s     NO      1
    s999  NO      1
    si    NO      1
    si01  NO      1
    si1   NO      1
    sio1  NO      3
    swl1  NO      1
    swl2  NO      1
;
```

`rtrv-scr-sio:sr=iec:nic=1:si=3:pri=2&&3`

```
    rlghncxa03w 03-03-15 08:36:43 EST  EAGLE 31.3.0
    SCREEN = ALLOWED SIO
```

```
    SR    NIC PRI   SI  H0     H1     NSFI    NSR/ACT
    IEC   1   0&&2  3   --     --     BLKDPC  WDB2
    IEC   1   3     3   --     --     DPC     ABC2
;
```

rtrv-scr-sio:sr=sio1:nic=1:si=1:h1=1:pri=1:h0=15:nsfi=blkdpc:nsr=bdp1

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED SIO
    SR    NIC  PRI   SI  H0     H1     NSFI    NSR/ACT
    sio1  1    1     1   15     01     BLKDPC  bdp1
;
```

rtrv-scr-sio:sr=sio1:h0=1:h1=1

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED SIO
    SR    NIC  PRI   SI  H0     H1     NSFI    NSR/ACT
    sio1  1    1     1   01     *      STOP    -------
    sio1  2    1     1   01     *      STOP    -------
;
```

rtrv-scr-sio:sr=sio1:nic=1:si=1

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED SIO
    SR    NIC  PRI   SI  H0     H1     NSFI    NSR/ACT
    sio1  1    1     1   01     *      STOP    -------
    sio1  1    1     1   02     01     STOP    -------
;
```

rtrv-scr-sio:sr=sio1:nic=1:si=1:h0=1:h1=*

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED SIO
    SR    NIC  PRI   SI  H0     H1     NSFI    NSR/ACT
    sio1  1    1     1   01     *      STOP    -------
;
```

rtrv-scr-sio:sr=iec:nic=1:si=1:actname=crncf

```
    rlghncxa03w 03-03-19 21:16:37 EST  EAGLE 31.3.0
    SCREEN = ALLOWED SIO
    SR    NIC  PRI   SI  H0     H1     NSFI    NSR/ACT
    iec   1    1     1   15     01     STOP    CRNCF
;
```

rtrv-scr-sio:si=5

```
    tekelecstp 02-08-28 16:47:06 EST  EAGLE 30.0.0
    SCREEN = ALLOWED SIO
    SR    NIC  PRI   SI  H0     H1     NSFI    NSR/ACT
    si01  1    1     5   --     --     STOP    ------
```

```
    si02  1    1     5   --     --     ISUP    is01
;
```

Legend

For a summary report:

- **SR**—The screen sets being used
- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. For more detailed output, use the `rtrv-scr-sio:all=yes` command, or specify the specific screening reference.
- **RULES**—Number of screening rules in that screening table

For a detailed report:

- **SCREEN = ALLOWED SIO**—Screen type
- **SR**—The screen sets being used
- **NIC**—Network indicator code in the service information octet
- **PRI**—Priority of a single message or the beginning message priority in a range of priorities in the service information octet
- **SI**—Service indicator for the service information octet, which are the last two bits of the subservice field
- **H0**—H0 heading code
- **H1**—H1 heading code
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-scr-sio, *dlt-scr-sio*, *ent-scr-sio*

rtrv-scr-tt

Retrieve Allowed Translation Type

Use this command to show the allowed translation type (TT) screening reference in the TT entity set.

Parameters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Displaygateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all allowed TT screening references.

Range:

yes

no

Default:

no

nsfi (optional)

This parameter specifies the next screening category that is used in the gateway screening process, or it indicates that the gateway screening process should stop.

Range: ***cdpa, stop***

cdpa

Allowed called party address is the next screening category.

stop

The gateway screening process ends and the message proceeds through normal routing.

Default:

Display all screening references

nsr (optional)

The next screening reference parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process. This parameter is mandatory if nsfi is other than *stop*. The nsr parameter cannot be entered if nsfi is *stop*, or the copy=yes parameter is specified.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

sr (optional)

The TT screening reference name

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

type (optional)

Translation type. The global title translation type value in the called party address. This value is the decimal representation of the 1-byte field used in SS7.

Range:

*0 - 255, **

* —the full range of values from 0–255

Default:

Display all.

Example

```
rtrv-scr-tt
rtrv-scr-tt:sr=iec
rtrv-scr-tt:all=yes
```

Dependencies

If the nsr parameter is specified, nsfi=stop cannot be specified.

If the actname parameter is specified, the value specified for nsfi must be *stop*.

The value of the actname parameter must be defined in the gateway screening stop action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

The nsr parameter cannot be specified if the actname parameter is specified.

If the actname parameter is specified with the screening reference name parameter, the specified value for the actname parameter must be assigned to that screening reference name.

Stop actions must be administered using the actname parameter in conjunction with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

The specified value for the nsfi parameter is not valid for TT screen.

The actname parameter value must already be defined in the Gateway Screening Stop Action table with the `chg-gws-actset` command. These values are shown in the ACT NAME field of the `rtrv-gws-actset` command output.

The screening reference and translation type for which the attributes are to be retrieved must exist.

The value specified for the type parameter must be within the allowed range.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

An asterisk as a parameter value in this command displays only entries that have an asterisk as the same parameter value in the entry.

If no parameters are specified, a list of allowed TT references is produced indicating whether they are referenced or not.

If only the all=yes parameter is specified, detailed information for every rule in every allowed TT screening table is displayed.

If the all parameter is specified and other parameters are also specified, the all parameter is ignored.

Output

`rtrv-scr-tt`

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED TT
    SR    REF  RULES
    IEC   YES     2
    WRD2  YES     1
    WRD4  YES     4
;
```

`rtrv-scr-tt:sr=iec`

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED TT
    SR    TYPE     NSFI    NSR/ACT
    IEC   005&&010 STOP    -------
    IEC   012      STOP    -------
    IEC   016      CDPA    IEC
;
```

`rtrv-scr-tt:all=yes`

```
    rlghncxa03w 03-03-07 12:05:33 EST  EAGLE 31.3.0
    SCREEN = ALLOWED TT
    SR    TYPE     NSFI    NSR/ACT
    IEC   005&&010 STOP    -------
    IEC   012      STOP    -------
    IEC   016      CDPA    IEC
    WRD2  243      STOP    -------
    WRD4  *        STOP    -------
;
```

`rtrv-scr-tt:sr=iec:type=1&&15:actname=copy`

```
    rlghncxa03w 03-03-15 08:54:35 EST  EAGLE 31.3.0
    SCREEN = ALLOWED TT
    SR    TYPE     NSFI    NSR/ACT
    IEC   005&&010 STOP    COPY
    IEC   012      STOP    COPY
;
```

Legend

- **SCREEN = ALLOWED TT**—Screen type

- **SR**—Identifies the screen sets being used. It can be up to four characters in length.
- **REF**—Indicates whether a screen is referenced by another screen. If NO, the screen is not used. for a more detailed output, used the the `rtrv-scr-tt:all=yes` command, or specify the specific screening reference.
- **TYPE**—Translation type that is allowed for global title translation
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen.

Related Commands

chg-scr-tt, *dlt-scr-tt*, *ent-scr-tt*

rtrv-scrset

Retrieve Screen Set

Use this command to show the attributes of one or more screen sets in the screen set entity set.

Parameters

actname (optional)

Name of the gateway screening stop action set. Stop actions must be administered using this parameter with the gateway screening stop action table (see `chg-gws-actset` and `rtrv-gws-actset`).

Range:

ayyyyy

1 alphabetic character followed by up to 5 alphanumeric characters.

none —Display gateway screening rules that do not have an assigned gateway screening stop action set

all (optional)

Displays all screen sets (except “placeholder” screen sets that contain only one rule with nsfi=stop specified in the rule).

Range:

yes

no

Default:

no

destfld (optional)

This parameter displays the indicator that specifies whether to apply the automatic allowed affected destination screening for network management messages against the routing table, self point codes, and capability point codes. When this parameter is on in the screen set rule, the automatic screening is applied at the end of the provisioned screen set.

Range:

yes

no

Default:

Display all

nsfi (optional)

This parameter indicates the next screening category that is used in the gateway screening process, or that the gateway screening process should stop. In this command, information is displayed for one or more screen sets containing rules with the specified nfsi parameter value.

Note: When nsfi=stop is specified, the command displays only the "placeholder" screen sets that have only one rule, with nsfi=stop specified in the rule. This is a way to locate those "placeholder" screen sets, so that you can add or change the rules to accomplish appropriate screening.

Range:

opc

Display rules with Allowed OPC as the next screening category.

blkopc

Display rules with Blocked OPC as the next screening category.

sio

Display rules with Allowed SIO as the next screening category.

dpc

Display rules with Allowed DPC as the next screening category.

blkdpc

Display rules with Blocked DPC as the next screening category.

stop

Display only "placeholder" screen sets that have only one rule in the screen set, with nsfi=stop specified as the next screening category.

Default:

Display all

nsr (optional)

Next screening reference. This parameter indicates which screening reference in the specified screening category (nsfi) is to be used in the screening process. This parameter is used to display information for one or more screen sets with rules that have the specified nsr parameter value.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

scrn (optional)

Screen set name.

Range:

ayyy

1 alphabetic character followed by up to 3 alphanumeric characters

Default:

Display all

Example

```
rtrv-scrset
rtrv-scrset:scrn=scr1
rtrv-scrset:nsr=opc4
rtrv-scrset:nsfi=dpc
rtrv-scrset:actname=copy
```

Dependencies

The screen set name must already exist.

The nsfi=stop parameter must be specified before the actname parameter can be specified.

The nsr parameter cannot be specified if the actname parameter is specified.

If the actname parameter is specified with the screen set name parameter, the specified value for the actname parameter must be assigned to that screen set name.

The nsfi parameter must be valid for the SCRSET entity.

If the nsfi=stop parameter is not specified, then the nsr parameter must be specified.

The nsr parameter cannot be entered if the nsfi parameter value equals stop.

The GWSOA parameter combination should be known and valid.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

If no parameters are specified for the `rtrv-scrset` command, the output shows all the screen sets, the screening function identifier of the root screening table, the screening reference of the root screening table, the memory usage (percentage), the number of entries in the screen set and the overall gateway screening statistics, followed by a summary of statistics for each screen set.

For the `rtrv-scrset:all=yes` command, the output consists of every screen set and every screening reference in each screen set (except "placeholder" screen sets that have only one rule with nsfi=stop specified in the rule). The all=yes and nfsi=stop parameters cannot be specified in the same command.

If the scrn, nsfi, or nsr parameter is entered, summary information for all screens that match the specified parameters is shown.

When the % FULL is over 100%, the screen is inaccessible. A screenset over 100% capacity size will not bind correctly. A screenset can become provisioned over capacity when linking one screen reference to another causes the size to become too large. To reduce a screenset that is over 100% capacity, screen rules must be deleted (see the `dlt-scr-xxx` commands)

Output

`rtrv-scrset:nsfi=opc`

```
    rlghncxa03w 03-03-14 16:37:54 EST  EAGLE 31.3.0
    SCRN  NSFI    NSR/ACT   RULES  DESTFLD
    att1  OPC     att1       111   Y
    atx1  OPC     atx1         2   Y
    bam1  OPC     bam1         3   Y
    ctt1  OPC     ctt1         1   Y
    ctw1  OPC     ctw         39   Y
    mci1  OPC     mci1         3   Y
    wtl1  OPC     wtl1       339   Y
;
```

`rtrv-scrset:nsr=dpc3`

```
    rlghncxa03w 03-03-14 16:38:28 EST  EAGLE 31.3.0
    SCRN  NSFI    NSR/ACT   RULES
    ss01  DPC     dpc3         3
    ss02  DPC     dpc3         3
    ss03  DPC     dpc3         3
    ss04  DPC     dpc3         3
    ss05  DPC     dpc3         3
;
```

`rtrv-scrset:scrn=ss53`

```
    rlghncxa03w 03-03-14 16:39:04 EST  EAGLE 31.3.0
    SCRN  NSFI    NSR/ACT   RULES  DESTFLD
    ss53  BLKDPC  bkd2         2   Y
          CGPA    cgp1         3
          TT      tt1          3
          TT      tt2          3
          TT      tt3          4
          CDPA    cdp1         3
          CDPA    cdp2         3
          CDPA    cdp3         4
          AFTPC   end1         9
;
```

```
rtrv-scrset:scrn=gws1
```

```
    e1070402 02-07-22 10:06:09 EST  EAGLE 30.0.0
    rtrv-scrset:scrn=gws1
    Command entered at terminal #4.
    SCRN  NSFI    NSR/ACT  RULES DESTFLD
    gws1  OPC     opc1     17    Y
          BLKOPC  bop1     1812
          SIO     sio1     80
          DPC     dpc1     17
          BLKDPC  bdp1     1812
          CGPA    cga1     34
          TT      tt01     256
          CDPA    cda1     17
          CDPA    cdb1     6
          AFTPC   apc1     17
          ISUP    isu1     17
;
```

The number of screen sets has increased from 255 to 1023. In the following example, the % full is over 100% and the screen is inaccessible.

```
rtrv-scrset
```

```
    tekelecstp 02-01-04 23:34:41 MST  UNKNOWN 46.1.0-65.14.0
    ENTIRE GWS DATABASE IS 1% FULL
    CDPA + AFTPC TABLES ARE 0% FULL
    SCREEN SET TABLE IS (4 OF 1023) 1% FULL
    THERE ARE 0 SEAS SCREEN SETS USED (prefix 00nn)
    THERE ARE 4 EAGLE SCREEN SETS USED

    THE FOLLOWING ARE OVER 80% FULL:
    SCRN  NSFI    NSR/ACT  FULL  RULES  TABLES  DESTFLD
    s1    OPC     op1      101%  8192   3       Y
    set1  OPC     op10      97%  7894   6       Y

    SCRN  NSFI    NSR/ACT  FULL  RULES  TABLES  DESTFLD
    a600  SIO     si1        1%  16     1       Y
    a610  SIO     si1        1%  16     1       Y
    s1    OPC     op1      101%  8192   3       Y
    set1  OPC     op10      97%  7894   6       Y
```

Legend

- **SCRN—**Name of the screen set
- **NSFI**—Next screening category to be used
- **NSR/ACT**—Name of the next screening reference (NSR - up to four characters) or action to be taken (ACT - up to six characters), if the message passes this screen
- **FULL**—Capacity of allowed memory a given screen set occupies, expressed as a percentage
- **RULES**—Number of entries in the screen set
- **TABLES**—Number of tables in the screen set
- **DESTFLD**—Displays whether to apply the automatic allowed affected destination screening for network management messages against the routing table, self point codes, and capability point codes. When this parameter is on, the automatic screening is applied at the end of the provisioned screen set.

Related Commands

chg-scrset, *dlt-scrset*, *ent-scrset*

rtrv-seas-config

rtrv-seas-config

Use this command to retrieve configuration information for the CCS Message Router (CCS MR) and the name of the EAGLE source node for the SEAS Over IP interface.

Parameters

This command has no parameters.

Example

```
rtrv-seas-config
```

Dependencies

The SEAS Over IP feature must be enabled before this command can be entered.

Output

```
rtrv-seas-config
```

```
tekelecstp 07-01-23 18:46:01 EST  EAGLE 37.5.0
SEASCLLI      AUTHMODE
----------------------
DEVEAGLE001   Password

CONN     TERM  IPADDR            PORT   LOGIN           HNAME
-------------------------------------------------------------------------
IPMR1     25   128.96.75.45      4010   ccscoor         tcpipmr1
IPMR2     33   128.96.75.46      4011   ccscoor         tcpipmr2
```

Related Commands

chg-seas-config

rtrv-secu-dflt

Display System-Wide Security-Related Defaults

Use this command to display the current values of the various security-related parameters that have been configured with the `chg-secu-dflt` command.

Parameters

msg (optional)

Use this parameter to specify whether the text of the login warning message is to be displayed also.

Range:

yes

no

Default:

no

Example

```
rtrv-secu-dflt
```

```
rtrv-secu-dflt:msg=yes
```

Dependencies

None

Notes

None

Output

`rtrv-secu-dflt:msg=yes`

```
rlghncxa03w 13-06-16 21:49:14 EDT  EAGLE 45.0.0
SECURITY DEFAULTS
-----------------
PAGE           60
UOUT           90
MULTLOG        NO
MINLEN          8
ALPHA           1
NUM             1
PUNC            1
MININTRVL       1
PNOTIFY         7
PGRACE          3
PREUSE          5
PCHREUSE        4
SSH            ON

rlghncxa03w 13-06-16 21:49:14 EDT  EAGLE 45.0.0
WARNING MESSAGE
---------------
1:“**************************************************”
2:“*  NOTICE: This is a private computer system.       *”
3:“*  Unauthorized Access or use may lead to           *”
4:“*  prosecution.                                     *”
```

```
    5:“*  13-06-01 Notice!!! Eagle will be upgraded between *”
    6:“*                the hours of 2am-3am on 13-07-15.  *”
    7:“*                                                   *”
    8:“*  Today’s happy message: Go with Tekelec!!         *”
    9:“*****************************************************”
    10:” ”
    11:””
    12:””
    13:””
    14:””
    15:””
    16:””
    17:””
    18:””
    19:””
    20:””
;
```

`rtrv-secu-dflt`

```
    tekelecstp 12-09-18 10:07:57 EST 45.0.0-64.42.0
    rtrv-secu-dflt
    Command entered at terminal #4.
    SECURITY DEFAULTS
    -----------------
    PAGE           90
    UOUT           90
    MULTLOG        NO
    MINLEN          8
    ALPHA           1
    NUM             1
    PUNC            1
    MININTRVL       1
    PNOTIFY         7
    PGRACE          3
    PREUSE          5
    PCHREUSE        4
    SSH            ON
;
```

The following command displays the output when SSH is ON but the OAM IP security feature is not activated.

```
    tekelecstp 12-09-18 10:07:57 EST 45.0.0-64.42.0
    rtrv-secu-dflt
    Command entered at terminal #4.
    SECURITY DEFAULTS
    -----------------
    PAGE           90
    UOUT           90
    MULTLOG        NO
    MINLEN          8
    ALPHA           1
    NUM             1
    PUNC            1
    MININTRVL       1
    PNOTIFY         7
    PGRACE          3
    PREUSE          5
    PCHREUSE        4
```

```
    SSH             --
;
```

Legend

- **PAGE**—Default password aging interval for newly created user IDs
- **UOUT**—number of successive days a user ID can go unused (no successful login) before the system denies login
- **MULTLOG**—Indicates whether users can users be logged on to multiple terminals at the same time
- **MINLEN**—Minimum password length
- **ALPHA**—Minimum number of alphabetic characters (a–z) required in a new password
- **NUM**—Minimum number of numeric characters (0–9) required in a new password
- **PUNC**—Minimum number of punctuation characters required in a new password. A punctuation character is any character that is not an alphabetic or numeric character.
- **MININTRVL**—Minimum number of days before a password can be changed again
- **PNOTIFY**—Number of days prior to password expiration in which the user will be notified about upcoming expiration
- **PGRACE**—Number of days after password expiration in which the user is allowed to login without requiring a password change
- **PREUSE**—Number of passwords in the password history that must be unique
- **PCHREUSE**—Number of characters that cannot be reused from the existing password when setting a new password
- **WARNING MESSAGE**—Message displayed when a user has successfully logged in
- **SSH**— Together with OAM IP security feature it indicates whether the telnet connections are secure or not

Related Commands

chg-pid, *chg-secu-dflt*

rtrv-secu-trm — Display Terminal Access Rights

Use this command to display the access rights for a terminal. Only a user with system security administration authority can change a terminal's access rights. Access rights determine whether a terminal or port has command access to the system.

Parameters

trm (optional)

Specifies the port about which information will be displayed.

Range:

1 - 16

Default:

Display all

Example

```
rtrv-secu-trm
```

```
rtrv-secu-trm:trm=9
```

Dependencies

None

Notes

None

Output

This example shows attributes of all terminals when the Command Class Management feature is off:

```
rtrv-secu-trm
```

```
    e5oam 08-12-01 23:40:14 EST  EAGLE 40.1.0
    TRM    LINK SA  SYS  PU   DB   DBG
    1      YES  *** YES  YES  YES  YES
    2      YES  *** YES  YES  YES  YES
    3      YES  YES YES  YES  YES  YES
    4      YES  YES YES  YES  YES  YES
    5      YES  YES YES  YES  YES  YES
    6      YES  YES YES  YES  YES  YES
    7      NO   *** NO   NO   NO   NO
    8      YES  *** YES  YES  YES  YES
    9      YES  *** YES  YES  YES  YES
    10     YES  *** YES  YES  YES  YES
    11     YES  *** YES  YES  YES  YES
    12     NO   *** NO   NO   NO   NO
    13     NO   *** NO   NO   NO   NO
    14     NO   *** NO   NO   NO   NO
    15     NO   YES NO   NO   NO   NO
    16     NO   *** NO   NO   NO   NO
;
```

This example shows attributes of all termnials when the Command Class Management feature is on:

```
rtrv-secu-trm
```

```
    rlghncxa03w 08-12-01 12:30:07 EST  EAGLE 40.1.0

    trm    link sa  sys pu  db  dbg
    1      NO   NO  YES NO  YES NO
    2      NO   YES NO  NO  NO  NO
    3      YES  *** YES YES YES YES
    4      NO   NO  NO  NO  NO  NO
    5      YES  *** YES NO  YES YES
    6      NO   NO  NO  NO  NO  NO
    .
```

```
    .
    .
    16     NO   YES NO  NO  YES YES YES

    trm    U01 U02 U03 U04 U05 U06 U07 U08 U09 U10 U11 U12 U13 U14 U15 U16
    1      NO  NO  YES NO  YES NO  YES YES NO  YES NO  NO  NO  NO  YES NO
    2      NO  YES NO  NO  NO  NO  YES NO  NO  NO  YES NO  YES NO  YES NO
    3      YES NO  YES YES YES YES YES NO  NO  YES NO  NO  NO  YES NO  YES
    4      NO  NO  NO  NO  NO  NO  YES NO  YES NO  YES NO  YES NO  YES NO
    5      YES YES YES NO  YES YES YES YES YES YES NO  NO  NO  YES NO  YES
    6      NO  NO  NO  NO  NO  NO  YES YES YES NO  YES NO  YES NO  YES NO
    .
    .
    .
    16     NO  YES NO  NO  YES YES YES YES YES YES YES YES NO  YES NO  YES

    trm    U17 U18 U19 U20 U21 U22 U23 U24 U25 U26 U27 U28 U29 U30 U31 U32
    1      NO  NO  YES NO  YES NO  YES YES NO  YES NO  NO  NO  YES NO  YES
    2      NO  NO  NO  NO  NO  NO  YES NO  YES NO  YES NO  YES NO  YES NO
    3      YES YES YES NO  YES YES YES YES YES YES NO  NO  NO  YES NO  YES
    4      NO  NO  NO  NO  NO  NO  YES YES YES NO  YES NO  YES NO  YES NO
    5      NO  NO  YES NO  YES NO  YES YES NO  YES NO  NO  NO  NO  YES NO
    6      NO YES  NO  NO  NO  NO  YES NO  NO  NO  YES NO  YES NO  YES NO
    .
    .
    .
    16     NO  YES NO  NO  YES YES YES YES NO  YES NO  YES NO  YES NO  YES
;
```

This example shows attributes of ternimal 9 when the Command Class Management feature is off:

```
rtrv-secu-trm:trm=9
```

```
    rlghncxa03w 08-12-01 12:30:07 EST  EAGLE 40.1.0

    TRM    LINK SA  SYS  PU   DB   DBG
    9      NO   NO  YES  NO   YES  NO
;
```

This example shows attributes of ternimal 9 when the Command Class Management feature is on:

```
rtrv-secu-trm:trm=9
```

```
    rlghncxa03w 08-12-01 12:30:07 EST  EAGLE 40.1.0

    TRM    LINK SA  SYS  PU   DB   DBG
    9      NO   NO  YES  NO   YES  NO

    trm    U01 U02 U03 U04 U05 U06 U07 U08 U09 U10 U11 U12 U13 U14 U15 U16
    9      NO  NO  YES NO  YES NO  YES YES YES YES NO  YES NO  YES NO  YES

    trm    U17 U18 U19 U20 U21 U22 U23 U24 U25 U26 U27 U28 U29 U30 U31 U32
    9      NO  NO  YES YES YES YES YES YES YES YES YES YES NO  YES NO  NO
;
```

Legend

- **TRM**—ID number of the terminal whose characteristics are to be changed

- **LINK**—Shows whether the Link Maintenance class of commands is allowed for this terminal
- **SA**—Shows whether the Security Administration class of commands is allowed for this terminal
- **SYS**—Shows whether the System Maintenance class of commands is allowed for this terminal
- **PU**—Shows whether the Program Update class of commands is allowed for this terminal
- **DB**—Shows whether the Database class of commands is allowed for this terminal
- **DBG**—Shows whether the Debug class of commands is allowed for this terminal
- ***—Denotes a Security Administration port whose port type has been configured with a value of *none* or *printer*. These terminal types do not allow you to enter commands.
- **U01 - U32**—Configurable command class default names. (If configured with a user-specified name, that name appears.)

Related Commands

chg-secu-trm

rtrv-secu-user — Retrieve Security User

Use this command to show the security information for all users in the system.

Parameters

uid (optional)

User ID

Range:

*a*zzzzzzzzzzzzzzz

1 alphabetic character followed by up to 15 alphanumeric characters

Default:

Display all

Example

```
rtrv-secu-user:uid=rogers
```

Dependencies

If a user ID is specified, the user ID must exist in the UserID table.

Notes

Only the system administrator should have access to this command.

Passwords cannot be shown.

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

This example shows a display when the Command Class Management feature is not enabled:

`rtrv-secu-user`

```
    rlghncxa03w 08-12-01 09:50:17 EST  EAGLE 40.1.0

    user id              age page uout rev link sa  sys pu  db  dbg
    eagle1longname16     750 0    0    NO  YES  YES YES YES YES YES

    user id              age page uout rev link sa  sys pu  db  dbg
    manny                36  60   60   NO  YES  YES YES YES YES YES

    user id              age page uout rev link sa  sys pu  db  dbg
    moe                  100 30   60   YES YES  YES YES YES YES YES

    user id              age page uout rev link sa  sys pu  db  dbg
    jack                 10  30   30   NO  YES  YES YES YES YES YES
;
```

This example shows a display when the Command Class Management featue is enabled:

`rtrv-secu-user`

```
    rlghncxa03w 08-12-01 09:50:17 EST  EAGLE 40.1.0

    user id              age page uout rev link sa  sys pu  db  dbg
    eagle1longname16     750 0    0    NO  YES  YES YES YES YES YES

                u01 u02 u03 u04 u05 u06 u07 u08 u09 u10 u11 u12 u13 u14 u15 u16

                YES YES YES YES YES YES YES YES YES YES YES YES YES YES YES NO

                u17 u18 u19 u20 u21 u22 u23 u24 u25 u26 u27 u28 u29 u30 u31 u32

                YES YES YES YES YES YES YES YES YES YES YES NO  NO  NO  NO  YES


    user id              age page uout rev link sa  sys pu  db  dbg
    manny                36  60   60   NO  YES  YES YES YES YES YES

                u01 u02 u03 u04 u05 u06 u07 u08 u09 u10 u11 u12 u13 u14 u15 u16

                NO  NO  NO  NO  YES YES YES YES YES YES YES YES YES YES YES YES


                u17 u18 u19 u20 u21 u22 u23 u24 u25 u26 u27 u28 u29 u30 u31 u32

                YES YES YES YES YES YES YES YES YES YES YES NO  NO  NO  NO  YES


    user id              age page uout rev link sa  sys pu  db  dbg
    moe                  100 30   60   YES YES  YES YES YES YES YES
                u01 u02 u03 u04 u05 u06 u07 u08 u09 u10 u11 u12 u13 u14 u15 u16


                YES YES YES YES YES YES YES YES YES YES YES YES YES YES YES NO
```

```
               u17 u18 u19 u20 u21 u22 u23 u24 u25 u26 u27 u28 u29 u30 u31 u32

               YES YES YES YES YES YES YES YES YES YES YES YES YES NO  NO  NO

    user id             age page uout rev link sa  sys pu  db  dbg
    jack                10  30   30   NO  YES  YES YES YES YES YES

               u01 u02 u03 u04 u05 u06 u07 u08 u09 u10 u11 u12 u13 u14 u15 u16

               YES YES YES YES YES YES YES YES YES YES YES YES YES YES YES YES


               u17 u18 u19 u20 u21 u22 u23 u24 u25 u26 u27 u28 u29 u30 u31 u32

               YES YES YES YES YES YES NO  NO  NO  NO  YES YES YES YES YES NO
;
```

Legend

- **USER-ID**—Name of the user
- **AGE**—Current age, in days, of the password associated with this user ID. If the password age is greater than 999 days, the value *999* is displayed.
- **PAGE**—Maximum password age established for the user ID. When AGE becomes greater than PAGE, the system forces the user to change the password at the next login. An asterisk (*) displayed after the value indicates that the system-wide default page parameter value, as configured on the `chg-secu-dflt` command, is in effect for the user ID.
- **UOUT**—User ID aging interval, in days. If the user ID is not used (that is, no successful login) for longer than this interval, the system does not allow a login. An asterisk (*) displayed after the value indicates that the system-wide default, uout parameter value, as configured on the `chg-secu-dflt` command, is in effect for the user ID.
- **REV**—Shows whether the user ID is denied login (revoked). YES indicates that the user ID is revoked, NO indicates that the user ID is not revoked.
- **LINK**—Shows whether the user has access to all commands in the Link Maintenance command class
- **SA**—Shows whether the user has access to all commands in the Security Administration command class
- **SYS**—Shows whether the user has access to all commands in the System Maintenance command class
- **PU**—Shows whether the user has access to all commands in the Program Update command class
- **DB**—Shows whether the user has access to all commands in the Database Administration command class
- **DBG**—Shows whether the user has access to all commands in the Debug command class

If the Command Class Management feature is enabled, the following fields appear:

- **U01 - U32**—Default configurable command class names. If user-defined names have been provisioned, they will appear instead of the default names.

Related Commands

act-user, *chg-pid*, *chg-user*, *dact-user*, *dlt-user*, *ent-user*, *login*, *logout*, *rept-stat-user*, *rtrv-user*

rtrv-seculog

Generate Report from Security Log Contents

Use this command to retrieve the contents of a security log and display it to the user in the scroll area. Various reports can be produced by varying the values of the command parameters. By default, the report is generated from the log on the active fixed disk, although the slog parameter can be used to generate the report from the log on the standby fixed disk.

Parameters

edate (optional)

End date. This parameter displays log entries that were created on or before the specified date. If the sdate parameter is specified, log entries created for the period specified by the sdate and edate combination are displayed.

Range:

000101 - 991231

(in the form *yymmdd*, where *yy* is year, *mm* is month, and *dd* is day)

The date must be specified with 6 digits. For example, enter 1/1/96 as 960101.

Default:

Report log entries regardless of their creation date

etime (optional)

End time. This parameter displays log entries created between midnight (00:00:00) and the time specified by this parameter. If the stime parameter is specified, log entries created in the time period specified by the stime and etime combination are displayed.

Range:

000000 - 235959

(in the form *hhmmss*, where *hh*=hours (00-23), *mm*=minutes (00-59), *ss*=seconds (00-59))

The time must be specified with 6 digits in a 24-hour format. For example, enter 1:05:03 P.M. as *130503*.

Default:

Report log entries regardless of their creation time

mode (optional)

Use this parameter to produce a either full log report or an abbreviated log report.

Range:

brief

Causes only one line of output to be generated for each log entry reported. Some information in each reported log entry is not shown.

full

Produces a report showing multiple lines of output for each log record that is reported. This report displays more information from each log record (including the entire command) than the mode=brief report.

Default:

brief

num (optional)

Number of records to be displayed before the report is terminated.

Range:

1 - 50000

Default:

500 —if mode=brief is specified

250 —if mode=full is not specified

rectype (optional)

This parameter specifies whether to consider all records in the log for reporting or only new (un-uploaded) records.

Range: ***new, both***

new

The report generator scans un-uploaded records when generating the report. Old records are not considered for reporting, even if they match the reporting criteria.

both

All records in the log are considered for reporting.

Default:

new

sdate (optional)

Start date. This parameter displays log entries created on or after the specified date. If the edate parameter is also specified, log entries created for the period specified by the sdate/edate combination are displayed.

Range:

000101 - 991231

(in the form *yymmdd*, where *yy* is year, *mm* is month, and *dd* is day)

The date must be specified with 6 digits. For example, enter 1/1/96 as 960101.

Default:

Report log entries regardless of their creation date

slog (optional)

Source log indicator. The log to be copied to the FTA.

Range:

act

produces the report from the log on the active MASP

stb

produces the report from the log on the standby MASP

Default:

act

stime (optional)

Start time. This parameter displays log entries created between the time specified by this parameter and the end of the day (23:59:59) inclusive. If the etime parameter is specified, log entries created in the time period specified by the stime/etime combination are displayed.

Range:

000000 - 235959

(in the form *hhmmss*, where *hh*=hours (00-23), *mm*=minutes (00-59), *ss*=seconds (00-59))

The time must be specified with 6 digits in a 24-hour format (*hhmmss*). For example, enter 1:05:03 p.m. as *130503*.

Default:

Report log entries regardless of their creation time

trm (optional)

Terminal ID. Use this parameter to report only those log entries created by the specified terminal.

Range:

1 - 16

Default:

Report log entries regardless of the associated terminal

uid (optional)

User ID. This parameter displays log entries created by the specified user ID. Specify uid=seas to display commands received on a SEAS terminal. Specify uid=none to display commands not associated with a user ID (for example, commands issued prior to login).

Range:

azzzzzzzzzzzzzzz

1 alphabetic character followed by up to 15 alphanumeric characters

Default:

Display all

Example

```
rtrv-seculog:sdate=960214:edate=960215:num=7
```

```
rtrv-seculog:mode=full:sdate=960214:edate=960214:stime=062900:etime=063200
```

Dependencies

If the sdate and edate parameters are specified, the date specified for the sdate parameter must be earlier than or equal to the date specified for the edate parameter.

If the stime and etime parameters are specified, the time specified for the stime parameter must be earlier than or equal to the time specified for the etime parameter.

The month component of the sdate and edate parameter combination must be specified in the range 1–12.

The day component of sdate and edate parameter combination must be specified in the range 1–31. This value must accurately reflect the number of days in the month and year indicated. For example, sdate=960631 is not a valid parameter value because June has only 30 days.

The second component of the stime and etime parameter combination must be specified in the range 00–59.

The minute component of the stime and etime parameter combination must be specified in the range 00–59.

No other security log command can be in progress when this command is entered.

This command cannot be entered at a telnet terminal (terminal ID 17-40).

Notes

To accommodate the year 2000 and beyond, the two-digit year portion of dates is interpreted to be in the indicated century as follows:

- years 95–99 = 1995 through 1999
- years 00–36 = 2000 through 2036

A consequence of this is that date 000101 (Jan 1, 2000) is greater than 991231 (December 31, 1999).

If the mode=brief parameter is specified and the output report has a plus (+) symbol appearing at the end of the command, the plus symbol indicates that more command characters are available to be displayed. Specify the mode=full parameter to see these additional characters.

In the mode=full output report, a plus (+) symbol appearing at the end of the command indicates the command is longer than 150 characters. Note that even in the uploaded log, each record in the log has room to record only 150 characters of the entered command. If the command is longer than 150 characters, then only the first 149 characters of the command and the plus symbol (to indicate that truncation has occurred) are recorded.

Security log size is limited to 50,000 records. Data from a query that exceeds the size limit of the security log cannot be displayed.

The system checks to ensure that the day portion of any sdate/edate value entered is in agreement with the month and year. It issues error message E2252 if the day is found to be invalid (for example,

960631 is not a valid date). The system software and date/time hardware properly handle leap years and leap centuries.

The system uses the sdate/edate and stime/etime parameters to select log records for reporting as follows:

- If the date on which the log record was created is not in the date range specified by the sdate/edate parameters, the record is not reported. The default sdate is the date of the oldest record in the log, and the default edate is the current date.
- If the time of day at which the log record was created is not in the time range specified by the stime/etime parameters, the record is not reported. The default stime is 00:00:00 (midnight), and the default etime is 23:59:59.
- Otherwise, the log record is reported, unless it is disqualified by other parameters such as uid or trm.

As an example, if the following command is entered, records are displayed for October 10, 1996 from 2:00 p.m. until 4:00 p.m., for October 11, 1996, from 2:00 p.m. until 4:00 p.m., and for October 12, 1996, from 2:00 p.m. until 4:00 p.m.

```
rtrv-seculog:sdate=961010:edate=961012:stime=140000:etime=160000
```

It takes the system approximately one minute to display 500 lines of data in the scroll area. To output a complete mode=full report (150,000 lines maximum) takes approximately 300 minutes. For this reason, the num parameter defaults to *125* (mode=full) or 500 (mode=brief) to prevent an excessively long process time, unless you deliberately choose a longer report.

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

The following message appears in the scroll area if the slog=stb parameter is specified (either explicitly or by default) and the standby fixed disk is not available (for example, simplex mode).

```
Command Failed - unable to read security log
```

When the `rtrv-seculog` command is entered, one of the first things that the reporting function does is to examine the log overflow and logging failure flags in the header of the specified log. Depending on the nature of the information found, one of the following notices is displayed in the output:

```
Notice: Log overflow has occurred -- report may be incomplete.
```

```
Notice: Logging failure -- report may be incomplete.
```

Output

This example shows output for records in the log created between 2/14/96 and 2/15/96 are displayed, up to a maximum of 9 records:

```
rtrv-seculog:sdate=960214:edate=960215:num=9
```

```
    rlghncxa03w 96-02-14 06:32:20 EST  EAGLE Release 34.0
    Notice: Log overflow has occurred -- report may be incomplete.
    Reporting parameters:
        sdate   = 960214
        edate   = 960215
        num     = 9

    uid           trm date   time   st cmd
    ------------- --- ------ ------ -- -----------------------------------
    NONE          03  960214 063000 OK login:uid=johnlamb
    SEAS          15  960214 063010 OK CHG-SLK::LSN123-03:123456:50,RCH::S+
    johnlamb      03  960214 063021 OK rept-stat-trbl
    SEAS          15  960214 063032 OK CHG-RTE::LSNABC-001001001:123456:55+
    johnlamb      05  960215 064524 RJ ent-card:loc=1201:type=lime1:appl=+
    johnlamb      05  960215 064528 OK ent-card:loc=1201:type=lime1:appl=+
    johnlamb      03  960215 063030 AB rept-stat-card
    johnlamb      03  960215 063031 OK canc-cmd
    johnlamb      05  960215 064533 OK logout

    Report terminated -- output length limitation (NUM=) reached.
    9 records reported of 5613 records scanned.
    END OF SECURITY LOG REPORT.
;
```

This example shows all records in the log created on 2/14/96 between the hours of 06:29:00 and 06:32:00:

```
rtrv-seculog:mode=full:sdate=960214:edate=960214:stime=062900:etime=063200
```

```
    rlghncxa03w 96-02-14 06:32:20 EST  EAGLE Release 34.0
    Reporting parameters:
            sdate   = 960214
            edate   = 960214
            stime   = 062900
            etime   = 063200

    uid              trm date   time   result
    ---------------- --- ------ ------ -----------
    NONE              05 960214 062912 E1234
    Cmd: login:uid=eagle
    johnlamb          03 960214 063000 OK
    Cmd: rept-stat-card
    SEAS              16 960214 063123 OK


Cmd:CHG-SLK::LSN12345-12:123456:50,RCH::OOS::::D,PRV123456-106-12,96-02-14-06-31-22;

    Johnlamb          03 960214 063128 OK
    Cmd:chg-lnp-lrn:lrn=1234567890:nmrgt1=255-255-255-255-255-dpcssn-ssn-255-
  yes:nmrgt2=255-255-255-255-dpcssn-ssn-255-yes:mrrgt3=255-255-255-255-255-
dpcssn+

    3 records reported of 50000 records scanned.
    END OF SECURITY LOG REPORT.
;
```

This example displays a maximum of 10 records (SEAS commands) in the log when the SEAS Over IP feature is turned on and SEAS commands are issued through the SEAS terminals:

```
rtrv-seculog:uid=seas:num=10
```

```
tekelecstp 07-03-09 11:57:50 IST  EAGLE 37.5.0
Reporting parameters:
    uid     = seas
    num     = 10

uid               trm date   time   st cmd
----------------  --- ------ ------ -- ----------------------------------

SEAS              17  070902 124846 RJ ASGN-SLK::LS111-00:AJP6OD:50,SOM::1+

SEAS              17  070902 124856 OK ASGN-SLK::LS111-02:AJP6OD:50,SOM::1+

SEAS              17  070902 124944 OK ASGN-SLK::LS111-03:AJP6OD:50,SOM::1+

SEAS              17  070902 125238 OK ASGN-SLK::LS111-11:AJP6OD:50,SOM::1+

SEAS              17  070902 125245 OK ASGN-SLK::LS111-05:AJP6OD:50,SOM::1+

SEAS              17  070902 125257 OK ASGN-SLK::LS111-13:AJP6OD:50,SOM::1+

SEAS              17  070902 130331 OK ASGN-SLK::LS111-02:AJP6OD:50,SOM::1+

SEAS              17  070902 130539 OK ASGN-SLK::LS111-02:AJP6OD:50,SOM::1+

SEAS              25  070902 131327 OK ASGN-SLK::LS111-03:AJP6OD:50,SOM::1+

SEAS              25  070902 184758 OK ASGN-SLK::LS111-02:AJP6OD:50,SOM::1+


Report terminated -- output length limitation (NUM=) reached

10 records reported of 240 records scanned.
END OF SECURITY LOG REPORT.
```

Legend

- **uid**—User ID that issued the command. The value SEAS appears if the command was received on a SEAS port. The value NONE appears if no user ID was associated with the port at the time the command was logged.
- **trm**—Terminal ID of the terminal where the command was received
- **date**—Date the log entry was made; that is, the date on which the command was received for execution
- **time**—Time the log entry was made; that is, the time the command was received for execution. A 24-hour time format is used (for example, 1:00 p.m. = 130000).
- **st**—Two-letter shorthand notation of the command's status. The complete status can be obtained by re-entering the `rtrv-seculog` command and specifying the mode=full parameter. The status abbreviations are:
  - **AB**—Command aborted. Displayed when the `canc-cmd:trm` command is issued to abort the following commands: `rept-stat-card`, `rept-stat-dstn`, `rept-stat-ls`, `rept-stat-slk`, `rtrv-dstn`, `rtrv-gta`, `rtrv-gtt`, `rtrv-ls`, `rtrv-map`, `rtrv-rte`, `rtrv-seculog`, and `rtrv-slk`. An AB status indicates that processing and output of the command have been halted. This status is also displayed for SEAS flow-thru commands that are canceled with the `canc-cmd` (without the trm parameter).

  - **RJ**—Command rejected. Displayed whenever the results value that would be displayed in the mode=full report would be one of the following:
    - Edddd
    - FAILED
    - rrrrrr/mmmm
  - **RL**—Retry later. The system is busy.
  - **IP**—In Progress
  - **OK**—Command successfully executed
  - **TO**—Timed out.
- **cmd**—Command that was recorded. In the mode=brief report, if the length of the recorded command is greater than or equal to 35 characters (as this much as can be displayed on a single line of the output report), then only the first 34 characters of the command are displayed, and the 35th character is displayed as a plus symbol (+) to indicate that more information is available in the log. Re-enter the `rtrv-seculog` command with the mode=full parameter to see the additional information. In the mode=full report, a plus symbol at the end of a command indicates that the command is longer than 150 characters.

Related Commands

None.

rtrv-serial-num — Retrieve Serial Number

Use this command to retrieve the NT serial number for the system.

Parameters

This command has no parameters.

Example

```
rtrv-serial-num
```

Dependencies

None

Notes

None

Output

Dashes appear if the serial number has not yet been entered into the database.

`rtrv-serial-num`

```
    rlghncxa03w 03-03-29 16:40:40 EST  EAGLE 31.3.0
    System serial number = nt00001231

    System serial number is locked.

    rlghncxa03w 03-03-29 16:40:40 EST  EAGLE 31.3.0
    Command Completed
;
```

Related Commands

ent-serial-num

rtrv-sg-opts

Retrieve IP7 Secure Gateway Options

Use this command to retrieve information about the currently chosen IP[7] Secure Gateway protocol options.

Parameters

This command has no parameters.

Example

`rtrv-sg-opts`

Dependencies

None

Notes

None

Output

`rtrv-sg-opts`

```
    rlghncxa03w 13-09-24  09:50:17 EST  EAGLE 46.0.0
    SRKQ:              250
    SNMPCONT:          john doe 555-123-4567
    GETCOMM:           public
    SETCOMM:           private
    TRAPCOMM:          public
    SCTPCSUM:          adler32
    IPGWABATE:         NO
    UAMEASUSEDFTAS:    YES
```

```
    DSCP              20
;
```

Legend

- **SRKQ**—Static routing key quantity. Maximum number of routing key entries in the Static Routing Key table.
- **SNMPCONT**—System contact information for each E5-ENET or E5-ENET-B SNMP agent
- **GETCOMM**—Community name used for messages sent by SS7IPGW cards (SNMP Get and GetNext request validations)
- **SETCOMM**—Community name used for SNMP set request validation. This value applies for each E5-ENET or E5-ENET-B SNMP agent in the system.
- **TRAPCOMM**—Community name used when SNMP traps are generated. This value applies for each E5-ENET or E5-ENET-B SNMP agent in the system.
- **SCTPCSUM**—SCTP checksum algorithm type
- **IPGWABATE**—IPGWx SS7 congestion abatement procedures
- **UAMEASUSEDFTAS**—UA measurements are generated
- **DSCP**--- Subfield in IP header. Applicable to SIGTRAN based cards only.

Related Commands

chg-sg-opts, *rtrv-appl-rtkey*

rtrv-shlf

Retrieve Shelf

Use this command to display the frames and shelves that are currently provisioned in the system. The type of shelf is also shown.

Parameters

loc (optional)

The shelf location.

Range:

1100, 1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300, 5100, 5200, 5300, 6100, 6200, 6300

Default:

Display all configured locations

Example

```
rtrv-shlf
rtrv-shlf:loc=1300
rtrv-shlf:loc=6200
```

Dependencies

The frame and shelf values of the shelf location parameter (loc) must be within the valid range (*xyzz*, where *x*=frame and *y*=shelf; *zz* is always 00 for this command).

Notes

None

Output

This example displays all configured STP equipment shelves:

`rtrv-shlf`

```
    tekelecstp 09-03-12 12:24:48 EST 45.0.0
    SHELF DISPLAY
    FRAME SHELF     TYPE
      1     1       CONTROL
      1     2       EXTENSION
      6     1       EXTENSION
      6     2       FPB
;
```

This example displays a specific STP equipment shelf:

`rtrv-shlf:loc=1300`

```
    rlghncxa03w 12-05-07 09:50:17 EST  EAGLE 45.0.0
    SHELF DISPLAY LOCATION=1300  FRMID: CF00
    FRAME SHELF     TYPE
      1     3       EXTENSION
    CARD   TYPE      APPL     LSET NAME   PORT SLC LSET NAME   PORT SLC
    1301   LIME1     SS7ANSI  ----------   --  --  ----------   --  --
    1302   LIME1     SS7ANSI  ----------   --  --  ----------   --  --
    1303   LIME1     SS7ANSI  ----------   --  --  ----------   --  --
    1304   LIME1     SS7ANSI  ----------   --  --  ----------   --  --
    1305   LIME1     SS7ANSI  ----------   --  --  ----------   --  --
;
```

This example displays a specific STP equipment shelf that is not configured (unequipped):

`rtrv-shlf:loc=2100`

```
    rlghncxa03w 12-05-07 09:50:17 EST  EAGLE 45.0.0
    SHELF DISPLAY LOCATION=2100  FRMID: EF00
    FRAME SHELF     TYPE

    This shelf is UNEQUIPPED in the database.
;
```

This example displays a specific FPB shelf.

```
rtrv-shlf:loc=6300
```

```
   tekelecstp 12-09-05 11:03:45 EST 45.0.0
   rtrv-shlf:loc=6300
   Command entered at terminal #4.
   SHELF DISPLAY LOCATION=6300
   FRAME         SHELF            TYPE         FAN
   6               3               FPB         OFF
   CARD           TYPE            APPL        SRVNAME
   6301           TELCO           SWITCH      telco1
   6302           TELCO           SWITCH      telco2
;
```

Legend

- **FRAME ID**—Frame power designation identifier
- **FRAME**—Frame location of the shelf
- **SHELF** —Location of the shelf within the frame
- **TYPE** —Type of shelf
- **CARD**—Card location in the specified shelf
- **TYPE**—Card type
- **APPL**—Application running on the card
- **LSET NAME**—Linkset name for the port on the card
- **PORT**—Port used by the linkset defined on the card
- **SLC**—Signaling link code for the linkset
- **FPB** - Frame Power Budget
- **SRVNAME**- Server Name

Related Commands

dlt-shlf, *ent-shlf*

rtrv-sid Retrieve Self Identification

Use this command to retrieve site identification characteristics of the system. It shows the point code assigned to this system, the CLLI code of the system, the capability code of the STP, and the type of point codes supported by the system.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

cpc (optional)

ANSI capability point code in the form of *network indicator-network cluster-network cluster member (ni-nc-ncm)*.

Synonym:

cpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

Default:

Display all

cpc/cpca/cpci/cpcn/cpcn24/cpcn16 (optional)

Capability point code. The code used by the SS7 protocol to identify a group of functionally related STPs in the signaling network to which the STP belongs.

cpci (optional)

ITU international point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Default:

Display all

cpcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

Default:

Display all

cpcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

Default:

Display all

cpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Default:

Display all

cpctype (optional)

Capability point code type. This parameter displays the CPCs that are provisioned for the specified service.

Range:

stp

lnp

inp

eir

gport

gflex

mnp

atinpq

vflex

aiq

Default:

stp

Example

```
rtrv-sid
rtrv-sid:cpc=3-3-3
rtrv-sid:cyctype=inp
rtrv-sid:cpcn=s-00456
rtrv-sid:cpcn16=1-2-3
```

Dependencies

The STP destination point codes and capability point codes can be specified only as full point codes.

The ANSI point code 0-0-0 and the ITU-I point code 0-000-0 are invalid for STP capability point codes.

The LNP feature must be turned on beore the cpctype=lnp parameter can be specified.

The INP feature must be turned on beore the cpctype=inp parameter can be specified.

The EIR feature must be turned on beore the cpctype=eir parameter can be specified.

The Spare Point Code Support feature must be enabled before an ITU-I or ITU-N spare point code can be retrieved.

If the cpcn parameter is specified, the format of the specified point code must match the format that was assigned with the `chg-stpopts:npcfmit` command.

The ATINP feature must be enabled before the cpctype=atinpq parameter can be specified.

The V-Flex feature must be turned on before the cpctype=vflex parameter can be specified.

The A-Port or the IS41 GSM Migration (IGM) feature must be enabled, before the cpctype=mnp parameter can be specified.

The ANSI41 AIQ feature must be enabled before the cpctype=aiq parameter can be specified.

Notes

If the cpc/cpca/cpci/cpcn/cpcn24/cpcn16 parameter is not specified, all site identification characteristics are displayed.

If the STP capability point code is specified and not provisioned, the report contains only the PCA, PCI, PCN, PCN16, PCN24, CLLI, and PCTYPE fields, with the message:

```
Capability Point Code specified is not provisioned.
```

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

The `rtrv-sid` command CPC output is sorted using three sort keys.

- The first sort key is by the cpctype service, ordered by: aiq, eir, gflex, inp, stp (own STP, unlabeled), and gport or mnp depending on whether A-Port, ATINP, G-Port or V-Flex is enabled.
- The second sort key is by network type, ordered by: ANSI, ITU-I, ITU-N, then ITU-N24.
- The third sort key is by point code value, ordered low to high.

In the following output examples:

- When a 24-bit ITU-N site identification STP point code is configured, the PCN header is changed to PCN24.
- The *s-* point code prefix indicates an ITU national or international spare point code or spare capability point code.
- ANSI41 AIQ, EIR, G-Flex, G-Port, INP, LNP and V-Flex capability point codes are indicated in parentheses after the capability point code header.
- STP capability point codes have no parentheses after the header.

This example shows all site identification characteristics provisioned in the system at the time the command was entered. The output includes spare point codes.

`rtrv-sid`

```
    tekelecstp 04-06-14 15:18:11 EST  EAGLE 31.12.0
       PCA             PCI          PCN                CLLI              PCTYPE

       005-067-000     1-023-4      01234              tekelecstp        ANSI
                     s-1-023-4    s-01234

        CPCI
       s-4-056-0

        CPCN
       s-00456

;
```

This example shows an STP capability point code:

`rtrv-sid:cpc=5-5-4`

```
    rlghncxa03w 03-03-18 09:33:58 EST  EAGLE 31.3.0
```

```
       PCA             PCI             PCN            CLLI          PCTYPE
       008-013-008     -------         -----          tklcstn14     OTHER

       CPCA
       005-005-004

;
```

This example shows an LNP capability point code:

`rtrv-sid:cpc=3-3-3`

```
    rlghncxa03w 03-03-10 09:33:58 EST  EAGLE 31.3.0
       PCA             PCI             PCN            CLLI          PCTYPE
       008-013-008     -------         -----          tklcstn14     OTHER

       CPCA (LNP)
       003-003-003

;
```

This example shows output when no match for the specified capability point code is found in the Site ID table:

`rtrv-sid:cpc=100-100-100`

```
    rlghncxa03w 03-03-18 09:33:58 EST  EAGLE 31.3.0
       PCA             PCI             PCN            CLLI          PCTYPE
       008-013-008     -------         -----          tklcstn14     OTHER

    Capability Point Code specified is not provisioned.
;
```

This example shows a display of a site identification STP point code with a group code (the ITUDUPPC feature must be on):

`rtrv-sid`

```
    rlghncxa03w 03-03-18 09:33:58 EST  EAGLE 31.3.0
       PCA             PCI             PCN            CLLI          PCTYPE
       008-013-008     -------         128-15-1-1-si  tklcstn14     OTHER
;
```

This example shows all provisioned INP capability point codes:

`rtrv-sid:cpctype=inp`

```
    rlghncxa03w 03-03-18 09:33:58 EST  EAGLE 31.3.0
       PCA             PCI             PCN            CLLI          PCTYPE
       -------         2-150-4         12345          tklcstn14     OTHER

       CPCN (INP)
       1234 34567

       CPCI (INP)
       3-050-2         4-100-3
;
```

This example shows a specific 24-bit ITU-N capability point code:

```
rtrv-sid:cpcn24=33-33-33
```

```
    rlghncxa03w 02-03-18 09:33:58 EST EAGLE 31.0.0
       PCA             PCI             PCN24             CLLI          PCTYPE
       001-001-001     -------         011-011-011       tekelecstp    ANSI

       CPCN24
       033-033-033
;
```

This example contains capability point codes provisioned with cpctype=gflex, cpctype=gport, and cpctype=aiq:

```
rtrv-sid
```

```
    tekelecstp 09-12-09 15:46:50 EST  EAGLE 42.0.0
       PCA             PCI          PCN               CLLI              PCTYPE

       001-001-001     2-002-2      00333             tekelecstp        ANSI

       CPCI (GFLEX)
       2-002-3           2-002-4

       CPCA (AIQ)
       001-002-003       001-002-004

       CPCA (GPORT)
       001-001-002       001-001-003
;
```

```
rtrv-sid
```

```
    tekelecstp 04-06-14 15:18:11 EST  EAGLE 31.12.0
       PCA             PCI             PCN            CLLI          PCTYPE
       008-013-008     -------         -----          tklcstn14     OTHER

       CPCA
       005-005-002      005-005-004      005-005-005

       CPCA (LNP)
       005-005-002      005-005-004      005-005-005
;
```

This example retrieves a specific spare ITU-N capability point code:

```
rtrv-sid:cpcn=s-00456
```

```
    rlghncxa03w 05-01-07-18 09:33:58 EST  EAGLE 31.12.0
       PCA             PCI          PCN               CLLI              PCTYPE

       005-067-000     1-023-4      01234             tekelecstp        ANSI
                     s-1-023-4    s-01234

       CPCN
      s-00456
```

```
      CPCN (EIR)
    s-123
;
```

This example shows all site identification characteristics provisioned in the system at the time the command was entered when the J7 feature is enabled. The output includes spare point codes.

`rtrv-sid`

```
    tekelecstp 13-08-13 15:36:39 EST  EAGLE 45.1.0-64.71.0
    rtrv-sid
    Command entered at terminal #4.
       PCN16           PCI          PCN               CLLI              PCTYPE

       001-01-01       2-002-2      12345             tekelecstp        ANSI
                     s-2-003-1    s-12341

       CPCI
       3-004-5

       CPCN
       03203

       CPCN16
       003-04-01         003-04-03

;
```

Legend

- **PCA**—ANSI point code of the STP.
- **PCI**—ITU-TSS international point code of the STP.
- **PCN**—ITU-TSS national point code of the STP.
- **PCN16**---16-bit ITU national point code of the STP.
- **PCN24**—24-bit ITU national point code of the STP.
- **CPCA**—ANSI capability point code used by the SS7 protocol to identify a group of functionally related STPs in the signaling network
- **CPCN**—ITU-TSS national capability point code used by the SS7 protocol to identify a group of functionally related STPs in the signaling network.
- **CPCI**—ITU-TSS international capability point code used by the SS7 protocol to identify a group of functionally related STPs in the signaling network.
- **CPCN24**—ITU-TSS 24-bit national capability point code used by the SS7 protocol to identify a group of functionally related STPs in the signaling network.
- **CPCN16---**ITU-TSS 16-bit national capability point code used by the SS7 protocol to identify a group of functionally related STPs in the signaling network.
- **(EIR)**—Equipment Identity Register (EIR) point code.
- **(INP)**—INAP Number Portability (INP) point code.
- **(LNP)**—Local number portability (LNP) point code.
- **(GFLEX)**—G-Flex (GFLEX) point code.
- **(GPORT)**—G-Port (GPORT) point code.
- **(MNP)**—MNP point code.

- **(VFLEX)**—V-Flex (VFLEX) point code.
- **(ATINP)**—ATINP feature (ATINPQ) point code.
- **(AIQ)**—ANSI41 AIQ feature (AIQ) point code.
- **CLLI**—Common language location identifier of the STP
- **PCTYPE**—Type of point code used by the STP. There are two types of point codes that the EAGLE STP can use, ANSI and OTHER. The value ANSI means the EAGLE STP supports point codes that meet the ANSI standard. The value OTHER means that the EAGLE STP supports point codes that do not meet the ANSI standard.

Related Commands

chg-sid, *ent-sid*

rtrv-sip-npp

Retrieve SIP NPP

Use this command to retrieve existing number normalization rules (SIPPHCXT and SIPNNPFX). SIPPHCXT table will be used to provision the phone-context. SIPNNPFX table will be used to configure the prefixes against each phone context and it will also contain number of digits to be deleted (NPDD) and new prefix to be added (NPDS).

Parameters

phctxt (optional)

Phone Context

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A string of 1 to 64 characters. Valid values are (0-9, A-Z), +, *, #, .(period), @ or DFLT (default).

pfx (optional)

Prefix

Range:

zzzzzzzzzzzzzzz

A string of 1 to 15 characters. Valid values are hex digits (0-9, A-F), +, *, -, #.

Example

```
rtrv-sip-npp
rtrv-sip-npp:phctxt=abc.com
rtrv-sip-npp:phctxt=abc.com:pfx=121
rtrv-sip-npp:phctxt=a+bc.com:pfx=91+
```

Dependencies

SIPNP Feature must be enabled before entering any number normalization rules.

SIP Phone Context table should be accessible.

SIP Prefix table should be accessible.

SIP DBMM 2 table should be accessible.

Requested SIP Prefix entry must exist in the SIPNNPFX table.

Requested SIP Phone Context entry must exist in the SIPPHCXT table.

SIP Phone context must be specified when the SIP Prefix is specified.

Notes

If optional parameters are specified, only the entries that match the entered parameters are displayed.

Output

This example displays output when no other parameter is specified:

`rtrv-sip-npp`

```
tekelecstp 12-07-09 19:08:19 EST EAGLE 45.0.0
rtrv-sip-npp
Command entered at terminal #4.
PHONE-CTXT            PFX                NPDD      NPDS
------------          ------------       ----      ---------------
xyz.com
                      121                0         NONE
abc.com
                      12                 0         NONE
mart.com
                      43321              0         NONE

                      233                0         NONE

                      232                0         NONE

                      231                0         NONE

                      11                 0         NONE

                      1                  0         NONE

PHCTXTID table is (3 of 101) 3% full.

;
```

The below two examples display the output when PHCTXT parameter is specified:

`rtrv-sip-npp:phctxt=abc.com`

```
tekelecstp 12-07-09 19:09:08 EST EAGLE 45.0.0
rtrv-sip-npp:phctxt=abc.com
Command entered at terminal #4.
PHONE-CTXT                    PFX                NPDD      NPDS
-------------------------     ---------------    ----      ---------------
```

```
abc.com
                              12                0         NONE


PHCTXTID table is (3 of 101) 3% full.

;
```

`rtrv-sip-npp:phctxt=dflt`

```
tekelecstp 12-07-09 19:09:08 EST EAGLE 45.0.0
rtrv-sip-npp:phctxt=dflt
Command entered at terminal #4.
PHONE-CTXT                    PFX               NPDD      NPDS
-------------------------     ---------------   ----      ---------------
dflt                          15                0         NONE


PHCTXTID table is (4 of 101) 4% full.

;
```

This example displays the output when PFX parameter is specified:

`rtrv-sip-npp:phctxt=user@mart.com:pfx=91+`

```
tekelecstp 12-07-09 19:09:08 EST EAGLE 45.0.0
rtrv-sip-npp:phctxt=user@mart.com:pfx=91+
Command entered at terminal #4.
PHONE-CTXT                    PFX               NPDD      NPDS
-------------------------     ---------------   ----      ---------------
user@mart.com
                              91+               0         NONE

PHCTXTID table is (3 of 101) 3% full.
;
```

Related Commands

dlt-sip-npp, *ent-sip-npp*, *chg-sip-npp*

rtrv-sipopts — Retrieve SIP Options

Use this command to retrieve SIP-configuration options.

Parameters

This command has no input parameters.

Example

`rtrv-sipopts`

Dependencies

SIPNP Feature must be enabled before retrieving SIP configuration-options.

SIPOPTS table should be accessible.

Output

This example shows output with default SIP options.

`rtrv-sipopts`

```
tekelecstp 12-06-25 11:43:52 EST EAGLE 45.0.0
rtrv-sipopts
Command entered at terminal #4.
NPRSPFMT       = RNDN
INCLUDENPDI    = on
INCLUDERN      = on
RNFMT          = RN
NPLKUPFAIL     = 404
RNCONTEXT      = null

;
```

This example shows output with SIP options provisioned.

`rtrv-sipopts`

```
tekelecstp 12-06-25 11:54:02 EST EAGLE 45.0.0
rtrv-sipopts
Command entered at terminal #4.
NPRSPFMT       = RN
INCLUDENPDI    = off
INCLUDERN      = off
RNFMT          = RNASD
NPLKUPFAIL     = 302
RNCONTEXT      = xyz

;
```

Legend

- NPRSPFMT— Defines format of URI in Contact header, when INCLUDERN is OFF.
- INCLUDENPDI— Indicates whether to include "npdi" parameter in the response in cases where the RTDB dip is successfully performed.
- INCLUDERN— Indicates whether to include "rn" parameter in the response in cases where the RTDB dip is successfully performed.
- RNFMT— Defines format of Routing Number in the 302 response.
- NPLKUPFAIL— Indicates whether 302 or 404 response is sent, when DN is not found in RTDB lookup.
- RNCONTEXT— Describes how the "rn" parameter value should be interpreted (global or local).

Related Commands

chg-sipopts

rtrv-slk — Retrieve Signaling Link

Use this command to show the parameters for low-speed signaling links, ATM high-speed signaling links, or both.

Parameters

aname (optional)

Association name. The name of the association assigned to the links to be displayed.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

link (optional)

The signaling link on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have assigned signaling links.

Default:

Display all

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

All signaling links are shown.

type (optional)

Link type. This parameter specifies to display a sub-set of links.

Range:

e1

Display signaling links for E1 cards. Includes low speed E1 and SE-HSL links.

ipgw

Display signaling links configured for IPGW linksets

iplim

Display signaling links configured for IPLIM linksets

ipsg

Display signaling links configured for IPSG linksets

j1

Display signaling links for J1 cards. Includes low speed J1 links.

mtp2

Display low-speed signaling links

saal

Display ATM high-speed signaling links

t1

Display signaling links for T1 cards. Includes low speed T1 and ST-HSL-A links.

Default:

Display all signaling links

Example

```
rtrv-slk:loc=1302:link=a
rtrv-slk:loc=1302:link=b2
rtrv-slk:loc=1303:link=a31
rtrv-slk:aname=asocm2pa
rtrv-slk:loc=1305
rtrv-slk:type=j1
```

Dependencies

If the link parameter is specified, the loc parameter must be specified. The loc parameter can be specified without the link parameter.

The loc parameter or the class parameter, but not both, can be specified in the command.

The slot portion of the specified loc parameter must be 01 - 18, except 09 and 10 cannot be specified (loc=*xyss*, where *x* is the frame, *y* is the shelf, and *ss* is the slot).

Card locations 1113 - 1118 cannot be specified for the loc parameter.

The LIMATM, LIME1ATM, LIME1, LIMT1, and DCM card types are the only valid card types for this command.

The card must be an E5-ATM, E5-ATM-B, E5-E1T1, E5-E1T1-B, E5-ENET, E5-ENET-B, or HC-MIM.

The specified card location must be equipped.

The associated location must be empty or must contain an E5-ATM or E5-ATM-B card before the link=b or link=a1 parameter can be specified. Upon initialization, the card is in **boot phase-0** for up to 30 seconds. During this period, the hardware is not detected, which may result in a lack of support for signaling link B or A1.

If an E5-ATM or E5-ATM-B card is used, then a value of A, B, or A1 must be specified for the link parameter. A 3 Links per E5-ATM Card feature quantity must be enabled before the link=a1 parameter can be specified.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Not every card location represents a signaling link. Be sure to address a signaling link in this command.

The *Installation Guide* provides an illustration of the card locations.

Output

`rtrv-slk`

```
tekelecstp 09-12-17 13:54:32 EST  EAGLE 42.0.0
rtrv-slk
Command entered at terminal #4.

                                    LP         ATM
LOC  LINK LSN        SLC TYPE     SET BPS    TSEL     VCI   VPI  LL
1208 A    e3e4       4   LIMATM   1   1.544M LINE     5     0    0
1218 A    e3e4       5   LIMATM   1   1.544M LINE     5     0    0

LOC  LINK LSN        SLC TYPE     ANAME           SLKTPS
1303 A    m2pa12132  0   IPSG     m2pa1303a       1000
1303 B    m3ua333a   0   IPSG     m3ua1303b       500
1303 A1   m3ua323a   0   IPSG     m3ua1303a       1000
1303 B1   m3ua333i   0   IPSG     m3ua1303b       500
1303 B2   m3ua333n   0   IPSG     m3ua1303b       500
1305 A    ls1305a    0   IPSG     sg1305a         1000
1305 B    ls1305i    0   IPSG     sg1305i         500
1305 A1   ls1305a    1   IPSG     a1              1000
1305 B1   ls1305i    1   IPSG     a1              500
1305 B14  lsitunbb   0   IPSG     a1              1000
1305 B15  lsitunaa   0   IPSG     a1              1000

LOC  LINK LSN        SLC TYPE     IPLIML2
1301 A    e3e4       0   IPLIM    M2PA
1301 B    e3e4       2   IPLIM    M2PA
1311 A    e3e4a      0   IPLIM    M2PA
1313 A    e3e4i      0   IPLIMI   M2PA
```

```
    LOC  LINK LSN        SLC TYPE
    1307 A    ls1307a    0   SS7IPGW
    1315 A    ls1315a    0   SS7IPGW
    1317 A    ls1317i    0   IPGWI

    SLK table is (20 of 1200) 2% full.
;
```

This example includes signaling links assigned to an HC-MIM card used as an E1 card:

`rtrv-slk:loc=1311`

```
    tekelecstp 09-04-08 16:22:25 EST  EAGLE5 41.0.0
                                  L2T               PCR  PCR    E1   E1
    LOC  LINK LSN        SLC TYPE     SET  BPS    ECM   N1   N2     LOC  PORT
TS
    1311 A    e11311a    0   LIME1    1    56000  BASIC ---- ------ 1311 1    1

    1311 B    e11311b    0   LIME1    1    56000  BASIC ---- ------ 1311 1    2

    1311 A1   e11311a    1   LIME1    1    56000  BASIC ---- ------ 1311 1    3

    1311 B1   e11311b    1   LIME1    1    56000  BASIC ---- ------ 1311 2    4

    1311 A2   e11311a    2   LIME1    1    56000  BASIC ---- ------ 1311 2    5

    1311 B2   e11311b    3   LIME1    1    56000  BASIC ---- ------ 1311 3    6

    1311 B3   e11311b    2   LIME1    1    56000  BASIC ---- ------ 1311 3    7

    1311 A4   e11311b    4   LIME1    1    56000  BASIC ---- ------ 1311 4
14
    1311 B6   e11311a    3   LIME1    1    56000  BASIC ---- ------ 1311 5
13
    1311 A11  e11311b    5   LIME1    1    56000  BASIC ---- ------ 1311 5
12
    1311 B17  e11311a    4   LIME1    1    56000  BASIC ---- ------ 1311 6
11
    1311 A29  e11311b    6   LIME1    1    56000  BASIC ---- ------ 1311 7
10
    1311 B31  e11311a    5   LIME1    1    56000  BASIC ---- ------ 1311 8    9

;
```

This example includes signaling links assigned to an HC-MIM card used as a T1 card:

`rtrv-slk:loc=1307`

```
    tekelecstp 09-04-08 16:22:25 EST  EAGLE5 41.0.0
                                  L2T               PCR  PCR    T1   T1
    LOC  LINK LSN        SLC TYPE     SET  BPS    ECM   N1   N2     LOC  PORT
TS
    1307 A    t11307     0   LIMT1    1    56000  BASIC ---- ------ 1307 2
12
    1307 B    t11307     1   LIMT1    1    56000  BASIC ---- ------ 1307 1    1

    1307 B1   t11307     2   LIMT1    1    56000  BASIC ---- ------ 1307 1    2

    1307 A2   t11307     3   LIMT1    1    56000  BASIC ---- ------ 1307 1    3
```

```
    1307 B3   t11307     4   LIMT1    1    56000  BASIC ---- ------ 1307 1    4

    1307 A5   t11307     5   LIMT1    1    56000  BASIC ---- ------ 1307 1    5

    1307 B8   t11307     6   LIMT1    1    56000  BASIC ---- ------ 1307 1    6

    1307 B11  t11307     7   LIMT1    1    56000  BASIC ---- ------ 1307 1    7

    1307 A21  t11307     8   LIMT1    1    56000  BASIC ---- ------ 1307 3
16
    1307 B24  t11307     9   LIMT1    1    56000  BASIC ---- ------ 1307 4
17
    1307 A25  t11307     10  LIMT1    1    56000  BASIC ---- ------ 1307 6
18
    1307 B25  t11307     11  LIMT1    1    56000  BASIC ---- ------ 1307 6
19
    1307 A27  t11307     12  LIMT1    1    56000  BASIC ---- ------ 1307 7
20
    1307 B29  t11307     13  LIMT1    1    56000  BASIC ---- ------ 1307 8
21
    1307 A31  t11307     14  LIMT1    1    56000  BASIC ---- ------ 1307 2
22
    1307 B31  t11307     15  LIMT1    1    56000  BASIC ---- ------ 1307 1
23
;
```

This example shows the signaling link A31 assigned to an HC-MIM card used as a T1 card:

`rtrv-slk:loc=1307:link=a31`

```
    tekelecstp 09-04-08 16:22:25 EST  EAGLE5 41.0.0
                                      L2T                 PCR  PCR    T1   T1
    LOC   LINK LSN       SLC TYPE     SET  BPS    ECM    N1   N2     LOC  PORT
TS
    1307  A31  t11307    14  LIMT1    1    64000  BASIC  ---- ------ 1307 2
22
;
```

This example includes E1 signaling links assigned to HC-MIM cards. The link with BPS value 1984000 is an SE-HSL link.

`rtrv-slk`

```
    tekelecstp 09-04-08 16:22:25 EST  EAGLE5 41.0.0

                                      L2T                 PCR  PCR    E1   E1
    LOC  LINK LSN        SLC TYPE    SET  BPS    ECM    N1   N2     LOC  PORT TS

    1101 B    e1ls       0   LIME1   11   56000  BASIC  ---- ------ 1101 2    2
    1102 A    e2ls       0   LIME1   21   1.984M BASIC  ---- ------ 1102 1    1
    SLK table is (2 of 1200) 0% full.
;
```

This example shows the link information for an E5-ENET card:

`rtrv-slk:loc=1303`

```
    eagle10110 09-04-05 08:37:15 EST  EAGLE 41.0.0
```

```
    LOC  LINK LSN        SLC TYPE     IPLIML2
    1303 A    e5e6       2   IPLIM    M2PA
    1303 B    e5e6       6   IPLIM    M2PA
    1303 A1   e5e6       1   IPLIM    M2PA
    1303 B1   e5e6       9   IPLIM    M2PA
    1303 B2   e5e6       10  IPLIM    M2PA
    1303 A3   e5e6       3   IPLIM    M2PA
    1303 B3   e5e6       11  IPLIM    M2PA
    1303 A4   e5e6       4   IPLIM    M2PA
    1303 B4   e5e6       12  IPLIM    M2PA
    1303 A5   e5e6       5   IPLIM    M2PA
    1303 B5   e5e6       13  IPLIM    M2PA
    1303 B6   e5e6       14  IPLIM    M2PA
    1303 A7   e5e6       7   IPLIM    M2PA
    1303 B7   e5e6       15  IPLIM    M2PA
;
```

This example shows the link information for an LIMATM card:

`rtrv-slk:loc=1304:link=a`

```
    tekelecstp 09-12-14 12:17:00 EST  EAGLE 42.0.0
                                      LP         ATM
    LOC  LINK LSN        SLC TYPE     SET BPS    TSEL     VCI   VPI  LL
    1304 A    ls1        3  LIMATM    1   1.544M LINE     5     0    0
```

This example shows the link information for an IPSG card:

`rtrv-slk:loc=1301`

```
    e1001501 10-04-03 16:20:45 EST  EAGLE 42.0.0

    LOC  LINK LSN        SLC TYPE     ANAME           SLKTPS/        MAXSLKTPS
                                                      RSVDSLKTPS
    1301 A    SCS1       0   IPSG     sg1301a         500            5000
    1301 B    SCS2       0   IPSG     sg1301b         1000           5000
    1301 A1   MGC1       0   ISPG     sg1301a1        700            5000
    1301 B1   MGC2       0   IPSG     sg1301b1        1200           5000

    IPTPS for LOC = 1301 is (3400 of 5000) 68%
;
```

This example shows link information for signaling links configured for a specified association:

`rtrv-slk:aname=m3ua1211a1`

```
    e1001501 10-04-03 16:20:45 EST  EAGLE 42.0.0

    LOC  LINK LSN        SLC TYPE     ANAME           SLKTPS/        MAXSLKTPS
                                                      RSVDSLKTPS
    1211 A1   ls1211b    0   IPSG     m3ua1211a1      600            5000
    1211 A2   ls1211c    0   IPSG     m3ua1211a1      700            5000
;
```

This example shows the link information for an E5-ATM or E5-ATM-B card:

```
rtrv-slk:loc=1305
```

```
    tekelecstp 11-03-14 12:17:00 EST  EAGLE 44.0.0
                                      LP         ATM
    LOC  LINK LSN        SLC TYPE     SET BPS    TSEL     VCI   VPI  LL
    1305 A    ls1        0   LIMATM   1   1.544M LINE     5     0    0
    1305 B    ls1        1   LIMATM   1   1.544M LINE     5     0    0
```

This example shows the link B information for an E5-ATM or E5-ATM-B card:

```
rtrv-slk:loc=1305:link=b
```

```
    tekelecstp 11-03-14 12:17:00 EST  EAGLE 44.0.0
                                      LP         ATM
    LOC  LINK LSN        SLC TYPE     SET BPS    TSEL     VCI   VPI  LL
    1305 B    ls1        1   LIMATM   1   1.544M LINE     5     0    0
```

This example includes T1 signaling links assigned to E5-E1T1 cards. The link with BPS value 1536000 is an ST-HSL-A link.

```
rtrv-slk
```

```
    tekelecstp 09-04-14 16:22:25 EST  EAGLE5 41.0.0

                                      L2T                PCR  PCR    T1   T1
    LOC  LINK LSN        SLC TYPE     SET  BPS    ECM    N1   N2     LOC  PORT TS

    1201 B    t1ls       0   LIMT1    11   56000  BASIC  ---- ------ 1201 2    2
    1202 A    t2ls       0   LIMT1    21   1.536M PCR    608  32224  1202 5    1

    SLK table is (2 of 1200) 0% full.

;
```

This example shows ATM (ANSI & ITU) and E1/T1 (HSL & LSL) links:

```
rtrv-slk
```

```
    tekelecstp 09-12-17 17:09:54 EST  42.0.0
                                      LP         ATM
    LOC  LINK LSN        SLC TYPE     SET BPS    TSEL     VCI   VPI  LL
    1101 A    ls333      0   LIMATM   1   1.544M LINE     5     0    0

                                      LP         ATM                    E1ATM
    LOC  LINK LSN        SLC TYPE     SET BPS    TSEL     VCI   VPI  CRC4 SI SN

    1201 A    lsi333     1   LIME1ATM 21  2.048M EXTERNAL 5     0    ON   3  0
                                      L2T                PCR  PCR    E1   E1

    LOC  LINK LSN        SLC TYPE     SET  BPS    ECM    N1   N2     LOC  PORT
TS
    1204 A    lsi111     0   LIME1    26   1.984M BASIC  ---- ------ 1204 5    1

    1205 A1   lsi222     0   LIME1    11   56000  BASIC  ---- ------ 1205 1    3

                                      L2T                PCR  PCR    T1   T1

    LOC  LINK LSN        SLC TYPE     SET  BPS    ECM    N1   N2     LOC  PORT
```

```
TS
    1104 A    ls111      0   LIMT1    31   1.536M BASIC ---- ------ 1104 5    1

    1105 A1   ls222      0   LIMT1    1    56000  BASIC ---- ------ 1105 1    2


    SLK table is (6 of 1200) 1% full.

;
```

This example shows link A1 information for an E5-ATM or E5-ATM-B card:

`rtrv-slk:loc=1306:link=a1`

```
    tekelecstp 11-03-18 12:17:00 EST  EAGLE 44.0.0
                                      LP         ATM
    LOC  LINK LSN        SLC TYPE     SET BPS    TSEL     VCI   VPI  LL
    1306 A1    ls1        1   LIMATM   1   1.544M LINE     5     0    0
```

This example shows link information for an E5-ENET-B card:

`rtrv-slk:loc=1301`

```
    tekelecstp 11-03-14 16:22:25 EST  EAGLE5 44.0.0
    LOC  LINK LSN         SLC TYPE     ANAME           SLKTPS/        MAXSLKTPS

                                                       RSVDSLKTPS
    1301 A    SCS1        0   IPSG     sg1301a         500            6500
    1301 B    SCS2        0   IPSG     sg1301b         1000           6500
    1301 A1   MGC1        0   ISPG     sg1301a1        700            6500
    1301 B1   MGC2        0   IPSG     sg1301b1        1200           6500

    RSVDSLKTPS for LOC = 1301 is (3400 of 6500) 52%.

    SLK table is (4 of 1200) 1% full.
```

This example shows link information for a J1 link:

`rtrv-slk:type=j1`

```
    tekelecstp 13-12-19 19:02:51 EST  46.0.0-65.3.0
    rtrv-slk:type=j1
    Command entered at terminal #4.

                                      L2T                PCR  PCR    J1
    LOC  LINK LSN        SLC TYPE     SET  BPS    ECM    N1   N2     PORT TS
    1102 A    ls2        11  LIMT1    11   64000  BASIC  ---- ------ 1    11
    1102 A1   ls2        10  LIMT1    11   64000  BASIC  ---- ------ 1    11
    1102 A2   ls2        5   LIMT1    11   64000  BASIC  ---- ------ 1    25

    SLK table is (7 of 1200) 1% full.

;
```

Legend

- **LOC**—Location of the card containing the signaling link

- **LINK**—Signaling link assigned to the card
- **LSN**—Name of the linkset containing the signaling link
- **SLC**—Signaling link code of the signaling link
- **TYPE**—Type of card
- **ANAME**—Association name
- **SLKTPS/RSVDSLKTPS**—SLKTPS guaranteed for an IPSG link
- **MAXSLKTPS**—Maximum SLKTPS allowed for an IPSG link
- **L2TSET**—Number of the level 2 timer set associated with the signaling link
- **BPS**—Transmission rate of the signaling link in bits per second
- **ECM**—Basic of PC for transmission
- **PCRN1**—MSU number
- **PCRN2**—Octet number
- **LPSET**—ATM link parameter set identifier
- **ATMTSEL**—ATM timing selector. Possible values are as follows:
  - **Internal**—Derived from an internal clock source operating at 1.544 MHz ± 200 Hz (ANSI) or 2.048 MHz ± 103 Hz (ITU).
  - **External**—Derived from the High-Speed Master Clock (T1 or E1)
  - **Line**—Derived from its received data stream, if present
- **VCI**—ATM virtual channel identifier
- **VPI**—ATM virtual path identifier
- **LL**—ATM line length
- **E1PORT**—E1 card port that has an E1 interface assigned to it.
- **E1LOC**—Card location of an E1 card with an E1 interface assigned to it
- **T1PORT**—T1 card port that has a T1 interface assigned to it
- **T1LOC**—Card location of a T1 card with a T1 interface assigned to it
- **TS**—Timeslot associated with the signaling link that is serviced by the E1 or T1 interface
- **E1ATMCRC4**—E1 ATM card CRC4 multi-frame structure enable/disable indicator
- **E1ATMSI**—Value of two Spare International bits of NFAS data for the E1 ATM card
- **E1ATMSN**—Value of five Spare National bits of NFAS data for the E1 ATM card
- **IPLIML2**—IPLIM Level 2 stack (M2PA)
- **J1PORT**--- J1 card port that has a J1 interface assigned to it.

Related Commands

act-slk, *blk-slk*, *dact-slk*, *dlt-slk*, *ent-slk*, *inh-slk*, *rept-stat-slk*, *tst-slk*, *ublk-slk*, *unhb-slk*

rtrv-slt

Retrieve Signaling Link Test Message

Use this command to display the fields of an SLTM (signaling link test message) record in the SLTM table.

Parameters

enabled (optional)

Displays the SLTM records that are either enabled or disabled (*off*).

Range:

on

display enabled records

off

display disabled records

Default:

All SLTM records with the specified value for the enabled parameter are shown.

sltset (optional)

The signaling link test message (SLTM) record number in the SLTM table.

Range:

1 - 20

Default:

Display all

Example

```
rtrv-slt
rtrv-slt:sltset=1
rtrv-slt:enabled=off
```

Dependencies

None

Notes

None

Output

`rtrv-slt`

```
rlghncxa03w 03-03-07 00:21:24 EST  EAGLE 31.3.0
SLTM PARAMETERS
SLTSET  T1   T2   MODE    ENABLED PATTERN
1       9.0  60.0 SPECIAL ON      AA2233445566778899AABBCCDDEEFF
2       12.0 30.0 SPECIAL OFF     F01234BCDE
3       4.0  50.0 REGULAR ON      CC2233445566778899AABBCCDDEEFF
4       6.0  90.0 SPECIAL OFF     BB23446789BCABEFG
5       6.0  90.0 SPECIAL OFF     BB23446789BCABEFG
6       6.0  90.0 SPECIAL OFF     BB23446789BCABEFG
7       6.0  90.0 SPECIAL OFF     BB23446789BCABEFG
8       6.0  90.0 SPECIAL OFF     BB23446789BCABEFG
```

```
    9       6.0  90.0 REGULAR OFF     BB23446789BCABEFG
    10      6.0  90.0 REGULAR OFF     BB23446789BCABEFG
    11      6.0  90.0 REGULAR OFF     BB23446789BCABEFG
    12      4.0  50.0 SPECIAL ON      FFEEDDCCBBAA998877665544332211
    13      4.0  50.0 SPECIAL ON      EE22334455
    14      6.0  90.0 SPECIAL ON      AABBCCDD
    15      6.0  90.0 REGULAR ON      AABBCCDD
    16      6.0  90.0 REGULAR ON      AABBCCDD
    17      6.0  90.0 REGULAR ON      AABBCCDD
    18      6.0  90.0 SPECIAL ON      AABBCCDD
    19      6.0  90.0 SPECIAL ON      AABBCCDD
    20      6.0  90.0 SPECIAL ON      AABBCCDD
;
```

`rtrv-slt:sltset=1`

```
    rlghncxa03w 03-03-07 00:21:24 EST  EAGLE 31.3.0
    SLTM PARAMETERS
    SLTSET  T1   T2   MODE    ENABLED PATTERN
    1       9.0  60.0 SPECIAL ON      112233445566778899AABBCCDDEEFF
;
```

`rtrv-slt:enabled=off`

```
    rlghncxa03w 03-03-07 00:21:24 EST  EAGLE 31.3.0
    SLTM PARAMETERS
    SLTSET  T1   T2   MODE    ENABLED PATTERN
    2       12.0 30.0 SPECIAL OFF     F01234BCDE
    4       6.0  90.0 SPECIAL OFF     0123446789BCABEFG
    5       6.0  90.0 SPECIAL OFF     0123446789BCABEFG
    6       6.0  90.0 SPECIAL OFF     0123446789BCABEFG
    7       6.0  90.0 SPECIAL OFF     0123446789BCABEFG
    8       6.0  90.0 SPECIAL OFF     0123446789BCABEFG
    9       6.0  90.0 REGULAR OFF     0123446789BCABEFG
    10      6.0  90.0 REGULAR OFF     0123446789BCABEFG
    11      6.0  90.0 REGULAR OFF     0123446789BCABEFG
;
```

Legend

- **SLTSET**—Signaling link test message record number in the SLTM table
- **T1**—T1 timer value for the SLTM record. The amount of time, in seconds, to wait before running the SLTM test again after an SLTM test fails.
- **T2**—T2 timer value for the SLTM record. The amount of time, in seconds, to wait between running SLTM tests for a normally functioning signaling link.
- **MODE**—SLTM mode to be used when sending test messages
- **ENABLED**—Indicates whether the signaling link test message is enabled.
- **PATTERN**—Test pattern to be sent with a signaling link test message

Related Commands

chg-l3t, *chg-slt*, *ent-ls*, *rtrv-ls*

rtrv-snmp-host Retrieve SNMP Host

Use this command to show the configuration parameters of the provisioned SNMP hosts.

Parameters

This command has no parameters.

Example

`rtrv-snmp-host`

Dependencies

This command cannot be entered while in upgrade mode.

Notes

None

Output

`rtrv-snmp-host`

```
tekelecstp 12-06-13 14:37:55 EST 45.0.0-64.66.0
rtrv-snmp-host
Command entered at terminal #4.
IPADDR     192.168.54.100
 HOST       snmphost1
 CMDPORT    161
 TRAPPORT   162
 HB         60
 TRAPCOMM   public
SNMP HOST table is (1 of 2) 50% full
;
```

Legend

- IPADDR - IP address of the SNMP Manager device
- HOST - Host name of the Manager device
- CMDPORT - SNMP command interface port ID
- TRAPPORT - SNMP trap interface port ID
- HB - Heartbeat notification interval
- TRAPCOMM - Trap community string

Related Commands

ent-snmp-host, *chg-snmp-host*, *dlt-snmp-host*

rtrv-snmpopts

Retrieve SNMP Options

Use this command to display the system-wide SNMP Options

Parameters

This command has no parameters.

Example

`rtrv-snmpopts`

Dependencies

This command cannot be entered while in upgrade mode.

Notes

None.

Output

`rtrv-snmpopts`

```
tekelecstp 13-06-13 15:27:39 EST 45.0.0-64.66.0
rtrv-snmpopts
Command entered at terminal #4.
SNMP      OPTIONS
--------  ---------------------------------------------
SNMPUIM   on
GETCOMM   my.getcomm.str
SETCOMM   setcomm-pwd
;
```

Legend

- SNMPUIM - UIM trap enable/disable
- GETCOMM - Get community string
- SETCOMM - Trap community string

Related Commands

chg-snmpopts

rtrv-spc — Retrieve Secondary Point Code

Use this command to retrieve an SPC (secondary point code) from the active database.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

spc (optional)

ANSI point code in the form of *network indicator-network cluster-network cluster member (ni-nc-ncm)*.

Synonym:

spca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

spc/spca/spci/spcn/spcn24/spcn16 (optional)

The secondary point code.

spci (optional)

ITU international secondary point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

spcn (optional)

ITU national point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

spcn24 (optional)

24-bit ITU national point code with subfields *main signaling area-sub signaling area-signaling point (msa-ssa-sp)*.

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

spcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

Example

```
rtrv-spc
```

```
rtrv-spc:spc=5-3-3
rtrv-spc:spcn24=98-98-98
rtrv-spc:spcn=s-00345
rtrv-spc:spcn16:121-10-30
```

Dependencies

The MPC feature must be turned on before this command can be entered.

The value of the spc parameter must be a full point code.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-).

Output

This example shows output for all provisioned secondary point codes. SPC-N is a flexible point code format as defined with the `chg-stpopts:npcfmti` parameter.

`rtrv-spc`

```
    rlghncxa03w 03-03-18 08:50:12 EST  EAGLE 31.0.0
    SPC (Secondary Point Codes)

    SPCA
         001-010-010
         002-010-010
         003-010-010

    SPC-I
           01-253-05
           02-254-06
           03-255-07

    SPC-N
          120-01-0-1
          100-02-1-0

    SPC-N24
         099-099-099

    Secondary Point Code table is (9 of 40) 25% full

;
```

This example shows output for all provisioned secondary point codes. Spare point codes are included.

`rtrv-spc`

```
    rlghncxa03w 05-01-18 08:50:12 EST  EAGLE 31.12.0
```

```
    SPC (Secondary Point Codes)

    SPCA
         001-001-001
         001-123-003

    SPC-I
                1-001-1
              s-1-001-1
                2-003-4
              s-4-003-4

    SPC-N
                00234
              s-00345

    SPC-N24
         011-011-011

    Secondary Point Code table is (9 of 40) 22% full.

;
```

This example shows the only provisioned secondary point code:

`rtrv-spc`

```
    rlghncxa03w 05-03-18 08:50:12 EST  EAGLE 31.0.0
    SPC (Secondary Point Codes)

    SPCA
    none

    SPC-I
    none

    SPC-N
    none

    SPC-N24
        099-099-099

    Secondary Point Code table is (1 of 40) 2% full.

;
```

This example shows output for a specific ANSI secondary point code:

`rtrv-spc:spc=5-3-3`

```
    rlghncxa03w 03-03-18 08:50:12 EST  EAGLE 31.3.0
    SPC (Secondary Point Codes)
         005-003-003

    Secondary Point Code table is (8 of 40) 25% full.

;
```

This example shows output when the specified secondary point code is not provisioned:

```
rtrv-spc:spc=5-3-1
```

```
    rlghncxa03w 03-03-18 08:50:12 EST  EAGLE 31.3.0
    SPC (Secondary Point Codes)

    Secondary Point Code specified is not provisioned

    Secondary Point Code table is (3 of 40) 8% full.

;
```

This example shows information for a specific ITU-N secondary spare point code:

```
rtrv-spc:spcn=s-00345
```

```
    rlghncxa03w 03-03-18 08:50:12 EST  EAGLE 31.12.0
    SPC (Secondary Point Codes)
             s-00345

    Secondary Point Code table is (2 of 40) 5% full.

;
```

This example shows output for a specific 24-bit ITU-N secondary point code:

```
rtrv-spc:spcn24=98-98-98
```

```
    rlghncxa03w 03-03-18 08:50:12 EST  EAGLE 31.0.0
    SPC (Secondary Point Codes)
         098-098-098

    Secondary Point Code table is (2 of 40) 5% full.

;
```

This example shows output for a specific 16-bit ITU-N point code:

```
rtrv-spc:spcn16=121-10-15

    rlghncxa03w 03-03-18 08:50:12 EST  EAGLE 31.0.0
    SPC (Secondary Point Codes)
         098-098-098

    Secondary Point Code table is (2 of 40) 5% full.

;
```

Legend

- **SPC**—Secondary point code
- **SPCA**—ANSI secondary point code
- **SPC-I**—ITU international secondary point code
- **SPC-N**—ITU national secondary point code
- **SPC-N24**—24-bit ITU national secondary point code

- **SPC-N16--**16-bit ITU national secondary point code

Related Commands

dlt-spc, *ent-spc*

rtrv-srvsel Retrieve Service Selector

Use this command to display a list of administered service selector combinations. The list can be filtered using various parameter combinations.

Note: The `rtrv-srvsel` operation may be lengthy because the service selector table can contain over 1,000 entries.

Parameters

Note: Definitions for the feature options specified by the on and off parameters are located in the Notes section.

dfltact (optional)

The default action ID associated with the service selector entry.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

This parameter can take one of the following values:

- a valid GTT Action ID of type **disc/udts/tcaperr** that must already exist in the GTT Action table
- *fallback* —Fallback to the Relay data. The Relayed MSU is routed as per routing data provided by the service.
- *falltogtt* —Fallback to GTT. If the gttselid parameter has a value other than *none*, and the GTT selector search fails, then the GTT selector search is performed again using gttselid=none.

force (optional)

The force=yes parameter must be specified when a num parameter value greater than 50 is specified to display more than 50 entries.

Range:

yes

no

Default:

no

gti/gtia/gtii/gtin/gtin24 (optional)

Global title indicator. For all service selector commands, the domain is defined as GTI and GTIA (ANSI), GTII (ITU international), GTIN (ITU national) and GTIN24 (24-bit ITU national). For the service selector commands, GTI and GTIA are equivalent.

Range:

Supported value for ANSI: gti/gtia=2

Supported values for ITU: gtii/gtin/gtin24=2, 4

Default:

Display all

nai (optional)

Nature of Address indicator.

Range:

sub

rsvd

natl

intl

Default:

Display all

naiv (optional)

Nature of Address indicator value.

Range:

0 - 127

Default:

Display all

np (optional)

Numbering Plan.

Range:

e164

generic

x121

f69

e210

e212

e214

private

Default:

Display all

npv (optional)

Numbering Plan value.

Range:

0 - 15

Default:

Display all

num (optional)

Number of entries to display. The force=yes parameter is required when this parameter value is specified greater than 50 entries.

Range:

1 - 20992

Default:

50

off (optional)

Disables or turns off the specified feature options. A comma-separated list of feature options that are requested to be turned off. Up to 10 feature options can be specified in the list.

Range:

gttrqd

force

on (optional)

Enables or turns on the specified feature options. A comma-separated list of feature options that are requested to be turned on. Up to 10 feature options can be specified in the list.

Range:

gttrqd

force

serv (optional)

The Service Module card service.

Range:

eir

Equipment Identity Register

gflex

GSM flexible numbering

gport

GSM number portability

inpq

INP query

inpmr

INP message relay

smsmr

Prepaid SMS Intercept Phase 1, Portability Check for Mobile Originated SMS, MO SMS GSM NP, MO SMS IS41 NP, MO SMS IS41-to-GSM Migration, MO SMS ASD, MO SMS GRN, MO SMS B-Party routing.

idps

IDP Screening for Prepaid

idpr

Prepaid IDP Query Relay

mnp

mobile number portability

vflex

Voice Mail Router

atinp

ATI Number Portability Query (ATINP)

ttr

Triggerless TCAP Relay

aiq

ANSI41 Analyzed Information Query

Default:

Display all

snai (optional)

Service nature of address indicator.

Range:

sub

Subscriber number

natl

National significant number

intl

International number

rnidn

Routing number prefix and international dialed/directory number

rnndn

Routing number prefix and national dialed/directory number

rnsdn

Routing number prefix and subscriber dialed/directory number

ccrndn

Country code, routing number, and national directory number

Default:

Display all

snp (optional)

Service numbering plan.

Range:

e164

E.164 numbering plan

e212

E.212 numbering plan

e214

E.214 numbering plan

Default:

Display all

ssn (optional)

Subsystem number.

Range:

*0 - 255, **

tt (optional)

Translation type.

Range:

0 - 255

Default:

Display all

Example

```
rtrv-srvsel
rtrv-srvsel:gtii=2
rtrv-srvsel:tt=0:np=e164
rtrv-srvsel:serv=vflex
```

```
rtrv-srvsel:serv=aiq
rtrv-srvsel:on=gttrqd
```

Dependencies

The INP or AINPQ feature must be turned on before the serv=inpmr or serv=inpq parameter can be specified.

The G-Flex feature must be turned on before the serv=gflex parameter can be specified.

The G-Port feature must be turned on before the serv=gport parameter can be specified.

The np and npv parameters cannot be specified together in the command.

The nai and naiv parameters cannot be specified together in the command.

The values 1 and 3 are not valid for the gti/gtia/gtii/gtin/gtin24 parameters.

The value 4 is not valid for the gti/gtia parameters.

If the gti/gtia/gtii/gtin/gtin24=2 parameter is specified, then no np(v) and nai(v) parameter combinations can be specified.

If the serv parameter has a value of *inpmr, inpq, gport*, or *eir*, then the gtia and gti parameters cannot be specified.

If the serv=inpmr parameter is specified, then the value of the snp parameter must be *e164* if specified.

If the value specified for the snai parameter is *rnidn*, *rnndn*, or *rnsdn*, then the value of the serv parameter must be *inpmr*, *gport*, or *smsmr* if it is specified.

If the serv=inpq parameter is specified, then the gtii parameter cannot be specified.

If the value specified for the snai parameter is *rnidn*, *rnndn*, or *rnsdn*, then the serv=gflex parameter cannot be specified.

If a value of *aiq, eir, inpq*, or *vflex* is specified for the serv parameter then the snp and snai parameters cannot be specified.

If the snai=ccrndn parameter is specified, then the value specified for the serv parameter must be *gport* or *smsmr*.

If the value specified for the num parameter is greater than 50, then the force=yes parameter must be specified.

The Prepaid IDP Query Relay feature must be turned on or the IAR Base feature must be enabled before the serv=ttr parameter can be specified.

If a value of *idpr* or *ttr* is specified for the serv parameter, then the only valid parameters are tt, ssn, and gti/gtia/gtii/gtin, and the only valid optional parameters are np and nai.

The IDP Screening for Prepaid feature must be turned on before the serv=idps parameter can be specified.

The V-flex feature must be turned on before the serv=vflex parameter can be specified.

The Portability Check for Mobile Originated SMS or the PPSMS feature must be turned on, or the MO SMS ASD, MO SMS B-Party Routing, MO SMS GRN, MO SMS IS41-to-GSM Migration, MO-based GSM SMS NP, or MO-based IS41 SMS NP feature must be enabled before the serv=smsmr parameter can be specified.

The ATINP feature must be enabled before the serv=atinp parameter can be specified.

If a value of *aiq*, *atinp*, or *eir* is specified for the serv parameter, then the gtin24 parameter cannot be specified.

The Prepaid IDP Query Relay feature must be turned on before the serv=idpr parameter can be specified.

The ANSI41 AIQ feature must be enabled before the serv=aiq parameter can be specified.

If a DSM4G card is active in the system, then the on=gttrqd parameter cannot be specified.

If a GTT Action ID is specified as the value for the dfltact parameter, then the Action ID must already exist in the GTT Action table.

The same values cannot be specified for the on and off parameters.

The dfltact=none parameter cannot be specified.

The EGTT feature must be turned on before the dfltact parameter can be specified.

The GSM DBMM table must be accessible.

Notes

on/off options

- *gttrqd* —GTT required. Specifies whether GTT is required after service execution is complete and the message is relayed by the service. This option is supported for the IDPR, MNP, TTR, GPORT, SMSMR, GFLEX, and INPMR services.
- *force* —Must be specified to display more than 50 entries

Output

This example shows all service selectors containing the specified GTI value:

```
rtrv-srvsel:gtii=2
```

```
    rlghncxa03w 10-03-29 16:40:40 EST  EAGLE 42.0.0
    GTII  TT   NP       NAI   SSN   SNP   SNAI  SERV   GTTRQD
    2     0    --       ---   7     e164  intl  gflex  on
    DFLTACT=act123456 GTTSELID=20
    2     18   --       ---   7     e164  rnidn inpmr  off
    DFLTACT=act1      GTTSELID=2
;
```

This example includes a GTIN24 entry:

```
rtrv-srvsel
```

```
    rlghncxa03w 10-03-09 16:40:40 EST  EAGLE 42.0.0
    GTIN    TT   NP       NAI   SSN  SNP   SNAI   SERV   GTTRQD
    4       4    e164     intl  8    e164  intl   gport  off
    DFLTACT=fallback  GTTSELID=none

    GTIN24  TT   NP       NAI   SSN  SNP   SNAI   SERV   GTTRQD
    4       4    e164     intl  2    e164  intl   gport  off
```

```
    DFLTACT=act123456 GTTSELID=2

    SRV SELECTOR table is (2 of 20992)   1 % full
;
```

`rtrv-srvsel:ssn=3`

```
    tekelecstp 10-03-08 15:43:22 EST  EAGLE5 42.0.0
    GTII  TT   NP       NAI   SSN  SNP   SNAI   SERV   GTTRQD
    4     1    e214     intl  3    ---   ---    eir    ---
    DFLTACT=--------- GTTSELID=-----

    SRV SELECTOR table is (4 of 20992)   1 % full
;
```

This example shows all provisioned service selectors:

`rtrv-srvsel`

```
    tekelecstp 10-03-16 17:09:08 EST  EAGLE 42.0.0
    GTIA  TT   NP       NAI   SSN  SNP   SNAI  SERV    GTTRQD
    2     9    --       ---   *    e212  intl  gflex   off
    DFLTACT=act123    GTTSELID=9
    2     10   --       ---   3    e164  intl  gflex   off
    DFLTACT=act123456 GTTSELID=75
    2     253  --       ---   4    e214  natl  gflex   off
    DFLTACT=actt1     GTTSELID=80

    GTII  TT   NP       NAI   SSN  SNP   SNAI  SERV    GTTRQD
    2     0    --       ---   2    e164  intl  gflex   off
    DFLTACT=act12345  GTTSELID=56
    2     18   --       ---   *    e164  rnsdn inpmr   on
    DFLTACT=act123    GTTSELID=80
    4     0    e214     sub   *    e214  sub   gflex   off
    DFLTACT=act123456 GTTSELID=98

    GTIN  TT   NP       NAI   SSN  SNP   SNAI  SERV    GTTRQD
    2     2    --       ---   3    e164  intl  gflex   off
    DFLTACT=act1234   GTTSELID=8
    2     9    --       --    *    ---   ---   inpq    ---
    DFLTACT=--------- GTTSELID=-----
    4     2    e164     natl  *    e164  rnndn inpmr   on
    DFLTACT=act1234   GTTSELID=432
    4     9    ---      ---   4    ---   ---   inpq    ---
    DFLTACT=--------- GTTSELID=-----
;
```

`rtrv-srvsel:serv=vflex`

```
    tekelecstp 10-03-08 16:35:22 EST  EAGLE 42.0.0
    GTII  TT   NP       NAI   SSN  SNP   SNAI   SERV   GTTRQD
    4     1    e164     intl  3    ---   ---    vflex  ---
    DFLTACT=--------- GTTSELID=-----
    4     2    e164     intl  *    ---   ---    vflex  ---
    DFLTACT=--------- GTTSELID=-----

    GTIN  TT   NP       NAI   SSN  SNP   SNAI   SERV   GTTRQD
    4     4    e164     natl  4    ---   ---    vflex  ---
    DFLTACT=--------- GTTSELID=-----
```

```
    SRV SELECTOR table is (3 of 20992)   1 % full
;
```

This example shows the output when no service selectors are provisioned:

`rtrv-srvsel`

```
    tekelecstp 10-03-04 13:28:13 EST  EAGLE 42.0.0

    GTIA  TT   NP       NAI   SSN  SNP  SNAI  SERV   GTTRQD
    No SRV Selector found in range
;
```

`rtrv-srvsel:serv=aiq`

```
    tekelecstp 09-12-03 15:43:22 EST  EAGLE5 42.0.0
    GTII  TT   NP       NAI   SSN   SNP   SNAI   SERV
    4     0    e214     intl  10    ---   ---    aiq

    SRV SELECTOR table is (4 of 20992)   1 % full
;
```

This example shows all service selectors for the GPORT service:

`rtrv-srvsel:serv=gport`

```
    tekelecstp 10-03-04 13:28:13 EST  EAGLE 42.0.0

    GTII    TT   NP       NAI   SSN  SNP   SNAI   SERV   GTTRQD
    2       4    --       ----  12   e164  sub    gport  on
    DFLTACT=act123456 GTTSELID=20
    2       6    --       ----  15   e164  sub    gport  on
    DFLTACT=fallback  GTTSELID=246
;
```

This example shows the output when the EPAP Data Split feature is turned on:

`rtrv-srvsel`

```
    tekelecstp 12-01-12 15:24:04 EST  EAGLE5 44.0.0

    GTII    TT   NP       NAI   SSN  SNP   SNAI   SERV   RQDTBLNOP  GTTRQD
    4       1    e164     sub   2    e164  sub    gflex  udts       off
    DFLTACT=fallback  GTTSELID=none
    4       2    e164     sub   3    e164  sub    gflex  gtt        off
    DFLTACT=fallback  GTTSELID=none
    4       2    e164     sub   4    e164  sub    gflex  disc       off
    DFLTACT=fallback  GTTSELID=none
    4       2    e164     sub   5    e164  sub    gflex  udts       off
    DFLTACT=fallback  GTTSELID=none
    4       5    e164     sub   2    e164  sub    mnp    udts       off
    DFLTACT=fallback  GTTSELID=none
    4       5    e164     sub   3    e164  sub    mnp    disc       off
    DFLTACT=fallback  GTTSELID=none
    4       5    e164     sub   4    e164  sub    mnp    gtt        off
    DFLTACT=fallback  GTTSELID=none
    4       5    e164     sub   5    e164  sub    mnp    udts       off
```

```
    DFLTACT=fallback  GTTSELID=none
    4       6    e164     sub   2    e164  sub    smsmr  udts       off
    DFLTACT=fallback  GTTSELID=none
    4       6    e164     sub   3    e164  sub    smsmr  disc       off
    DFLTACT=fallback  GTTSELID=none
    4       6    e164     sub   4    e164  sub    smsmr  gtt        off
    DFLTACT=fallback  GTTSELID=none
    4       6    e164     sub   5    e164  sub    smsmr  udts       off
    DFLTACT=fallback  GTTSELID=none
    4       7    e164     sub   2    ----  -----  eir    udts       ---
    DFLTACT=--------- GTTSELID=-----
    4       7    e164     sub   3    ----  -----  eir    disc       ---
    DFLTACT=--------- GTTSELID=-----
    4       7    e164     sub   5    ----  -----  eir    udts       ---
    DFLTACT=--------- GTTSELID=-----
    4       9    e164     sub   2    ----  -----  idps   udts       ---
    DFLTACT=--------- GTTSELID=-----
    4       9    e164     sub   3    ----  -----  idps   disc       ---
    DFLTACT=--------- GTTSELID=-----
    4       9    e164     sub   4    ----  -----  idps   gtt        ---
    DFLTACT=--------- GTTSELID=-----
    4       9    e164     sub   5    ----  -----  idps   udts       ---
    DFLTACT=--------- GTTSELID=-----
    4       10   e164     sub   2    e164  sub    mnp    udts       off
    DFLTACT=fallback  GTTSELID=none
    4       10   e164     sub   3    e164  sub    mnp    disc       off
    DFLTACT=fallback  GTTSELID=none
    4       10   e164     sub   4    e164  sub    mnp    gtt        off
    DFLTACT=fallback  GTTSELID=none
    4       10   e164     sub   5    e164  sub    mnp    udts       off
    DFLTACT=fallback  GTTSELID=none
    4       11   e164     sub   2    e164  sub    tati   gtt        ---
    DFLTACT=--------- GTTSELID=-----
    4       11   e164     sub   3    e164  sub    tati   disc       ---
    DFLTACT=--------- GTTSELID=-----
    4       11   e164     sub   4    e164  sub    tati   gtt        ---
    DFLTACT=--------- GTTSELID=-----
    4       11   e164     sub   5    e164  sub    tati   udts       ---
    DFLTACT=--------- GTTSELID=-----

    GTIN    TT   NP       NAI   SSN  SNP   SNAI   SERV   RQDTBLNOP  GTTRQD
    2       3    --       ----  2    ----  -----  inpq   udts       ---
    DFLTACT=--------- GTTSELID=-----
    2       4    --       ----  2    e164  sub    inpmr  udts       off
    DFLTACT=fallback  GTTSELID=none
    2       4    --       ----  3    ----  -----  inpq   disc       ---
    DFLTACT=--------- GTTSELID=-----
    2       4    --       ----  4    e164  sub    inpmr  gtt        off
    DFLTACT=fallback  GTTSELID=none
    2       4    --       ----  5    ----  -----  inpq   udts       ---
    DFLTACT=--------- GTTSELID=-----

    SRV SELECTOR table is (32 of 20992)   1 % full
;
```

Legend

- **GTI/GTIA/GTII/GTIN/GTIN24**—Global title indicator
- **TT**—Translation type
- **NP**—Numbering plan

- **NAI**—Nature of address indicator
- **NPV**—Numbering plan value.
- **NAIV**—Nature of address indicator value
- **SSN**—Subsystem number
- **SNP**—Service numbering plan
- **SNAI**—Service nature of address indicator
- **SERV**—Service Module card service
- **GTTRQD**—GTT Required Indicator
- **GTTSELID**—Selector ID
- **DFLTACT**—Default action ID
- **RQDTBLNOP**—Required table not present

Related Commands

chg-srvsel, *dlt-srvsel*, *ent-srvsel*

rtrv-ss-appl

Retrieve Subsystem Application

Use this command to retrieve information for all provisioned subsystem applications from the database. The command displays the application type, subsystem number, and application status.

Parameters

This command has no parameters.

Example

`rtrv-ss-appl`

Dependencies

The ANSI41 AIQ, EIR, LNP, or V-Flex feature must be enabled, or the AINPQ or INP feature must be turned on before this command can be entered.

The LNP feature must be turned on before the WNP or PLNP feature can be turned on and before LNP information or measurements can be reported on.

Notes

None

Output

`rtrv-ss-appl`

```
    tekelecstp 09-12-03 14:42:38 EST  EAGLE 42.0.0
```

```
    APPL   SSN  STAT
    AIQ    12   online
    ATINPQ 10   online

    SS-APPL TABLE IS 33% FULL (2 OF 6)
;
```

This example shows the output when the EPAP Data Split feature is turned on:

`rtrv-ss-appl`

```
    tekelecstp 12-01-12 15:08:04 EST  EAGLE 45.0.0

    APPL     SSN  STAT      RQDTBLNOP
    INP      11   offline   disc
    AIQ      12   online    udts

 SS-APPL table is (2 of 6) 33% full.

;
```

Legend

- **APPL**—Application type
- **SSN**—Subsystem number
- **STAT**—Status:online or offline
- **RQDTBLNOP**—Required table not present

Related Commands

chg-ss-appl, *dlt-ss-appl*, *ent-ss-appl*

rtrv-ss7opts

Retrieve SS7 Options

This command retrieves the current values of the SS7 option indicators maintained in the STP options table. SS7 options can modify normal handling of SS7 traffic.

Parameters

This command has no parameters.

Example

`rtrv-ss7opts`

Dependencies

None

Notes

None

Output

`rtrv-ss7opts`

```
    tekelecstp 09-05-10 03:59:31 EST  EAGLE 41.0.0

    SS7 OPTIONS
    -----------------------
    LSRESTRICT   off
    DISCARDTFCI  off
    DISCARDTFCN  off
    SLSREPLACE   yes
    SLANCPORGOPC off
    DDBAUDTIMER   10
    SLANLSN      off
    MSGPRI2ITUI    3
    MSGPRI2ITUN    0
;
```

Related Commands

chg-ss7opts

rtrv-stp

Retrieve STP Information

Use this command to retrieve information related to the STP at which the command is entered.

The command can retrieve frame and card power consumption and threshold values (in Amps or milliamps and Watts) for all provisioned frames or for a specified frame. (See the `ent-frm-pwr` command.)

The command can retrieve hardware configuration information (card location. board part number, revision, serial number, card type, card memory, APPL, and GPL version):

- For all provisioned STP frames and shelves
- For a specific provisioned frame
- For a specific provisioned shelf
- For a specific equipped card
- For all cards of the specified card type
- For all cards that the contain the specified Board Part Number
- For all cards that are running the specified GPL or GPL version.

Parameters

Note: As of Release 43.0, the BLBEPM, BLBIOS, BLBSMG, BLCPLD, BLDIAG6, BLROM1, BLVXW6, IMTPCI, and PLDPMC1 GPLs are replaced with the BLIXP GPL. The replaced GPLs are used only during upgrade to Release 43 and hardware replacement.

display (optional)

Display the power consumption and power threshold value for all provisioned frames or for one specific provisioned frame.

This parameter must be specified when the frm parameter is specified, to display the power information for one frame.

Range:

power

Display frame power information in the command output.

frm (optional)

Frame ID. Displays information for the specified provisioned frame.

Range:

cf00

Control Frame identifier

ef00

Identifier for the first Extension Frame

ef01

Identifier for the second Extension Frame

ef02

Identifier for the third Extension Frame

ef03

Identifier for the fourth Extension Frame

ef04

Identifier for the fifth Extension Frame

gpl (optional)

Generic program load. Displays hardware configuration information for all card locations equipped with cards that are running the specified GPL.

Note: This parameter must be specified with the ver parameter to display information for a specific version of the GPL.

Range:

xyyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters. Valid GPLs are:

atmhc—Used by E5-ATM and E5-ATM-B cards to allow the card to support up to 3 signaling links

blbepm—Flash GPL containing the BIOS ROM image on E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards

blbios—Flash GPL containing the BIOS ROM image on HC-MIM cards that are used for E1 or T1 signaling links

blbsmg—Flash GPL containing the BIOS ROM image on E5-SM4G and E5-SM8G-B cards

blcpld—Flash GPL containing the bit files for the CPLD on HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards that are used for E1 or T1 signaling links

bldiag6—Flash GPL containing the diagnostic code on E5-E1T1, E5-E1T1-B, HC-MIM, E5-ENET, and E5-ENET-B cards

blixp—Flash GPL containing a tar image with all code required on E5-E1T1, HC-MIM, E5-ATM, E5-IPSM, E5-TSM, E5-ENET, and E5-SM4G cards

blmcap—Flash GPL containing a tar image with all code required on E5-MCAP, E5-E1T1-B, E5-MCPM-B, E5-ATM-B, E5-ENET-B, and E5-SM8G-B cards

blrom1—Flash GPL containing the bootloader code for VxWorks operating system on HC-MIM cards

blvxw6—Flash GPL containing the VxWorks operating system on HC-MIM, E5-ATM/E5-ATM-B, E5-E1T1/E5-E1T1-B, E5-ENET/E5-ENET-B, E5-IPSM, E5-MCPM-B, E5-SM4G/E5-SM8G-B, and E5-TSM cards

cdu—Used in the card manufacturing process

deirhc— Used by E5-SM8G-B cards to support the S13/S13' EIR feature

erthc—Used by E5-ENET and E5-ENET-B cards when the card acts as an STC card (E5-STC card) for EAGLE 5 Integrated Monitoring Support functions

glshc—Used by E5-TSM cards to download gateway screening to LIM and SCCP cards

hipr2—Communication software used on the High Speed IMT Packet Router (HIPR2) card

imtpci—Communication software that operates the IMT bus on HC-MIM, E5-E1T1, E5-E1T1-B, E5-ENET, and E5-ENET-B cards

ipghc—Used by E5-ENET and E5-ENET-B cards to support point-to-multipoint IP connectivity for ANSI and ITU point codes

iplhc—Used by E5-ENET and E5-ENET-B cards for point-to-point IP connectivity for ANSI and ITU point codes

ipsg—Used by E5-ENET and E5-ENET-B cards to support the combined functionality of IPLIMx M2PA and IPGWx M3UA

ipshc—Used by E5-IPSM and E5-ENET-B cards to support the IPS application

mcphc—Used by E5-MCPM-B cards for the Measurements Platform feature

oamhc—Used by E5-MCAP cards for enhanced OAM functions

pldpmc1—Flash GPL used on HC-MIM, and E5-E1T1 cards for E1 and T1 signaling links

sccphc—Used by E5-SM4G and E5-SM8G-B cards to support EPAP-based features and the LNP ELAP Configuration feature. If no EPAP-based or LNP ELAP Configuration feature is turned on, and an E5-SM4G or E5-SM8G-B card is present, then the GPL processes normal GTT traffic.

siphc— Used by E5-SM8G-B Cards to support the SIP application

slanhc—Used by E5-ENET and E5-ENET-B cards to support the STPLAN application

ss7hc—Used by HC-MIM, E5-E1T1, and E5-E1T1-B cards. Allows the card to support up to 32 (E5-E1T1) or 64 (HC-MIM and E5-E1T1-B) signaling links for E1 and T1 functions.

utility—Used by the factory for testing, and when directed by My Oracle Support

vcdu—Used in the card manufacturing process

partnum (optional)

Display the hardware configuration for all card locations that contain a card with the specified Board Part Number.

Range:

zzz-zzzz-zz

Specify the Board Part Number in the format *xxx-xxxx-xx*. See the Hardware Baseline in the *Release Notes* for a list of Board Part Numbers that are supported for the release.

shelf (optional)

Display the hardware configuration information for all card locations in the specified EAGLE shelf.

Range:

1100

1200

1300

2100

2200

2300

3100

3200

3300

4100

4200

4300

5100

5200

5300

6100

6200

6300

type (optional)

Display the hardware configuration information for all card locations that contain cards of the specified card type.

Range:

dcm

dsm

e5appb

enet

enetb

ipsm

limatm

lime1

lime1atm

limt1

mcpm

stc

telco

tsm

ver (optional)

Display the hardware configuration information for all the card locations that have cards with the specified GPL Type and the specified GPL Version. The version format is *major-minor-fix*.

Range:

major-minor-fix

major—Range 0-255

minor—Range 0-255

fix—Range 0-255

Example

Retrieve the frame power information for all provisioned frames of the STP.

```
rtrv-stp:display=power
```

Retrieve the card level power information for the control frame in the STP.

```
rtrv-stp:display=power:frm=cf00
```

Retrieve the hardware configuration information for the STP control shelf (shelf 1100).

```
rtrv-stp:shelf=1100
```

Retrieve the hardware configuration information for all cards equipped in the STP that have the specified Board Part Number.

```
rtrv-stp:partnum=870-1275-01
```

Retrieve the hardware configuration information for all provisioned E5-TSM cards in the STP.

```
rtrv-stp:type=tsm
```

Retrieve the hardware configuration information for all cards in the STP that are running the IMT communication GPL with GPL version 126-039-043.

```
rtrv-stp:gpl=imt:ver=126-039-043
```

Retrieve the hardware configuration information for all provisioned frames in the STP.

```
rtrv-stp
```

Retrieve the hardware configuration information for all cards in the STP that are running the ATMHC GPL.

```
rtrv-stp:gpl=atmhc
```

Retrieve the hardware configuration information for all provisioned E5-APP-B cards in the STP.

```
rtrv-stp:type=e5appb
```

Retrieve the hardware configuration information for all provisioned Telco Switches in the STP.

```
rtrv-stp:type=telco
```

Retrieve the hardware configuration information for all cards in the STP that are running the SIPHC GPL.

```
rtrv-stp:gpl=siphc
```

Retrieve the hardware configuration information for all cards in the STP that are running the DEIRHC GPL.

```
rtrv-stp:gpl=deirhc
```

Dependencies

A valid value must be specified for the display parameter.

A valid value must be specified for the frm parameter.

A valid value must be specified for the shelf parameter.

The partnum parameter value must contain no more than 12 characters.

A valid value must be specified for the type parameter.

The gpl parameter value must contain no more than 8 characters.

Valid values must be specified for the ver parameter subfields (format *major-minor-fix*).

The display parameter must be specified when the frm parameter is specified.

The gpl parameter must be specified when the ver parameter is specified.

Only one optional parameter can be specified in the command, except for the following parameter combinations:

- The display parameter must be specified when the frm parameter is specified.
- The gpl parameter must be specified when the ver parameter is specified.

The frm parameter value must specify a provisioned frame.

The value specified for the gpl parameter must be supported. See the gpl definition for a list of supported GPLs.

Notes

When the power threshold value has not been provisioned for a provisioned frame, the default frame power threshold value is displayed and prefixed with a plus sign (+).

For an un-provisioned card that is present in the frame, the card power consumption value is displayed prefixed with a plus sign (+).

For the E5-TDM and E5-MDAL cards in the Control Frame, "E5-TDM" and "E5-MDAL" are displayed as the Part Number of the card.

If a MUX card is not present, then "Empty" is displayed.

If the Board Part Number received in the BIP response from a card is not present in the Assembly Power table, then the Part Number for the card is displayed with a prefix of a plus sign (+).

If the Card power value is not present in the BIP data and the Assembly Power table, then the default card power value of *1563 milliamps* is displayed for the card.

If board information is not available from a card,

- *BIP Data inv* is displayed as the Part number for the card.
- The default card power value of 1563 milliamps is displayed for the card.

If a card location is empty (no card is present in that slot),

- *Empty* is displayed as the Part Number for the card
- A card power value of 0 is assumed and displayed.

For Standby E5-MASP cards, “Unavailable” is displayed as the Part Number if the card is absent. In this case, the card power of the Active E5-MASP card is shown for the card power of the standby card.

If a flash or communication GPL is specified with the `rtrv-stp` command, then the GPL output displays the version of the application GPL that is running on the card and not the version of the specified flash or communication GPL.

An unequipped MUX location does not have any type of MUX card in the slot. If a MUX card is present in the slot, then the location is equipped. When a location is unequipped, “EMPTY” is displayed for the slots, and an error message is generated. Locations 1109 and 1110, which support the control shelf, must contain MUX cards before the EAGLE is considered to be fully operational.

This command can be used to display the power consumption of MUX cards within a frame. The power consumption displays *0* for an unequipped MUX location. The Part Number, Revision, and Power Consumption obtained from the BIP data associated with the MUX card are displayed.

Output

If a flash or communication GPL is specified, then the output displays the GPL version of the application GPL running on the card instead of the GPL version of the specified flash or communication GPL.

The power consumption values that are displayed in the `rtrv-stp:display=power` or the `rtrv-stp:display=power:frm=` commands indicate the maximum calculated power for the frame. The calculation is based on the cards that are populated in the system, and includes a fan tray assembly for every shelf (the system cannot detect the presence or absence of a fan tray, and assumes presence for the calculation). These values are typically much higher than the actual power being drawn; the values cannot be used as a gauge of the actual power consumption of the EAGLE.

Abbreviated output is indicated by 3 vertical dots:

.

.

.

This example shows the output for a specific shelf containing a HIPR2 card at location 1109:

`rtrv-stp:shelf=1100`

```
tekelecstp 12-03-15 11:07:17 EST  EAGLE 45.0.0
    Card  Part Number  Rev Serial Number  Type     DB     APPL     GPL Version
    ----  -----------  --- -------------  ----     --     ----     -----------
    1101  870-1275-01  W    10245689323   DSM      4096M  VSCCP    027-010-000
    1102  Empty
    1103  870-1788-03  A    10234658345   TSM      128M   GLSHC    027-010-000
    1104  Empty
    1105  870-1339-06  A    10274568974   LIMATM    -     ATMANSI  027-010-000
    1106  Empty
    1107  Empty
    1108  870-1456-05  A    10204764378   DCM      512M   SS7IPGW  027-010-000
    1109  870-2872-01  A    10207185554   HIPR2     -     HIPR2    129-001-000
    1110  MUX                                             BPHMUX   027-345-000
    1111  870-1788-05  A    10205734657   MCPM     4096M  MCP      027-010-000
    1112  Empty
    1113  870-2360-01  A    10346357678   GPSM     1024M  EOAM     025-340-000
    1114  TDM
    1115  Unavailable                     GPSM             EOAM
    1116  Unavailable
    1117  MDAL
    1118  Empty
    Command Completed.
;
```

This example shows the output for the frame power information for all provisioned frames in the STP:

`rtrv-stp:display=power`

```
tekelecstp 07-03-30 11:07:17 EST  EAGLE 37.0.0
             Power Threshold          Power Consumption
    Frame   (Amps)    (Watts)         (Amps)    (Watts)
    -----   -----------------         -----------------
    CF00       45        2160          37.71       1810
    EF00       40        1920          33.99       1631
    EF01       35        1680          10.00        480
    EF04      +30       +1440          14.06        675
    Command Completed.
;
```

This example shows the output for the frame and card power information for the control frame in the system. The frame contains HIPR cards at location1109 and 1110, HMUX card at location 1209, and HIPR2 cards at location 1309 and 1310. MUX location 1210 is unequipped.

```
rtrv-stp:display=power:frm=cf00
```

```
tekelecstp 09-06-30 11:07:17 EST  EAGLE 5 41.1.0
                 Power Threshold          Power Consumption
    Frame         (Amps)    (Watts)         (Amps)    (Watts)
    -----         ----------------         ----------------
    CF00            45        2160          34.58       1795
                                                Power Consumption
    Card       Part Number       Revision        (MilliAmps)        (Watts)
    ----       -----------       --------      ----------------------------
    1101       850-0484-01          E              313                15
    1102       870-2372-01          J              521                25
    1103       870-1289-04          K              313                15
    1104    +  870-2198-01          M            + 1563           +    75
    1105       870-1984-05          M            +  646           +    31
    1106       870-2372-01          J              521                25
    1107       870-2061-01          K              542                26
    1108       870-2061-01          K            +  542           +    26
    1109       MUX                                 313                15
    1110       MUX                                 313                15
    1111       870-2061-01          B              542                26
    1112       850-0419-03          C              521                25
    1113       870-2360-01          B              625                30
    1114       TDM                                 333                16
    1115       Unavailable                         625                30
    1116       Unavailable                         333                16
    1117       MDAL                                333                16
    1118       Empty                               0                  0
    1201       870-2061-01          A              542                26
    1202       870-2061-01          A              542                26
    1203       850-0549-01          A              313                15
    1204    +  870-2198-01          M             1563                75
    1205       850-0549-01          A              313                15
    1206    +  870-2198-01          M             1563                75
    1207       870-2371-02          E              625                30
    1208       870-1293-02          B              521                25
    1209       MUX                                 313                15
    1210       Empty                                 0                 0
    1211       870-2061-01          D              542                26
    1212       850-0549-01          A              313                15
    1213       850-0549-01          A              313                15
    1214       850-0549-01          A              313                15
    1215       870-2061-01          C              542                26
    1216       870-1945-03          D              646                31
    1217       Empty                                 0                 0
    1218       870-2061-01          K              542                26
    1301       870-1984-05          M              646                31
    1302       850-0549-01          A              313                15
    1303    +  870-2198-01          M             1563                75
    1304       870-2371-02          E              625                30
    1305       870-2371-02          E              625                30
    1306       850-0419-03          C              521                25
    1307
    1308       870-2061-01          K              542                26
    1309       870-2872-01          A              313                15
    1310       870-2872-01          A              313                15
    1311       850-0484-01          E              313                15
    1312    +  870-2198-01          M            + 1563           +    75
    1313       BIP Data inv                      + 1563           +    75
```

```
    1314       BIP Data inv                        1563              75
    1315       Empty                                  0               0
    1316       Empty                                  0               0
    1317       Empty                                  0               0
    1318       850-0419-03         C               521              25

    FAN ASSYs Power Consumption                    7812             375
    Command Completed.
;
```

This example shows the output for the hardware configuration information for all equipped SM cards that contain the specified Board Part Number:

`rtrv-stp:partnum=870-2990-01`

```
   tekelecstp 13-07-27 14:31:06 EST EAGLE 45.0.0
   rtrv-stp:partnum=870-2990-01
   Command entered at terminal #18.
;
```

```
   Command Accepted - Processing
   tekelecstp 13-07-27 14:31:06 EST EAGLE 45.0.0
   Card  Part Number  Rev Serial Number  Type     DB     APPL     GPL Version
   ----  -----------  --- -------------  ----     --     ----     -----------
   1101  870-2990-01   A  10208087123    DSM      4096M  SIPHC    134-070-000
   1105  870-2990-01   B  10209135229    DSM      4096M  SCCPHC   134-067-000
   Command Completed
;
```

This example shows the output for the hardware configuration information for all cards of the specified card type:

`rtrv-stp:type=tsm`

```
    tekelecstp 08-10-10 11:07:17 EST  EAGLE 40.0.0
    Card  Part Number  Rev Serial Number  Type     DB     APPL     GPL Version

    ----  -----------  --- -------------  ----     --     ----     -----------
    1103  870-1788-03  A    10234658345   TSM      128M   GLSHC    027-010-000
    1212  870-1788-03  A    10234632455   TSM      128M   GLSHC    027-010-000
    2105                                  TSM               GLSHC
    2217  870-2943-03  A    10229185653   TSM      512M   GLSHC    030-005-000
    Command Completed.
;
```

This example shows the output for the hardware configuration information for all cards that are running the specified GPL:

`rtrv-stp:gpl=ss7ansi`

```
  tekelecstp 07-03-30 11:07:17 EST  EAGLE 37.0.0
  Card  Part Number  Rev  Serial Number  Type     DB    APPL         GPL Version

  ----  -----------  ---  -------------  ----     --    ----         -----------

  1301  870-2671-02  C    10145689323    LIMT1    512M  SS7ANSI      126-033-000

  1303  870-1873-01  C    10345689323    LIMT1    512M  SS7ANSI      126-033-000
```

```
  Command Completed.
;
```

This example shows the output for the hardware configuration information for all cards that are running the specified GPL:

`rtrv-stp:gpl=siphc`

```
   tekelecstp 13-07-27 14:31:06 EST EAGLE 45.0.0
   rtrv-stp:gpl=siphc
   Command entered at terminal #4.
   Card  Part Number  Rev  Serial Number  Type     DB    APPL       GPL Version

   ----  -----------  ---  -------------  ----     --    ----       -----------

   1101  870-2990-01  A    10208087123    DSM      4096M SIPHC      134-067-000

   Command Completed.
;
```

This example shows the output for the hardware configuration information for all cards that are running the specified version of the specified GPL:

rtrv-stp:gpl=ss7ansi:ver=126-033-000

```
    tekelecstp 07-03-30 11:07:17 EST  EAGLE 37.0.0
    Card  Part Number  Rev  Serial Number  Type     DB    APPL       GPL Version

    ----  -----------  ---  -------------  ----     --    ----       -----------

    1301  870-2671-02  C    10145689323    LIMT1    512M  SS7ANSI    126-033-000

    1303  870-1873-01  C    10345689323    LIMT1    512M  SS7ANS     126-033-000

    Command Completed.
;
```

`rtrv-stp:gpl=siphc:ver=134-067-000`

```
    tekelecstp 13-07-27 14:31:06 EST EAGLE 45.0.0
    rtrv-stp:gpl=siphc:ver=134-067-000
    Command enetered at terminal #18.
;
```

```
    Command Accepted - Processing
    tekelecstp 13-07-27 14:31:06 EST EAGLE 45.0.0
    Card  Part Number  Rev  Serial Number  Type     DB    APPL     GPL Version
    ----  -----------  ---  -------------  ----     --    ----     -----------
    1101  870-2990-01  A    10208087123    DSM      4096M SIPHC    134-067-000
    Command Completed.
;
```

This example shows the output for the hardware configuration information for all cards that are running the specified GPL:

`rtrv-stp:gpl=deirhc`

```
    tekelecstp 13-03-20 11:07:17 EST  EAGLE 45.1.0
```

```
   Card  Part Number  Rev  Serial Number  Type     DB    APPL        GPL Version

   ----  -----------  ---  -------------  ----     --    ----        -----------

   1101  870-2990-01  A    10302135627    DSM      8192M DEIRHC      134-056-000

   1103  870-2990-02  A    10502135627    DSM      8192M DEIRHC      134-056-000

    Command Completed.
;
```

This example shows output for the hardware configuration information for all frames of the STP, without specifying any optional parameters in the command. This example includes EPM-B cards and shows abbreviated output.

`rtrv-stp`

```
    stpc9070501 13-07-27 15:39:29 EDT  EAGLE5 45.0.0
    Card  Part Number  Rev Serial Number  Type     DB     APPL     GPL Version
    ----  -----------  --- -------------  ----     --     ----     -----------
    1101  870-2212-03  E   10207435071    ENET     512M   IPSG     009-003-000
    1102  870-2212-03  E   10207425102    ENET     512M   IPSG     009-003-000
    1103  870-2212-03  E   10207425103    ENET     512M   IPSG     009-003-000
    1104  870-2212-03  E   10207425104    ENET     512M   IPSG     009-003-000
    1105  870-2212-03  E   10207425107    ENET     512M   IPSG     009-003-000
    1106  870-2212-03  E   10207425106    ENET     512M   IPSG     009-003-000
    1107  870-2212-03  E   10207425108    ENET     512M   IPSG     009-003-000
    1108  870-2212-03  E   10207425109    ENET     512M   IPSG     009-003-000
    1109  870-2872-01  B   10209135026                    HIPR2    009-003-000
    1110  870-2872-01  B   10209125156                    HIPR2    009-003-000
    1111  870-2971-01  C   10210245182    ENETB    2048M  IPSG     009-003-000
    1112  870-2212-03  E   10207425093    ENET     512M   IPSG     009-003-000
    1113  870-2903-01  C   10208245108    E5MCAP   4096M  OAMHC    009-003-000
    1114  TDM
    1115  870-2903-01  H   10209287087    E5MCAP   4096M  OAMHC    009-003-000
    1116  TDM
    1117  MDAL
    1118  Empty
    1201  870-2212-03  F   10208337195    DCM      512M   IPGHC    009-003-000
    1202  870-2212-03  E   10207425094    DCM      512M   IPGHC    009-003-000
    1203  870-2212-03  E   10207425060    DCM      512M   IPGHC    009-003-000
    1204  870-2212-03  E   10207425071    DCM      512M   IPGHC    009-003-000
    1205  870-2212-03  F   10208337194    DCM      512M   IPGHC    009-003-000
    1206  870-2212-03  E   10207425070    DCM      512M   IPGHC    009-003-000
    1207  870-2212-03  E   10207435090    DCM      512M   IPGHC    009-003-000
    1208  870-2212-03  E   10207425101    DCM      512M   IPGHC    009-003-000
    1209  MUX                                             HIPR     009-003-000
    1210  870-2872-01  B   10209135079                    HIPR2    009-003-000
    1211  870-2212-03  E   10207295241    ENET     512M   IPSG     009-003-000
    1212  870-2212-03  E   10207425090    ENET     512M   IPSG     009-003-000
    1213  870-2212-03  E   10207425025    ENET     512M   IPSG     009-003-000
    1214  870-2212-03  E   10207435016    ENET     512M   IPSG     009-003-000
    1215  870-2212-03  E   10207435089    ENET     512M   IPSG     009-003-000
    1216  870-2212-03  E   10208047109    ENET     512M   IPSG     009-003-000
    1217  870-2212-05  D   10209177197    STC      512M   ERTHC    009-003-000
    1218  870-2372-08  D   10206215361    STC      -      EROUTE   009-003-000
    1301  870-2212-03  E   10207435020    ENET     512M   IPSG     009-003-000
    1302  870-2212-03  E   10207435019    ENET     512M   IPSG     009-003-000
    1303  870-2212-02  A   10206135605    ENET     512M   IPSG     009-003-000
    1304  870-2212-03  E   10207425105    ENET     512M   IPSG     009-003-000
    1305  870-2212-03  E   10207435018    ENET     512M   IPSG     009-003-000
```

```
    1306  870-2212-03  E   10207435023    ENET     512M   IPSG     009-003-000
    1307  870-2212-03  E   10207435024    ENET     512M   IPSG     009-003-000
    1308  870-2212-03  E   10207425033    ENET     512M   IPSG     009-003-000
    1309  870-2872-01  B   10209125033                    HIPR2    009-003-000
    1310  870-2872-01  B   10209065053                    HIPR2    009-003-000
    1311  870-2212-03  E   10207435025    ENET     512M   IPSG     009-003-000
    1312  870-2212-05  D   10209517269    ENET     512M   IPSG     009-003-000
    1313  870-2212-03  F   10208337191    ENET     512M   IPSG     009-003-000
    1314  870-2212-03  E   10207425012    ENET     512M   IPSG     009-003-000
    1315  870-2212-02  A   10206125247    ENET     512M   IPSG     009-003-000
    1316  870-2212-05  D   10209517134    ENET     512M   IPSG     009-003-000
    1317  870-2212-02  E   10206305256    ENET     512M   IPSG     009-003-000
    1318  870-2212-05  D   10209327104    ENET     512M   IPSG     009-003-000
    2101  870-2990-02  A   10502135627    DSM      8192M  DEIRHC   134-000-056
    2102  Empty
    2103  Empty
    2104  Empty
    2105  Empty
    2106  Empty
    2107  Empty
    2108  Empty
    2109  Empty
    2110  Empty
    2111  Empty
    2112  Empty
    2113  Empty
    2114  Empty
    2115  Empty
    2116  Empty
    2117  Empty
    2118  Empty
    3101  870-2990-01  A   10208087123    DSM      4096M  SIPHC    134-067-000
.
.
.
    6101  Empty
    6102  Empty
    6103  Empty
    6104  Empty
    6105  Empty
    6106  Empty
    6107  Empty
    6108  Empty
    6109  Empty
    6110  Empty
    6111  Empty
    6112  Empty
    6113  Empty
    6114  Empty
    6115  Empty
    6116  Empty
    6117  Empty
    6118  Empty

    Command Completed.
;
```

This example shows the output for the hardware configuration information for cards, including an E5-STC card. This example displays abridged output.

```
rtrv-stp
```

```
tekelecstp 12-03-14 13:19:14 GMT  EAGLE 45.0.0
Card  Part Number  Rev Serial Number  Type     DB     APPL     GPL Version
----  -----------  --- -------------  ----     --     ----     -----------
1101  870-1289-04  K   10206035030    TSM      256M   GLSHC    128-018-000
1102  Empty
1104  Empty
1105  Empty
1106  Empty
1107  Empty
1108  870-2212-02  A   10206365046    DCM      512M   STPLAN   128-018-000
1109  MUX                                             HIPR     128-016-000
1110  MUX                                             HIPR     128-016-000
1111  870-2212-02  A   10206275736    STC      512M   EROUTE   028-018-000
1112  870-2372-08  D   10206125537    STC      -      EROUTE   028-018-000
1113  870-2360-06  C   10206255064    GPSM     1024M  EOAM     128-018-000
1114  TDM
1115  870-2360-06  C   10206255165    GPSM     1024M  EOAM     128-018-000
1116  TDM
1117  MDAL
1118  Empty
1201  Empty
1202  Empty
1203  Empty
1204  Empty
1205  Empty
1206  Empty
1207  Empty
1208  Empty                          DCM              STPLAN
1209  MUX                                             HIPR     128-016-000
1210  MUX                                             HIPR     128-016-000
1211  Empty
1212  Empty
1213  Empty
1214  Empty
```

This example shows the output for the hardware configuration information for E5APPB cards and Telco Switches. This example displays abridged output.

```
rtrv-stp
```

```
tekelecstp 13-09-06 15:43:40 EST 45.0.0
rtrv-stp
Command entered at terminal #4.
Card  Part Number  Rev  Serial Number  Type     DB    APPL     GPL Version
----  -----------  ---  -------------  ----     --    ----     -----------
1101  870-3096-01                     E5APPB   -     EPAP     255-255-255
1102  Empty
1103  Empty
1104  Empty
1105  Empty
1106  Empty
1107  Empty
1108  Empty
1109  Empty                                          BPHMUX    000-000-000
1110  Empty                                          BPHMUX    000-000-000
1111  Empty
1112  Empty
1113  Unavailable                   GPSM     -     EOAM      255-255-255
1114  Unavailable
1115  Unavailable                   GPSM     -     EOAM      255-255-255
```

```
   1116  Unavailable
   6201  870-2904-01                    TELCO     -    SWITCH    255-255-255
   6202  870-2904-01                    TELCO     -    SWITCH    255-255-255

Command Completed.
;
```

This example shows the output when the `rtrv-stp` command is issued with the partnum parameter.

`rtrv-stp:partnum=870-2990-02`

```
tekelecstp 13-03-25 14:31:06 EST EAGLE 45.1.0
    rtrv-stp:partnum=870-2990-02
    Command entered at terminal #18.
;
```

```
Command Accepted - Processing
      tekelecstp 13-03-25 14:31:06 EST EAGLE 45.0.0

    Card  Part Number  Rev Serial Number  Type     DB     APPL     GPL Version
    ----  -----------  --- -------------  ----     --     ----     -----------
    1103  870-2990-02  A   10502135627    DSM      8192M  DEIRHC   134-000-056
    Command Completed.
```

Legend

- **Frame**—Frame ID for the control shelf or an extension shelf
- **Power Threshold**—Power threshold (in Amps or Milliamps and Watts) at which an alarm is generated to indicate that power consumption is approaching a maximum allowed level. (See the `ent-frm-pwr` command.)
- **Power Consumption**—Current calculated power consumption (Amps or Milliamps and Watts) of the frame or card
- **Card**—Card Location
- **Part Number**—Board Part Number
- **Rev**—Board Part Number revision
- **Serial Number**—Card serial number
- **Type**—Card type
- **DB**—Daughterboard memory
- **APPL**—Application that has been provisioned on the card
- **GPL Version**—GPL version of the Application GPL being used by the card

Related Commands

chg-frm-pwr, *dlt-frm-pwr*, *ent-frm-pwr*, *rtrv-frm-pwr*

rtrv-stpopts

Retrieve STP Options

Use this command to retrieve the current value of the system's node-level processing option indicators maintained in the system's options table.

Parameters

This command has no parameters.

Example

`rtrv-stpopts`

Dependencies

None

Notes

The timer output for this command is in milliseconds, even though the timer could have been entered in seconds on the `chg-stpopts` command.

Output

The following example displays MTP STP options with no affecting features on. Certain features that are shown in other examples control changes and additional options in this option list:

`rtrv-stpopts`

```
    rlghncxa03w 14-03-17 16:02:05 EST  EAGLE 46.0.0
    STP OPTIONS
    ---------------------------
    MTPT31CTL                  1
    MTPLTI                   yes
    MTPLTCTDPCQ                3
    MTPLTST                10000
    MTPDPCQ                 2000
    TFATFRPR                1000
    MTPLPRST                 yes
    MTPT10ALT              30000
    UIMRD                    yes
    SLSCNV                 perls
    CRITALMINH               yes
    DISPACTALMS               no
    NPCFMTI            14-0-0-0
    RPTLNPMRSS               yes
    RANDSLS                  off
    RSTRDEV                   on
    HSCLKSRC               RS422
    HSCLKGAIN           LONGHAUL
    ARCHBLDID                off
    MFC                      off
    UITHROTTLE                 0
    GDPC             -----------


;
```

The following example displays all MTP STP options. The following list indicates which options appear in the output when the associated features are on:

Note: All options will not appear in actual output, because all features that cause these options to appear cannot be on in the system at the same time.

- Cluster Routing and Management Diversity (CRMD) feature—MTPXLQ, MTPXLET, MTPXLOT
- MTP Restart (MTPRS or ITUMTPRS) feature—MTPRSI, MTPRSIT
- 6000, 7000, or 8000 Routesets feature—MTPDPCQ=6000 or 7000 or 8000
- GSM MAP Screening (GSMSCRN) feature—GSMDFLT, GSMDECERR
- GSM Mobile Number Portability (G-Port), IS41 to GSM Migration (IGM), Prepaid SMS Intercept (PPSMS) Ph1, Voice Mail Router (V-Flex), Prepaid IDP Query Relay (IDPR), ANSI-41 Mobile Number Portability (A-Port), or any TIF feature is enabled **OR** INAP Number Portability (INP) or GSM Flexible Numbering (G-Flex) feature is ON—DEFCC, DEFNDC
- ATINP feature is enabled—DEFCC
- EPAP-based features or LNP ELAP Configuration feature—DSMAUD
- GSM Flexible Numbering (G-Flex) feature—ANSIGFLEX
- Network Security (NSE) feature—SECMTPMATE, SECMTPSID, SECMTPSNM, SECSCCPSCMG
- ANSI-ITU-China SCCP Conversion (SCCP Conversion) feature is enabled—CNVCGDA, CNVCGDI, CNVCGDN, CNVCGDN24, GTCNVDFLT
- PC & CIC Translation feature—PCT

`rtrv-stpopts`

```
rlghncxa03w 11-03-17 16:02:05 EST  EAGLE 44.0.0
 STP OPTIONS
 --------------------------
 MTPT31CTL                1
 MTPLTI                 yes
 MTPLTCTDPCQ              3
 MTPLTST              10000
 MTPXLQ                 500
 MTPXLET               0100
 MTPXLOT                90%
 MTPDPCQ               8000
 TFATFRPR              1000
 MTPRSI                 yes
 MTPRSIT               5000
 MTPLPRST               yes
 MTPT10ALT            30000
 UIMRD                  yes
 SLSCNV               perls
 CRITALMINH             yes
 DISPACTALMS             no
 NPCFMTI           14-0-0-0
 GSMDFLT               PASS
 GSMDECERR             PASS
 DEFCC                   49
 DEFNDC                 177
 DSMAUD                  no
 RPTLNPMRSS             yes
 RANDSLS                all
 RSTRDEV                 on
 SECMTPMATE             off
 SECMTPSID              off
 SECMTPSNM           notify
 SECSCCPSCMG         notify
 CNVCGDA                yes
```

```
    CNVCGDI                 yes
    CNVCGDN                 yes
    CNVCGDN24               yes
    GTCNVDFLT               yes
    ANSIGFLEX               yes
    HSCLKSRC              RS422
    HSCLKLL            LONGHAUL
    ARCHBLDID               off
    MFC                      on
    PCT                      on
    UITHROTTLE                0
    GDPC            004-004-004

;
```

Legend

- **MTPT31CTL**—MTP T31 congestion trigger level. The signaling link congestion level at which the system starts the level 3 t31 timer. When the level 3 t31 timer expires, the associated signaling link is removed from service for realignment.
- **MTPLTI**—MTP loop test indicator. Specifies whether the MTP loop detection procedures are enabled or disabled at the system.
- **MTPLTCTDPCQ**—MTP loop test congestion trigger DPC quantity. The number of most frequently occurring DPCs to which the MTP loop test messages are to be sent when the MTP loop test is triggered by congestion.
- **MTPLTST**—MTP loop test supervision timer. The amount of time, in milliseconds, that the MTP loop test detection procedures run when started.
- **MTPXLQ**—MTP x-list quantity. The number of dynamic status exception list (x-list) entries the system maintains.
- **MTPXLET**—MTP x-list expiration time. The maximum amount of time the system maintains an unreferenced dynamic status exception list (x-list) entry.
- **MTPXLOT**—MTP x-list occupancy threshold. The dynamic status exception list (x-list) occupancy threshold at which the system raises a minor alarm. The threshold is expressed as a percentage of space available.
- **MTPDPCQ**—MTP destination point code quantity. The maximum number of DPCs that can be provisioned in the system.
- **TFATFRPR**—TFA/TFR pacing rate. The amount of time, in milliseconds, between partial broadcasts of up to 20 percent increments of the number of TFAs/TCAs or TFRs/TCRs to be broadcast by the STP when an affected destination becomes accessible using its primary route rather than an alternate route. The STP uses this pacing to prevent congestion on the newly-recovered linksets.
- **MTPRSIT**—MTP Restart isolation timer. The minimum duration of node isolation, in milliseconds, before the MTP Restart procedure is deemed necessary.
- **MTPRSI**—MTP Restart indicator. Specifies whether ANSI or ITU MTP Restart procedures are enabled or disabled at the STP.
- **MTPLPRST**—MTP low priority route set test. Specifies whether low priority route set polling is enabled or disabled at the STP.
- **MTPT10ALT**—MTP T10 alternate timer. Specifies the interval at which the STP performs a route set test on low priority routes.
- **SLSCNV**—Per node SLS conversion indicator. Specifies whether SLS conversion is on, off, or performed per linkset (perls).

- **UIMRD**—Unsolicited Information Message (UIM) redirect. Specifies whether specific UIMs are redirected to this output group.
- **CRITALMINH—**Indicates whether the option that allows the inhibiting of critical alarms is enabled (yes) or disabled (no).
- **DISPACTALMS**—Indicates whether to display active or total alarms in the alarm status area of the VT320 screen.
- **NPCFMTI**—Defines how the ITU national point code is entered into the database and how it is displayed in any outputs from the system.
- **GSMDFLT**—Indicates whether the GSM MAP screening default action is set to pass or discard.
- **GSMDECERR**—Indicates whether the GSM MAP screening decode error action is set to pass or discard.
- **DEFCC**—Defines the default country code.
- **DEFNDC**—Defines the default network destination code.
- **DSMAUD**—Indicates whether the DSM audit is running (on) or disabled (off).
- **RANDSLS**—Displays the Random SLS setting.
- **RTPLNPMRSS**—Displays the setting for reporting or suppressing UIM 1049 for LNP MR with missing subsystems.
- **RSTRDEV**—Allow or disable restoration of device states when an `init-sys` command is executed, an OAM role changes, or a card reload occurs.
- **SECMTPMATE**—Indicates Network Security screening for MTP messages received by an STP on a non-C-Link, with an OPC equal to the SID (True, Adjacent, or Capability) point code of its mate.
- **SECMTPSID**—Indicates Network Security screening for MTP messages received at MTP3 containing an OPC equal to its own SID (OPC that is the True, Secondary, or Capability point code entered in the `chg-sid` command) that is not a route-set-congestion-message. The EAGLE should not receive a message with its own OPC unless the message is a result of a circular route test or is an SLTM when the far end is in loopback. (SLTM messages are not checked).
- **SECMTPSNM—**Indicates Network Security screening for MTP SNM messages. The EAGLE should not receive an MTP network management message unless:
  - The OPC is an adjacent point code. (For all link types, this rule does not apply to UPU, TFC, and RCT messages.)
  - The EAGLE has a route to the OPC of the MTP network management message on the linkset which the message was received.
  - The EAGLE has a route to the destination field in the message (if applicable to the concerned message) on the linkset which the message was received. (For all link types, this rule is not applicable to RST messages.)
- **SECSCCPSCMG—**Indicates Network Security screening for SCCP SCMG messages. This value applies only to SSP and SOR messages. SSA, SST, SOG, SBR, SNR and SRT messages are not affected. The EAGLE should not receive an SCCP network management message unless:
  - The EAGLE has a route to the OPC of the SCMG message on the linkset on which the message was received.
  - The EAGLE has a route to the Affected Point Code (also called the Concerned Point Code in EAGLE) in the message on the linkset on which the message was received.
- **CNVCGDA—**Indicates whether or not to discard the CGPA PC in SCCP messages if the destination network type is ANSI, and the PC or ALIAS PC of the destination network type is not defined.
- **CNVCGDI—**Indicates whether or not to discard the CGPA PC in SCCP messages if the destination network type is ITU-I, and the PC or ALIAS PC of the destination network type is not defined.

- **CNVCGDN—**Indicates whether or not to discard the CGPA PC in SCCP messages if the destination network type is ITU-N, and the PC or ALIAS PC of the destination network type is not defined.
- **CNVCGDN24—**Indicates whether or not to discard the CGPA PC in SCCP messages if the destination network type is 24-bit ITU-N, and the PC or ALIAS PC of the destination network type is not defined.
- **ANSIGFLEX—**Indicates enable or disable of ANSI G-Flex to execute at 1700 TPS per DSM card
- **GTCNVDFLT—**Indicates enable or disable of routing of SCCP messages using system defaults when an appropriate entry is not found in the Default GT Conversion table.
- **HSCLKLL**—High speed master clock line length option (SHORTHAUL, LONGHAUL)
- **HSCLKSRC**—High speed master clock source
- **ARCHBLDID**—Archive build ID
- **MFC**—Indicates whether system will use Group Ticket Voucher (TVG) or Message Flow Control (MFC).
- **PCT**—Indicates whether PCT is applied to MSUs
- **GDPC**--- MSU duplicated by GWS DUP Stop Action will be routed to the point code configured in GDPC.
- **UITHROTTLE**---Indicates speed at which output is sent to the terminal. Zero represents the most throttling, or the slowest output. Nine represents the least throttling, or the fastest output.

Related Commands

chg-stpopts

rtrv-subnetid Retrieve Subnet ID

Use this command to retrieve a list of Subnet ID entries from the SUBNETID table, for the ISUP NP with EPAP feature.

Parameters

subnetnum (optional)

Subnet Number

Range:

1 - 5

Example

```
rtrv-subnetid
rtrv-subnetid:subnetnum=1
```

Dependencies

The ISUP NP with EPAP feature must be enabled before this command can be entered.

Notes

None.

Output

This example shows output when the command is entered with no parameter. Subnet IDs for Subnet number 1 are listed in numerical order, followed by the Subnet IDs for Subnet number 2 in numerical order, etc.

`rtrv-subnetid`

```
    tekelecstp 04-09-21 16:11:21 EST  EAGLE 31.11.0
                   Subnet
    ID             Number
    ---------------------
    886932         1
    886936         1
    886935         2
    886938         2
    886939         2

    Subnetidlen = 6

    SUBNETID table is (5 of 50) 3% full

;
```

This example shows output when a Subnet number is specified. Subnet IDs for the specified Subnet number are listed in numerical order. The table capacity line shows the total number of entries in use, not just the number of entries displayed.

`rtrv-subnetid:subnetnum=2`

```
    tekelecstp 04-09-21 16:13:54 EST  EAGLE 31.11.0
                   Subnet
    ID             Number
    ---------------------
    886935         2
    886938         2
    886939         2

    Subnetidlen = 6

    SUBNETID table is (5 of 50) 3% full

;
```

Related Commands

dlt-subnetid, *ent-subnetid*

Use this command to retrieve information for a specified T1 interface or for all T1 interfaces that have been defined by the `ent-t1` command for an HC-MIM, E5-E1T1, or E5-E1T1-B card that is used as a T1 or ST-HSL-A card.

Parameters

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

all T1 card locations are listed

t1port (optional)

T1 port number. The value must be a T1 port that has already been configured with a T1 interface on the specified T1 card (loc parameter).

Range:

1 - 8

Default:

If not specified, all T1 ports are listed.

Example

```
rtrv-t1
rtrv-t1:loc=1307:t1port=2
rtrv-t1:loc=1311:t1port=1
```

Dependencies

The loc and t1port parameters must be specified together, if any parameters are specified for the command.

The T1 interface of the T1 card specified by the loc parameter must already be defined before this command can be entered.

The card specified by the loc parameter must be a LIMT1 card type.

The port specified by the t1port parameter on the card specified by the loc parameter must be already equipped with a T1 interface.

The following card locations (loc parameter) are not valid for this command: 1113 - 1118 and all *xy*09 and *xy*10 locations (where *x* is the frame and *y* is the shelf).

Notes

None.

Output

`rtrv-t1`

```
    rlghncxa03w 09-03-20 09:07:58 EST  EAGLE 41.0.0
          T1                                              LINK   MINSU
    LOC   PORT ENCODE  T1TSEL    FRAMING  LL   CHANBRDG  CLASS  RATE
    1211  1    ami     external  esf      10   ------    CHAN   ----
    1307  2    b8zs    line      sf       133  ------    CHAN   ----
    1311  1    ami     external  esf      500  ------    CHAN   ----
;
```

`rtrv-t1:loc=1311:t1port=1`

```
    rlghncxa03w 09-03-20 09:07:58 EST  EAGLE 41.0.0
          T1                                              LINK   MINSU
    LOC   PORT ENCODE  T1TSEL    FRAMING  LL   CHANBRDG  CLASS  RATE
    1211  1    ami     external  esf      100  ------    CHAN   ----

    TS1  1311,A    TS9   1313,B    TS17  ------
    TS2  1311,A1   TS10  ------    TS18  ------
    TS3  1311,B1   TS11  ------    TS19  ------
    TS4  1311,B3   TS12  1313,B3   TS20  ------
    TS5  1312,A    TS13  ------    TS21  ------
    TS6  ------    TS14  ------    TS22  ------
    TS7  1313.A    TS15  ------    TS23  ------
    TS8  1313.A    TS16  ------    TS24  ------
;
```

This example includes information for HC-MIM T1 cards. Ports 3 and 4, 5 and 6, and 7 and 8 on the card in location 1311 are channel-bridged pairs.

`rtrv-t1`

```
    rlghncxa03w 09-04-04 09:07:58 EST  EAGLE5 41.0.0
          T1                                              LINK   MINSU
    LOC   PORT ENCODE  T1TSEL    FRAMING  LL   CHANBRDG  CLASS  RATE
    1211  1    ami     external  esf      10   ------    CHAN   ----
    1307  2    b8zs    line      sf       133  ------    CHAN   ----
    1307  6    b8zs    line      sf       133  ------    CHAN   ----
    1311  1    ami     external  esf      500  ------    CHAN   ----
    1311  2    ami     external  esf      500  ------    CHAN   ----
    1311  3    ami     external  esf      500  MASTER    CHAN   ----
    1311  4    ami     external  esf      500  SLAVE     CHAN   ----
    1311  5    ami     RECOVERED esf      500  MASTER    CHAN   ----
    1311  6    ami     RECOVERED esf      500  SLAVE     CHAN   ----
    1311  7    ami     recovered sf       500  MASTER    CHAN   ----
    1311  8    ami     recovered sf       500  SLAVE     CHAN   ----
;
```

This example shows information for port 5 on the card in location 1311. Port 5 is the master port of a channel-bridged pair of ports (5 and 6) on the card.

```
rtrv-t1:loc=1311:t1port=5
```

```
    rlghncxa03w 09-04-04 09:07:58 EST  EAGLE5 41.0.0
          T1                                            LINK   MINSU
    LOC   PORT ENCODE  T1TSEL    FRAMING  LL   CHANBRDG  CLASS  RATE
    1311  5    ami     RECOVERED esf      500  MASTER    CHAN   ----

    TS1  1311,A    TS9   1311,B18  TS17  ------
    TS2  1311,A1   TS10  ------    TS18  ------
    TS3  1311,B1   TS11  ------    TS19  ------
    TS4  1311,B3   TS12  1311,B31  TS20  ------
    TS5  1311,A12  TS13  ------    TS21  ------
    TS6  ------    TS14  ------    TS22  ------
    TS7  1311,A21  TS15  ------    TS23  ------
    TS8  1311,A31  TS16  ------    TS24  ------
;
```

This example shows information for port 6 on the card in location 1311. Port 6 is channel bridged with port 5 for data pass-through.

```
rtrv-t1:loc=1311:t1port=6
```

```
    rlghncxa03w 09-04-02 09:07:58 EST  EAGLE5 41.0.0
          T1                                            LINK   MINSU
    LOC   PORT ENCODE  T1TSEL    FRAMING  LL   CHANBRDG  CLASS  RATE
    1311  6    B8ZS    recovered SF       135  SLAVE     CHAN   ----

    Card 1311, port 6 is channel bridged with port 5 for data pass through.
;
```

This example shows E5-E1T1 cards used as T1 cards. Cards with unchannelized linksets have ST-HSL-A links.

```
rtrv-t1
```

```
    rlghncxa03w 09-04-02 09:07:58 EST  EAGLE5 41.0.0
          T1                                            LINK   MINSU
    LOC   PORT ENCODE  T1TSEL    FRAMING  LL   CHANBRDG  CLASS  RATE
    1211  1    ami     external  esf      10   ------    UNCHAN 1000
    1307  2    b8zs    line      sf       133  ------    UNCHAN 2000
    1311  1    ami     external  esf      500  ------    CHAN   ----
;
```

Legend

- **LOC**—T1card location in the shelf
- **T1PORT**—T1 port number on a T1 card
- **ENCODE**—Indicator for use of B8ZS or AMI encoding/decoding
- **T1TSEL**—T1 timing source indicator (*external* = master timing source, *line*= slave timing source, *recovered*= timing source for the even-numbered port in a channel bridged pair is recovered from the odd-numbered port of the pair)
- **FRAMING**—Framing format (SF or ESF)
- **LL**—Line length; T1 cable length in feet between the EAGLE and the connecting node

- **CHANBRDG**—Indicates whether an odd numbered port is not channel bridged with its adjacent even numbered port for non-signaling data pass through (dashes), or the port is the odd-numbered channel bridged port on the card (MASTER), or the port is the even-numbered channel bridged port on the card (SLAVE) on an HC-MIM or E5-E1T1 card.
- **LINKCLASS**—Indicates whether an HC-MIM or E5-E1T1 card is used as a "channelized" T1 Card (CHAN) or an "unchannelized" ST-HSL-A card (UNCHAN)
- **MINSURATE**—Minimum number of signaling units present on a link uniformly distributed. A value appears in this field only when the LINKCLASS field value is UNCHAN.
- **TSx**—Timeslot

Related Commands

chg-t1, *dlt-t1*, *ent-t1*, *tst-t1*

rtrv-tatr-msg

Retreive Configured TATR messages

Use this command to display the configured Triggerless ANSI TCAP Relay message parameter values.

Parameters

msgn (optional)

Message number. The number of the TATR message.

Range:

1 - 10

Example

```
rtrv-tatr-msg:msgn=1
```

Dependencies

None.

Notes

None.

Output

```
rtrv-tatr-msg:msgn=1
```

```
tekelecstp 09-06-26 13:46:01 EST  41.1.0
rtrv-tatr-msg:msgn=1
Command entered at terminal #4.
MSG = 1             ACTIVE = NO
```

```
          TRIGTYPE = h'25

          CGPA_GT = 2
          CGPA_GT_NAI = 4      CGPA = 0123456789abcde

          CDPA_GT = 2
          CDPA_GT_NAI = 4      CDPA = 0123456789abcde

          CGPN_NAI = 1         CGPN = 01234567890abcdef
          CDPN_NAI = 1         CDPN = 01234567890abcdef

;
```

Related Commands

chg-tatr-msg, *tst-msg*

rtrv-tatropts

Retrieve TATR Options

Use this command to display all of the Triggerless ANSI TCAP Relay options that are cofigured in the database.

Parameters

This command has no parameters.

Example

`rtrv-tatropts`

Dependencies

None.

Notes

None.

Output

`rtrv-tatropts`

```
    tekelecstp 09-08-26 15:15:20 EST  EAGLE 41.1.0

    TATR OPTIONS
    ------------------------------------------------
    CDNPTYPE        = rnsp
    CGNPTYPE        = rnsp
    CGPACCCK        = nonintl
    SPORTTYPE       = none
```

```
    DFLTRN          = none
;
```

Related Commands

chg-tatropts

rtrv-tbl-capacity

Retrieve Table Capacity

Use this command to retrieve table use capacity summary information. For each table listed, the number of table entry elements in use and the total allowed number of table elements is presented, along with a percent (%) full value.

Parameters

This command has no parameters.

Example

`rtrv-tbl-capacity`

Dependencies

None

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

XLIST table information is shown only if the CRMD feature is ON.

Secondary Point Code (SPC) table information is shown only if the MPC feature is ON.

If the EGTT feature is ON then table name is GTA instead of GTT.

Additional information for each listed table can be displayed using the commands listed in *Table 50: Retrieve Commands for Additional Table Information* .

Though the ASP table entries are now part of the IPAPSOCK table, command entry and output still appear as though they are separate tables. The `rtrv-tbl-capacity` command shows the number of ASPs in the 4000-entry IPAPSOCK table.

Table 50: Retrieve Commands for Additional Table Information

Command	Table name	Description of table
`rept-stat-xlist`	XLIST	Destination - Routeset Extension

Command	Table name	Description of table
rtrv-appl-rtkey	IPRTKEY	IP Routing Key
rtrv-as	AS	Application Server
rtrv-assoc	IPAPSOCK	IP Socket/Association
rtrv-dstn	DSTN	Destination Routeset, Exception Routeset
rtrv-gta	GTA	Global Title Address
rtrv-gtt	GTT	Global Title Translation
rtrv-ip-host	IP-HOST	IP Host
rtrv-ip-lnk	IP-LNK	Internet Process Link
rtrv-ls	LS	Link Set
rtrv-map	MAP	Mated Application
rtrv-mrn	MRN	Mated Relay Node
rtrv-npp-as	NPP-AS	Numbering Plan Processor
rtrv-npp-srs	NPP-SRS	Numbering Plan Processor
rtrv-scrset	SCRSET	Gateway Screening Screen Set
rtrv-slk	SLK	Signal Link
rtrv-spc	SPC	Secondary Point Code
rtrv-vflx-cd	VFLXCD	V-Flex Call Decision
rtrv-vflx-rn	VFLXRN	V-Flex Routing Number
rtrv-vflx-vmsid	VFLXVID	V-Flex VMSID
rtrv-gttact	GTT-ACT	GTT Action
rtrv-gttaset	GTT-ASET	GTT Action Set
rtrv-gttapath	GTT-PATH	GTT Action Path
rtrv-gtmod	GTMOD	GT Modification

The MRN table capacity value is adjusted to subtract any point code values allocated to support the SCCP-SERV reroute service.

V-Flex Call Decision (VFLXCD), Routing Number (VFLXRN) and VMSID (VFLXVID) table information is shown only if the V-Flex feature is enabled.

Output

This example shows the output for the minimum table sizes in the system when CRMD, MPC, EGTT and VFLEX features are off:

```
rtrv-tbl-capacity
```

```
    tekelecstp 010-03-06 13:57:06 EST  EAGLE 42.0.0

    DSTN     table is (        8 of      2000)   1% full
    LS       table is (        6 of      1024)   1% full
    SLK      table is (       12 of      1200)   1% full
    IP-LNK   table is (        0 of       512)   0% full
    IP-HOST  table is (        2 of      2048)   1% full
    MAP      table is (        8 of      1024)   1% full
    MRN      table is (        0 of      3000)   0% full
    SCCPSRV  table is (        0 of       384)   0% full
    GTT      table is (        0 of    269999)   0% full
    GTT-SET  table is (       21 of      2000)   2% full
    SSNSELID table is (        0 of    100000)   0% full
    SCRSET   table is (        0 of       255)   0% full
    RTEKEY   table is (        0 of      1000)   0% full
    APPLSOCK table is (        0 of      4000)   0% full
    AS       table is (        0 of       250)   0% full
    NPP-AS   table is (        0 of      1024)   0% full
    NPP-SRS  table is (        0 of      8192)   0% full
    GTMOD    table is (        1 of    100000)   1% full

;
```

This example shows the output for the maximum table sizes in the system. For the DSTN, SLK, GTT, and MAP tables, maximum values depend on the enabled feature quantity value applicable to the table in the system. GTT, MPC, CRMD, VFLEX and FGTTLS features are turned on.

```
rtrv-tbl-capacity
```

```
    rlghncxa03w 10-08-17 08:29:15 EST  EAGLE 43.0.0

    DSTN     table is (      600 of     10000)   6% full
    XLIST    table is (        0 of       500)   0% full
    SPC      table is (        0 of        40)   0% full
    LS       table is (      512 of      1024)  50% full
    SLK      table is (     1501 of      2800)  54% full
    IP-LNK   table is (        0 of       512)   0% full
    IP-HOST  table is (        0 of      2048)   0% full
    MAP      table is (     1500 of     36000)   5% full
    MRN      table is (        0 of      3000)   0% full
    SCCPSRV  table is (        0 of       384)   0% full
    GTA      table is (        0 of    269999)   0% full
    GTT-SET  table is (       10 of      2000)   1% full
    SSNSELID table is (        0 of    100000)   0% full
    SCRSET   table is (       25 of       255)  10% full
    RTEKEY   table is (        0 of      1000)   0% full
    APPLSOCK table is (        0 of      4000)   0% full
    AS       table is (        0 of       250)   0% full
    VFLXCD   table is (        1 of      4950)   1% full
    VFLXRN   table is (        1 of     10000)   1% full
    VFLXVID  table is (        1 of      1000)   1% full
    NPP-AS   table is (        0 of      1024)   0% full
```

```
    NPP-SRS  table is (        0 of      8192)   0% full
    GTT-ACT  table is (        0 of      2000)   0% full
    GTT-ASET table is (        0 of     20000)   0% full
    GTMOD    table is (        1 of    100000)   1% full
    GTT-PATH table is (        3 of     10000)   1% full

;
```

This example shows the output when the MRN table limit is 3000 entries and 12 entries are used for SCCP-SERV reroute:

`rtrv-tbl-capacity`

```
    tklc1090701 10-03-06 13:57:06 EST  EAGLE 42.0.0
    DSTN     table is (     5940 of      6000)  99% full
    XLIST    table is (        0 of       500)   0% full
    SPC      table is (        4 of        40)  10% full
    LS       table is (      738 of      1024)  72% full
    SLK      table is (      360 of      2000)  18% full
    IP-LNK   table is (        6 of       512)   1% full
    IP-HOST  table is (       58 of      2048)   3% full
    MAP      table is (      336 of      1024)  33% full
    MRN      table is (      768 of      2988)  26% full
    SCCPSRV  table is (       12 of        96)  13% full
    GTA      table is (   269999 of    269999) 100% full
    GTT-SET  table is (       10 of      2000)   1% full
    SSNSELID table is (        0 of     10000)   0% full
    SCRSET   table is (       40 of       255)  16% full
    RTEKEY   table is (        0 of      1000)   0% full
    APPLSOCK table is (        0 of      4000)   0% full
    AS       table is (        0 of       250)   0% full
    VFLXRN   table is (        1 of     10000)   1% full
    VFLXCD   table is (        1 of      4950)   1% full
    VFLXVID  table is (        1 of      1000)   1% full
    NPP-AS   table is (        6 of      1024)   1% full
    NPP-SRS  table is (        0 of      8192)   0% full
    GTT-ACT  table is (        0 of      2000)   0% full
    GTT-ASET table is (        0 of     20000)   0% full
    GTMOD    table is (        1 of    100000)   1% full
    GTT-PATH table is (        3 of     10000)   1% full

;
```

Related Commands

rept-stat-xlist, *rtrv-appl-rtkey*, *rtrv-as*, *rtrv-assoc*, *rtrv-dstn*, *rtrv-gta*, *rtrv-gtmod*, *rtrv-gtt*, *rtrv-gttact*, *rtrv-gttapath*, *rtrv-gttaset*, *rtrv-ip-host*, *rtrv-ip-lnk*, *rtrv-ls*, *rtrv-map*, *rtrv-scrset*, *rtrv-slk*, *rtrv-spc*, *rtrv-vflx-cd*, *rtrv-vflx-rn*, *rtrv-vflx-vmsid*

rtrv-th-alm

Retrieve Alarm Thresholds

Use this command to retrieve the alarm thresholds and associated values. For additional information on these values, refer to the *Database Administration Manual - SS7* in your EAGLE documentation set.

Parameters

This command has no parameters.

Example

```
rtrv-th-alm
```

Dependencies

None

Notes

None

Output

```
rtrv-th-alm
```

```
    tekelecstp 13-03-19 13:14:44 EST  EAGLE 45.1.0
    Thermal Alarm Level 1:                      92%
    Thermal Alarm Level 2:                      100%
    SCCP TPS Threshold:                         80%
    SCCP Calculation Method:                    N
    LNP TN  DB Alarm Level 1:                   80%
    LNP TN  DB Alarm Level 2:                   95%
    GTT SCCP Service Alarm Level 1:             10%
    GTT SCCP Service Alarm Level 2:             20%
    Non-GTT SCCP Service Alarm Level 1:         10%
    Non-GTT SCCP Service Alarm Level 2:         20%
    SCCP Service Alarm Level 1 Interval:        0
    SCCP Service Alarm Level 2 Interval:        0
    IMT Bus Combined Utilization Alarm Level 1: 70%
    IMT Bus Combined Utilization Alarm Level 2: 80%
    IMT Bus Congestion Alarm Level 1:           70%
    IMT Bus Congestion Alarm Level 2:           80%
    DEIR Congestion Alarm Level 1:              40%
    DEIR Congestion Alarm Level 2:              80%
    RTRV-TH-ALM: MASP A - COMPLTD.
;
```

Related Commands

chg-th-alm, *rept-stat-sccp*

rtrv-tifopts — Retrieve TIF Options

Use this command to retrieve the current values of the TIF option indicators from the TIFOPTS table.

Parameters

This command has no parameters.

Example

```
rtrv-tifopts
```

Dependencies

None

Notes

The NSADDLDATA and NSPUBLIC options are displayed only when the TIF Number Substitution feature is enabled.

Output

```
rtrv-tifopts
```

```
    tekelecstp 09-06-10 12:32:21 EST  EAGLE 41.1.0
    Command entered at terminal #4.

    TIF OPTIONS
    -------------------------------------------------
    IAMCGPN         = dn
    NPFLAG          = none
    RCAUSENP        = 0
    RCAUSEPFX       = 0
    NPTYPERLS       = sprn
    NPTYPERLY       = sprn
    NPTYPECGPN      = sprn
    SPLITIAM        = none
    CONDCGPN        = none
    CRPREL          = 31
    RNRQD           = yes
    DFLTRN          = none
    DLMA            = none
    DLMB            = none
    DLMC            = none
    SNSCGPNDFLT     = none
    MATCHSEQ        = dn
    SPORTRLS        = all
    SPORTRELAY      = gsm
    SPFILL          = on
    RLCOPC          = off
    NSADDLDATA      = yes
    NSPUBLIC        = 5

;
```

Related Commands

chg-tifopts

rtrv-tps — Retrieve Provisioned System TPS Allocation

Use this command to display the total provisioned system TPS for IPGWx, IPLIMx, IPSG and ATM/E5-ATM/E5-ATM-B cards. The total of these four values, and the maximum allowed system TPS value, are also displayed.

Parameters

This command has no parameters.

Example

```
rtrv-tps
```

Dependencies

None

Notes

The maximum total provisioned System TPS is based on whether the HIPR2 High Rate Mode feature is turned on. The maximum total provisioned System TPS is 500,000 if the HIPR2 High Rate Mode feature is turned off, 750,000 if the HIPR2 High Rate Mode feature is turned on, and 1,000,000 if both the HIPR2 High Rate Mode and 1M System TPS features are turned on.

MAX TPS calculations

The provisioned (max) system TPS calculation is calculated by summing the SIGTRAN TPS values (values for the IPGW and IPSG linksets + IPLIM cards TPS usage) and the ATM links TPS values. The total provisioned system TPS is calculated by using the following:

- Sum all TPS values for IPGW linksets using the value of the iptps parameter (see the `ent/chg-ls` commands).
- Sum all TPS values for IPSG linksets using the (num_ipsg_links * the value of the maxslktps parameter (see the `ent/chg-ls` commands)).
- For each IPLIM card that has at least 1 link provisioned, add 4000 to the provisioned System TPS value, regardless of card type.
- Sum all ATM over T1 links ((ATM ANSI links) * per ATM ANSI links TPS (1630))
- Sum all ATM over E1 links ((ATM ITU links) * per ATM ITU links TPS (2038))

RSVD TPS Calculations

The reserved TPS calculation is calculated by summing the SIGTRAN TPS values (values for the IPGW and IPSG linksets + IPLIM cards TPS usage) and the ATM links TPS values. The total provisioned system TPS is calculated by using the following:

- Sum all TPS values for IPGW linksets using the number of IPGW links provisioned plus the value of the iptps parameter (see the `ent/chg-ls` commands).
- Sum all TPS values for IPSG linksets using the (num_ipsg_links * the value of the slktps or rsvdslktps parameter (see the `ent/chg-ls` commands)).
- For each IPLIM card that has at least 1 link provisioned, add 4000 to the provisioned System TPS value, regardless of card type.
- Sum all ATM over T1 links ((ATM ANSI links) * per ATM ANSI links TPS (1630))
- Sum all ATM over E1 links ((ATM ITU links) * per ATM ITU links TPS (2038))

Output

This example shows the output when the HIPR2 High Rate Mode feature is turned off:

`rtrv-tps`

```
    rlghncxa03w 10-02-10 16:20:46 EST  EAGLE 42.0.0

    CARD     NUM    NUM      RSVD       MAX
    TYPE   CARDS  LINKS       TPS       TPS
    -----  -----  -----  --------  --------
    IPGW       9      8     32000     40000
    IPSG     100     16     80000     80000
    IPLIM      1      0         0         0
    ATM        0      0         0         0

    Total provisioned System TPS (120000 of 500000) 24%

    Command Completed.
;
```

This example shows the output when the HIPR2 High Rate Mode feature is turned on:

`rtrv-tps`

```
    rlghncxa03w 10-02-10 16:20:46 EST  EAGLE 42.0.0

    CARD     NUM    NUM      RSVD       MAX
    TYPE   CARDS  LINKS       TPS       TPS
    -----  -----  -----  --------  --------
    IPGW       9      8     32000     40000
    IPSG     100     16     80000     80000
    IPLIM      1      0         0         0
    ATM        0      0         0         0

    Total provisioned System TPS (120000 of 750000) 16%

    Command Completed.
;
```

Related Commands

chg-ctrl-feat, *chg-ls*, *ent-ls*, *rept-stat-iptps*, *rtrv-ctrl-feat*, *rtrv-ls*

Use this command to display detailed information for one or more troubles that are currently logged into the system.

Parameters

loc (mandatory)

The address of the card that is running the OAM from which logged trouble reports are to be displayed.

Range:

1113, 1115

mode (optional)

Display mode

Range:

c

Continuous mode; shows troubles already logged and new troubles as they occur.

m

Manual mode; shows troubles on demand only

Default:

c

num (optional)

Indicates how many troubles to display.

Range:

1 - 99

Example

```
rtrv-trbl:loc=1113:num=2
```

Dependencies

At least one trouble must be in the trouble log, or the command is rejected.

Only one `rtrv-trbl` or `rtrv-obit` command can be in progress at a time.

If the mode parameter is specified without the num parameter, the entire log is displayed.

The card specified by the loc parameter must be 1113 or 1115.

If the loc parameter specifies the card that is running the standby OAM, that card must be available.

The num parameter must be between 1 - 99.

Notes

When a trouble is generated in the system, it is logged into the RAM storage area of the active OAM. Each OAM can store up to 99 troubles in a queue. If the OAM resets, logged troubles are lost.

Output

The output from this command should be reviewed with a member of the Customer Care Center. See the "Customer Care Center" section in Chapter 1 of this manual.

`rtrv-trbl:loc=1113:num=2`

```
    rlghncxa03w 03-03-07 08:47:43 EST  EAGLE 31.3.0
    Card 1113  Module 0000  Mod_loc 0  Class 0000  Severity 0
    Report Date:00-00-00  Time:00:00:00

    rlghncxa03w 03-03-07 08:47:43 EST  EAGLE 31.3.0
    Card 1108  Module 8001  Mod_loc 6  Class 100A  Severity 1
    Report Date:03-03-04  Time:09:19:59
;
```

Related Commands

act-alm-trns, *dact-alm-trns*, *rept-stat-alm*, *rept-stat-clk*, *rept-stat-trbl*, *rls-alm*, *rtrv-obit*

rtrv-trbltx

Retrieve Trouble Text Table Entries

Use this command to retrieve Alarm and UIM message information including MRN (message reference number), level (for Alarms), Output Group, and text.

The default report displays all Alarms (in numerical order) and then all UIMs.

The optional parameters can be used to:

- Display a range of Alarms or UIMs (ranges spanning both Alarms and UIMs are not supported)
- Search for Alarms, UIMs, or both message types matching a specific Output Group
- Sort all entries by Output Group

Parameters

enum (optional)

The ending Message Reference Number (MRN) when specifying a range.

Range:

1 - 1499

1-999-UAMs

1000-1499 -UIMs

Default:

If snum is specified, the enum value defaults to the specified snum value.

If snum is not specified and type=all, type=uim, or type is not specified, the enum value defaults to 1499

If snum is not specified and type=alarm, the enum value defaults to 999.

outgrp (optional)

The Output Group to sort or filter the Alarm/UIMs on.

Range:

appserv

Application Server

appss

Application Subsystem

card

Card

clk

Clock

db

Database

dbg

Debug

gtt

GTT Maintenance

gws

GWS Maintenance

link

Link Maintenance

meas

Measurements Maintenance

mon

Monitoring (Sentinel or IMF) Maintenance

mps

MPS Maintenance

pu

Program Update

sa

System Administration

seas

SEAS (Sentinel or IMF)

slan

SLAN Maintenance

sys

System Maintenance

traf

Traffic

all

Retrieve information for all Output Groups

Default:

No sorting or filtering is done on Output Groups.

snum (optional)

A single Message Reference Number (MRN), or the starting MRN when specifying a range.

Range:

1 - 1499

1-999 —UAMs

1000-1499—UIMs

Default:

All message entries for the specified type are displayed.

For type=all, type=alarm, or type not specified the snum value defaults to 1.

For type=uim, the snum value defaults to 1000.

type (optional)

The type of trouble text entry to display.

Range:

all

Both types are displayed

alarm

Only Alarm entries are displayed

uim

Only UIM entries are displayed

Default:

all

Example

```
rtrv-trbltx
```

```
rtrv-trbltx:type=alarm
rtrv-trbltx:outgrp=sys
rtrv-trbltx:type=alarm:outgrp=all
rtrv-trbltx:snum=1002
```

Dependencies

If the enum parameter is specified, then the snum parameter must be specified.

The value specified for the enum parameter must be greater than or equal to the value specified for the snum parameter.

The specified enum value must be in the same range as the specified snum value (1-999 for Alarms and 1000-1499 for UIMs). The range cannot span both types.

The values specified for the snum and enum parameters must be in the range of the specified type (1-999 for Alarms and 1000-1499 for UIMs).

If the outgrp parameter is specified, then the snum and enum parameters cannot be specified.

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

To display a single Alarm or UIM, enter the Alarm or UIM MRN as the value of the snum parameter. Either do not specify the enum parameter or specify the enum parameter with the same value as the snum value.

If an unused MRN is specified as an snum parameter value, the header information is displayed without any Output Group header or MRN information.

If an snum/enum range is specified, and there are unused MRNs within that range, only the used MRNs are displayed.

Output

This example shows the output when the command has no parameters. All entries are not shown; the list is long.

`rtrv-trbltx`

```
ncralstp00001 03-07-16 10:15:29 EST  EAGLE 31.3.0

Alarm Report
        MRN   LEVEL  OUTPUT GROUP    TEXT
  ------------------------------------------------------------------------

        0001   MAJR   SYS             Card has reset
        0002   MINR   SYS             Card is not running approved GPL
        0003   NONE   SYS             Alarm cleared for GPL
    .
    .
```

```
        .
            0912   NONE   SYS             Dynamic database is now consistent
    UIM Report
            MRN           OUTPUT GROUP    TEXT
      ------------------------------------------------------------------------

            1000          SYS             MTP rcvd UPU - user part is not SCCP
            1001          SYS             MTP rcvd Transfer Controlled (TFC)
            1002          SYS             MTP rcvd invalid TFC - status 0
        .
        .
        .
            1499          SYS             Invalid MRN detected

    END OF RTRV-TRBLTX REPORT.
;
```

This example shows output with type=alarm. All entries are not shown.

`rtrv-trbltx:type=alarm`

```
    ncralstp00001 03-07-16 10:15:29 EST  EAGLE 31.3.0
    Alarm Report
            MRN    LEVEL  OUTPUT GROUP    TEXT
      ------------------------------------------------------------------------

            0001   MAJR   SYS             Card has reset
            0002   MINR   SYS             Card is not running approved GPL
            0003   NONE   SYS             Alarm cleared for GPL
        .
        .
        .
            0912   NONE   SYS             Dynamic database is now consistent
    END OF RTRV-TRBLTX REPORT.
;
```

This example shows the output with type=uim. All entries are not shown.

`rtrv-trbltx:type=uim`

```
    ncralstp00001 03-07-16 10:15:29 EST  EAGLE 31.3.0

    UIM Report

            MRN           OUTPUT GROUP    TEXT
      ------------------------------------------------------------------------

            1000          SYS             MTP rcvd UPU - user part is not SCCP
            1001          SYS             MTP rcvd Transfer Controlled (TFC)
            1002          SYS             MTP rcvd invalid TFC - status 0
            .
            .
            .
            1499          SYS             Invalid MRN detected
    END OF RTRV-TRBLTX REPORT.
;
```

This example shows the outptu with outgrp=all. All entries are not shown; examples from each type and several Output Groups are shown.

Note: The output for outgrp=all:type=alarm includes all Output Groups in the Alarm Report only; the output for outgrp=all:type=uim includes all Output Groups in the UIM Report only.

`rtrv-trbltx:outgrp=all`

```
    rlghncxa03w 06-05-27  08:15:10 EST  EAGLE 35.0.0

    Alarm Report
            MRN    LEVEL  OUTPUT GROUP    TEXT

      ------------------------------------------------------------------------

        Output Group - SYS
            0001   MAJR   SYS             Card has reset
            0002   MINR   SYS             Card is not running approved GPL
        .
        .
        .
            0912   NONE   SYS             Dynamic database is now consistent
        .
        .
        .
        Output Group - LINK
            0155   MINR   LINK            STPLAN connection unavailable
            0156   NONE   LINK            STPLAN connection available
                           :
            0479   NONE   LINK            Link not Monitored
        UIM Report
            MRN            OUTPUT GROUP    TEXT

      ------------------------------------------------------------------------

        Output Group - SYS
            1000           SYS             MTP rcvd UPU - user part is not SCCP
            1001           SYS             MTP rcvd Transfer Controlled (TFC)
        .
        .
        .
            1499           SYS             Invalid MRN detected

        .
        .
        .
        Output Group - LINK
            13nn           LINK            Example text

    END OF RTRV-TRBLTX REPORT.
;
```

This example shows the output for outgrp=sys. All entries are not shown.

`rtrv-trbltx:type=alarm:outgrp=sys`

```
    ncralstp00001 03-07-16 10:15:29 EST  EAGLE 31.3.0
    Alarm Report
            MRN    LEVEL  OUTPUT GROUP    TEXT

      ------------------------------------------------------------------------

        Output Group - SYS
            0001   MAJR   SYS             Card has reset
```

```
            0002   MINR   SYS             Card is not running approved GPL
        .
        .
        .
            0912   NONE   SYS             Dynamic database is now consistent

    END OF RTRV-TRBLTX REPORT.
;
```

This example shows the output for Alarm MRN 3:

`rtrv-trbltx:snum=3`

```
    ncralstp00001 03-07-16 10:15:29 EST  EAGLE 31.3.0

    Card 1113; SYS REL= 31.3.0; STP CLLI= ncralstp00001; Timezone= EST

    Alarm Report
            MRN    LEVEL  OUTPUT GROUP    TEXT

      ------------------------------------------------------------------------

            0003   NONE   SYS             Alarm cleared for GPL

    END OF RTRV-TRBLTX REPORT.
;
```

This example shows the output for UIM MRN 1002:

`rtrv-trbltx:snum=1002`

```
    ncralstp00001 03-07-16 10:15:29 EST  EAGLE 31.3.0
    UIM Report
            MRN           OUTPUT GROUP    TEXT

      ------------------------------------------------------------------------

            1002          SYS             MTP rcvd invalid TFC - status 0

    END OF RTRV-TRBLTX REPORT.
;
```

Related Commands

None.

rtrv-trm

Retrieve Terminal

Use this command to show the port configuration for all TDM terminals or a specified terminal. These ports are used to connect modems, printers, and terminals to the system. This command displays the following information: device type, data transmission rate, parity, type of flow control used, number of stop bits, number of data bits, and the type of unsolicited messages to be received.

Parameters

trm (optional)

The ID number of the terminal whose characteristics are to be retrieved and displayed.

Range:

1 - 40

Default:

Display all

Example

```
rtrv-trm
```

```
rtrv-trm:trm=17
```

Dependencies

The IP User Interface feature must be enabled and turned on, and at least one IPSM card must be equipped, before telnet or emsalm type terminals with IDs 17 - 40 can be specified.

The specified terminal must be equipped.

If a value of *telnet*, *seas*, or *emsalm* was specified for the type parameter (see the `chg-trm` command) and a Telnet terminal is specified by the trm parameter (IDs 17-40), then an IPSM card must be equipped in the system.

Notes

None

Output

This example shows the output for 16 terminal ports (no IPSM cards are equipped):

```
rtrv-trm
```

```
rlghncxa03w  10-03-11 16:02:08 EST  EAGLE 42.0.0
TRM  TYPE    COMM        FC    TMOUT MXINV DURAL
1    VT320    9600-7-E-1 SW    60    5     99:59:59
2    VT320    9600-7-E-1 BOTH  60    5     INDEF
3    KSR      9600-7-E-1 SW    60    0     00:00:00
4    NONE     9600-7-E-1 SW    60    5     00:30:00
5    NONE     9600-7-E-1 SW    60    5     00:00:30
6    NONE     9600-7-E-1 SW    60    5     00:30:00
7    VT320    9600-7-E-1 SW    60    5     99:59:59
8    VT320    9600-7-E-1 SW    60    5     INDEF
9    VT320    9600-7-E-1 SW    60    0     00:00:00
10   VT320    9600-7-E-1 SW    60    5     00:30:00
11   VT320    9600-7-E-1 NONE  60    5     00:00:30
12   NONE    19200-7-E-1 SW    0     5     INDEF
13   VT320    9600-7-E-1 SW    60    5     99:59:59
14   VT320    9600-7-E-1 SW    60    5     INDEF
```

```
    15   VT320    9600-7-E-1 SW    60    0     00:00:00
    16   VT320    9600-7-E-1 SW    60    5     00:30:00

    TRM  TRAF LINK SA  SYS PU  DB  UIMRD
    1    YES  YES  YES YES YES YES YES
    2    YES  YES  YES YES YES YES YES
    3    YES  YES  YES YES YES YES YES
    4    YES  YES  YES YES NO  YES YES
    5    YES  YES  YES YES YES YES YES
    6    NO   YES  YES YES YES YES YES
    7    NO   YES  YES YES YES YES YES
    8    YES  YES  YES YES YES YES YES
    9    YES  YES  YES YES YES YES YES
    10   NO   NO   NO  NO  NO  NO  NO
    11   NO   NO   NO  NO  NO  NO  NO
    12   NO   NO   NO  NO  NO  NO  NO
    13   NO   NO   NO  NO  NO  NO  NO
    14   NO   NO   NO  NO  NO  NO  NO
    15   NO   NO   NO  NO  NO  NO  NO
    16   NO   NO   NO  NO  NO  NO  NO

         APP  APP
    TRM  SERV SS  CARD CLK DBG GTT GWS MEAS MON MPS SEAS SLAN
    1    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
    2    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
    3    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
    4    YES  YES YES  YES YES NO  YES YES  YES YES NO   NO
    5    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
    6    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
    7    NO   YES YES  YES YES YES YES YES  YES YES NO   NO
    8    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    9    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    10   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    11   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    12   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    13   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    14   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    15   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    16   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
;
```

This example shows the output with the IP User Interface feature enabled and three IPSM cards equipped:

`rtrv-trm`

```
    rlghncxa03w  09-01-11 16:02:08 EST  EAGLE 40.1.0
    TRM   TYPE    COMM        FC    TMOUT MXINV DURAL
    1     VT320   9600 -7-E-1 SW    0     5     00:01:00
    2     VT320   9600 -7-E-1 SW    0     5     00:01:00
    3     VT320   9600 -7-E-1 SW    0     5     00:01:00
    4     KSR     9600 -7-E-1 SW    0     5     00:01:00
    5     NONE    9600 -7-E-1 SW    30    5     00:01:00
    6     NONE    9600 -7-E-1 SW    30    5     00:01:00
    7     NONE    9600 -7-E-1 SW    30    5     00:01:00
    8     NONE    9600 -7-E-1 SW    30    5     00:01:00
    9     VT320   9600 -7-E-1 SW    0     5     00:01:00
    10    VT320   9600 -7-E-1 SW    0     5     00:01:00
    11    VT320   9600 -7-E-1 SW    0     5     00:01:00
    12    KSR     9600 -7-E-1 SW    0     5     00:01:00
    13    NONE    9600 -7-E-1 SW    30    5     00:01:00
    14    NONE    9600 -7-E-1 SW    30    5     00:01:00
```

```
15    NONE    9600 -7-E-1 SW    30    5     00:01:00
16    NONE    9600 -7-E-1 SW    30    5     00:01:00

TRM  TYPE      LOC              TMOUT MXINV DURAL
17   TELNET    1201             60    5     00:30:00
18   TELNET    1201             60    5     00:30:00
19   TELNET    1201             60    5     00:30:00
20   TELNET    1201             60    5     00:30:00
21   TELNET    1201             60    5     00:30:00
22   TELNET    1201             60    5     00:30:00
23   TELNET    1201             60    5     00:30:00
24   TELNET    1201             60    5     00:30:00
25   TELNET    1203             60    5     00:30:00
26   TELNET    1203             60    5     00:30:00
27   TELNET    1203             60    5     00:30:00
28   TELNET    1203             60    5     00:30:00
29   TELNET    1203             60    5     00:30:00
30   TELNET    1203             60    5     00:30:00
31   TELNET    1203             60    5     00:30:00
32   TELNET    1203             60    5     00:30:00
33   TELNET    1208             60    5     00:30:00
34   TELNET    1208             60    5     00:30:00
35   TELNET    1208             60    5     00:30:00
36   TELNET    1208             60    5     00:30:00
37   TELNET    1208             60    5     00:30:00
38   TELNET    1208             60    5     00:30:00
39   TELNET    1208             60    5     00:30:00
40   TELNET    1208             60    5     00:30:00

TRM  LOGINTMR LOGOUTTMR PNGTIMEINT PNGFAILCNT
     (sec)    (sec)     (msec)
17   none     none      none       1
18   none     none      none       1
19   none     none      none       1
20   none     none      none       1
21   none     none      none       1
22   none     none      none       1
23   none     none      none       1
24   none     none      none       1
25   none     none      none       1
26   none     none      none       1
27   none     none      none       1
28   none     none      none       1
29   none     none      none       1
30   none     none      none       1
31   none     none      none       1
32   none     none      none       1
33   none     none      none       1
34   none     none      none       1
35   none     none      none       1
36   none     none      none       1
37   none     none      none       1
38   none     none      none       1
39   none     none      none       1
40   none     none      none       1

TRM  TRAF LINK SA  SYS PU  DB  UIMRD
1    YES  YES  YES YES YES YES YES
2    YES  YES  YES YES YES YES YES
3    YES  YES  YES YES YES YES YES
4    YES  YES  YES YES NO  YES YES
5    YES  YES  YES YES YES YES YES
6    NO   YES  YES YES YES YES YES
7    NO   YES  YES YES YES YES YES
```

```
8    YES  YES  YES YES YES YES YES
9    YES  YES  YES YES YES YES YES
10   NO   NO   NO  NO  NO  NO  NO
11   NO   NO   NO  NO  NO  NO  NO
12   NO   NO   NO  NO  NO  NO  NO
13   NO   NO   NO  NO  NO  NO  NO
14   NO   NO   NO  NO  NO  NO  NO
15   NO   NO   NO  NO  NO  NO  NO
16   NO   NO   NO  NO  NO  NO  NO
17   NO   NO   NO  NO  NO  NO  NO
18   NO   NO   NO  NO  NO  NO  NO
19   NO   NO   NO  NO  NO  NO  NO
20   NO   NO   NO  NO  NO  NO  NO
21   NO   NO   NO  NO  NO  NO  NO
22   NO   NO   NO  NO  NO  NO  NO
23   NO   NO   NO  NO  NO  NO  NO
24   NO   NO   NO  NO  NO  NO  NO
25   NO   NO   NO  NO  NO  NO  NO
26   NO   NO   NO  NO  NO  NO  NO
27   NO   NO   NO  NO  NO  NO  NO
28   NO   NO   NO  NO  NO  NO  NO
29   NO   NO   NO  NO  NO  NO  NO
30   NO   NO   NO  NO  NO  NO  NO
31   NO   NO   NO  NO  NO  NO  NO
32   NO   NO   NO  NO  NO  NO  NO
33   NO   NO   NO  NO  NO  NO  NO
34   NO   NO   NO  NO  NO  NO  NO
35   NO   NO   NO  NO  NO  NO  NO
36   NO   NO   NO  NO  NO  NO  NO
37   NO   NO   NO  NO  NO  NO  NO
38   NO   NO   NO  NO  NO  NO  NO
39   NO   NO   NO  NO  NO  NO  NO
40   NO   NO   NO  NO  NO  NO  NO

     APP  APP
TRM  SERV SS   CARD CLK DBG GTT GWS MEAS MON MPS SEAS SLAN
1    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
2    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
3    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
4    YES  YES YES  YES YES NO  YES YES  YES YES NO   NO
5    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
6    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
7    NO   YES YES  YES YES YES YES YES  YES YES NO   NO
8    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
9    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
10   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
11   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
12   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
13   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
14   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
15   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
16   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
17   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
18   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
19   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
20   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
21   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
22   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
23   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
24   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
25   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
26   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
27   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
28   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
```

```
    29   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    30   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    31   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    32   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    33   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    34   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    35   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    36   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    37   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    38   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    39   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    40   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
;
```

This example shows the output for Telnet terminal 30:

```
rtrv-trm:trm=30
```

```
    rlghncxa03w  08-05-01 16:02:08 EST  EAGLE 39.0.0
    TRM  TYPE    LOC         TMOUT MXINV DURAL
    30   TELNET  1204        60    0     00:00:00

    TRM  LOGINTMR LOGOUTTMR PNGTIMEINT PNGFAILCNT
         (sec)    (sec)     (msec)
    30   none     none      none       1

    TRM  TRAF LINK SA  SYS PU  DB  UIMRD
    30   YES  YES  YES YES YES YES YES

         APP  APP
    TRM  SERV SS  CARD CLK DBG GTT GWS MEAS MON MPS SEAS SLAN
    30   YES  YES YES  YES YES YES YES YES  YES YES NO   NO
;
```

This example shows the output with the IP User Interface feature enabled, one IPSM card equipped, and the OA&M IP Security Enhancements feature or the parameter SSH in SECUDFLT table is turned off:

```
rtrv-trm
```

```
    rlghncxa03w  09-01-11 16:02:08 EST  EAGLE 40.1.0
    TRM   TYPE    COMM        FC    TMOUT MXINV DURAL
    1     VT320   9600 -7-E-1 SW    0     5     00:01:00
    2     VT320   9600 -7-E-1 SW    0     5     00:01:00
    3     VT320   9600 -7-E-1 SW    0     5     00:01:00
    4     KSR     9600 -7-E-1 SW    0     5     00:01:00
    5     NONE    9600 -7-E-1 SW    30    5     00:01:00
    6     NONE    9600 -7-E-1 SW    30    5     00:01:00
    7     NONE    9600 -7-E-1 SW    30    5     00:01:00
    8     NONE    9600 -7-E-1 SW    30    5     00:01:00
    9     VT320   9600 -7-E-1 SW    0     5     00:01:00
    10    VT320   9600 -7-E-1 SW    0     5     00:01:00
    11    VT320   9600 -7-E-1 SW    0     5     00:01:00
    12    KSR     9600 -7-E-1 SW    0     5     00:01:00
    13    NONE    9600 -7-E-1 SW    30    5     00:01:00
    14    NONE    9600 -7-E-1 SW    30    5     00:01:00
    15    NONE    9600 -7-E-1 SW    30    5     00:01:00
    16    NONE    9600 -7-E-1 SW    30    5     00:01:00

    TRM   TYPE    LOC               TMOUT MXINV DURAL      SECURE
```

```
17    TELNET  1201              60    5     00:30:00   no
18    TELNET  1201              60    5     00:30:00   no
19    TELNET  1201              60    5     00:30:00   no
20    TELNET  1201              60    5     00:30:00   no
21    TELNET  1201              60    5     00:30:00   no
22    TELNET  1201              60    5     00:30:00   no
23    TELNET  1201              60    5     00:30:00   no
24    TELNET  1201              60    5     00:30:00   no

TRM  LOGINTMR LOGOUTTMR PNGTIMEINT PNGFAILCNT
     (sec)    (sec)     (msec)
17   none     none      none       1
18   none     none      none       1
19   none     none      none       1
20   none     none      none       1
21   none     none      none       1
22   none     none      none       1
23   none     none      none       1
24   none     none      none       1

TRM  TRAF LINK SA  SYS PU  DB  UIMRD
1    YES  YES  YES YES YES YES YES
2    YES  YES  YES YES YES YES YES
3    YES  YES  YES YES YES YES YES
4    YES  YES  YES YES NO  YES YES
5    YES  YES  YES YES YES YES YES
6    NO   YES  YES YES YES YES YES
7    NO   YES  YES YES YES YES YES
8    YES  YES  YES YES YES YES YES
9    YES  YES  YES YES YES YES YES
10   NO   NO   NO  NO  NO  NO  NO
11   NO   NO   NO  NO  NO  NO  NO
12   NO   NO   NO  NO  NO  NO  NO
13   NO   NO   NO  NO  NO  NO  NO
14   NO   NO   NO  NO  NO  NO  NO
15   NO   NO   NO  NO  NO  NO  NO
16   NO   NO   NO  NO  NO  NO  NO
17   NO   NO   NO  NO  NO  NO  NO
18   NO   NO   NO  NO  NO  NO  NO
19   NO   NO   NO  NO  NO  NO  NO
20   NO   NO   NO  NO  NO  NO  NO
21   NO   NO   NO  NO  NO  NO  NO
22   NO   NO   NO  NO  NO  NO  NO
23   NO   NO   NO  NO  NO  NO  NO
24   NO   NO   NO  NO  NO  NO  NO

     APP  APP
TRM  SERV SS  CARD CLK DBG GTT GWS MEAS MON MPS SEAS SLAN
1    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
2    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
3    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
4    YES  YES YES  YES YES NO  YES YES  YES YES NO   NO
5    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
6    YES  YES YES  YES YES YES YES YES  YES YES NO   NO
7    NO   YES YES  YES YES YES YES YES  YES YES NO   NO
8    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
9    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
10   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
11   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
12   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
13   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
14   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
15   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
16   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
```

```
    17   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    18   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    19   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    20   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    21   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    22   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    23   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
    24   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO

;
```

This example shows the output for a SEAS terminal.

```
rtrv-trm:trm=30
```

```
    tekelecstp 07-12-16 22:37:01 IST  EAGLE 37.5.0
    TRM  TYPE    LOC              TMOUT MXINV DURAL     SECURE
    30   SEAS    1102             30    5     00:01:00  no

    TRM  TRAF LINK SA  SYS PU  DB  UIMRD
    30   NO   NO   NO  NO  NO  NO  NO

         APP  APP
    TRM  SERV SS  CARD CLK DBG GTT GWS MEAS MON MPS SEAS SLAN
    30   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  YES  NO
;
```

This example shows the output with the IP User Interface feature enabled, one IPSM card equipped, and the OA&M IP Security Enhancements feature and the parameter SSH in SECUDFLT table are turned on.

- Terminals 17,18 and 19 are of type TELNET.
- Terminals 20,21 and 22 are of type EMSALM.
- Termnal 23 is of type NONE.
- Terminal 24 is of type SEAS.

The *LOGINTMR* and *LOGOUTTMR* fields apply to terminals 17 - 19. The *PNGTIMEINT* and *PNGFAILCNT* fields apply to terminals 17 - 22. None of the fields apply to terminals 23 and 24.

```
rtrv-trm
```

```
    tekelecstp 08-06-16 00:17:30 IST  EAGLE 39.0.0
    TRM  TYPE    COMM        FC    TMOUT MXINV DURAL
    1    VT320   9600 -7-E-1 SW    30    5     00:01:00
    2    VT320   9600 -7-E-1 SW    30    5     00:01:00
    3    VT320   9600 -7-E-1 SW    30    5     00:01:00
    4    VT320   9600 -7-E-1 SW    30    5     00:01:00
    5    VT320   9600 -7-E-1 SW    30    5     00:01:00
    6    VT320   9600 -7-E-1 SW    30    5     00:01:00
    7    VT320   9600 -7-E-1 SW    30    5     00:01:00
    8    VT320   9600 -7-E-1 SW    30    5     00:01:00
    9    VT320   9600 -7-E-1 SW    30    5     00:01:00
    10   VT320   9600 -7-E-1 SW    30    5     00:01:00
    11   VT320   9600 -7-E-1 SW    30    5     00:01:00
    12   VT320   9600 -7-E-1 SW    30    5     00:01:00
    13   VT320   9600 -7-E-1 SW    30    5     00:01:00
    14   VT320   9600 -7-E-1 SW    30    5     00:01:00
    15   VT320   9600 -7-E-1 SW    30    5     00:01:00
    16   VT320   9600 -7-E-1 SW    30    5     00:01:00
```

```
TRM  TYPE    LOC              TMOUT MXINV DURAL     SECURE
17   TELNET  1111             30    5     00:01:00  yes
18   TELNET  1111             30    5     00:01:00  yes
19   TELNET  1111             30    5     00:01:00  yes
20   EMSALM  1111             30    5     00:01:00  yes
21   EMSALM  1111             30    5     00:01:00  yes
22   EMSALM  1111             30    5     00:01:00  yes
23   NONE    1111             30    5     00:01:00  yes
24   SEAS    1111             30    5     00:01:00  yes

TRM  LOGINTMR LOGOUTTMR PNGTIMEINT PNGFAILCNT
     (sec)    (sec)     (msec)
17   15       15        none       1
18   15       none      none       1
19   15       none      none       1
20   ----     ----      none       1
21   ----     ----      none       1
22   ----     ----      none       1

TRM  TRAF LINK SA  SYS PU  DB  UIMRD
1    YES  YES  YES YES YES YES YES
2    YES  YES  YES YES YES YES YES
3    YES  YES  YES YES YES YES YES
4    YES  YES  YES YES YES YES YES
5    NO   NO   NO  NO  NO  NO  NO
6    NO   NO   NO  NO  NO  NO  NO
7    NO   NO   NO  NO  NO  NO  NO
8    NO   NO   NO  NO  NO  NO  NO
9    NO   NO   NO  NO  NO  NO  NO
10   NO   NO   NO  NO  NO  NO  NO
11   NO   NO   NO  NO  NO  NO  NO
12   NO   NO   NO  NO  NO  NO  NO
13   NO   NO   NO  NO  NO  NO  NO
14   NO   NO   NO  NO  NO  NO  NO
15   NO   NO   NO  NO  NO  NO  NO
16   NO   NO   NO  NO  NO  NO  NO
17   YES  YES  YES YES YES YES YES
18   YES  YES  YES YES YES YES YES
19   YES  YES  YES YES YES YES YES
20   YES  YES  YES YES YES YES YES
21   YES  YES  YES YES YES YES YES
22   YES  YES  YES YES YES YES YES
23   YES  YES  YES YES YES YES YES
24   YES  YES  YES YES YES YES YES

     APP  APP
TRM  SERV SS   CARD CLK DBG GTT GWS MEAS MON MPS SEAS SLAN
1    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
2    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
3    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
4    YES  YES YES  YES YES YES YES YES  YES YES YES  YES
5    NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
6    NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
7    NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
8    NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
9    NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
10   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
11   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
12   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
13   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
14   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
15   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
16   NO   NO  NO   NO  NO  NO  NO  NO   NO  NO  NO   NO
```

```
    17   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    18   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    19   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    20   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    21   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    22   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    23   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
    24   YES  YES YES  YES YES YES YES YES  YES YES YES  YES

;
```

This example shows the output for an EMSALM terminal on an IPSM card:

```
rtrv-trm:trm=22
```

```
    tekelecstp 08-06-16 01:29:28 EST  EAGLE 39.0.0
    TRM  TYPE    LOC              TMOUT MXINV DURAL     SECURE
    22   EMSALM  1111             30    5     00:01:00  yes

    TRM  PNGTIMEINT PNGFAILCNT
         (msec)
    22   none       1

    TRM  TRAF LINK SA  SYS PU  DB  UIMRD
    22   YES  YES  YES YES YES YES YES

         APP  APP
    TRM  SERV SS  CARD CLK DBG GTT GWS MEAS MON MPS SEAS SLAN
    22   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
;
```

This example shows the output for a NONE terminal on an IPSM card:

```
rtrv-trm:trm=23
```

```
    tekelecstp 08-06-16 01:28:03 EST  EAGLE 39.0.0
    TRM  TYPE    LOC              TMOUT MXINV DURAL     SECURE
    23   NONE    1111             30    5     00:01:00  yes

    TRM  TRAF LINK SA  SYS PU  DB  UIMRD
    23   YES  YES  YES YES YES YES YES
         APP  APP

    TRM  SERV SS  CARD CLK DBG GTT GWS MEAS MON MPS SEAS SLAN
    23   YES  YES YES  YES YES YES YES YES  YES YES YES  YES
;
```

Legend

Part one of the report contains these fields:

- **TRM**—TDM terminal port number associated with the output device
- **TYPE**—Type of output device that is connected
- **COMM**—This field consists of four communication attributes in the format *baud-dbts-prty-sb*. The parts are:
  - **BAUD**—Serial port baud rate of the output device

  - **DBTS—**Number of data bits used by the output device
  - **PRTY**—Parity of the output device
  - **SB**—Number of stop bits used in communications with the output device
- **FC**—Type of protocol used between the system and the output devices
- **TMOUT**—Maximum amount of time (in minutes) that a login session can remain idle
- **MXINV**—Login/unlock failure threshold
- **DURAL**—Length of time (in seconds, minutes, and hours) the terminal is disabled after each failed login/unlock attempt in excess of the threshold configured with the mxinv parameter
- **SECURE**—Shows whether the OA&M IP Security Enhancements feature and the parameter SSH in the SECUDFLT table are turned on or off for Telnet terminals

Part two of the report contains these fields:

- **LOGINTMR**—Maximum time for logging on to the telnet terminal after selecting the terminal
- **LOGOUTTMR**—Maximum time the telnet session remains open after the user manually or automatically logs out
- **PNGTIMEINT**—Time period after which IPSM card initiates new ping cycle
- **PNGFAILCNT**—Number of consecutive ping fails waited before dropping the telnet connection

Part three of the `rtrv-trm` report contains these fields:

- **TRM**—TDM terminal associated with the output device
- **TRAF**—Shows whether traffic-related unsolicited messages are received by the output device
- **LINK**—Shows whether link-related unsolicited messages are received by the output device
- **SA**—Shows whether security administration-related unsolicited messages are received by the output device
- **SYS**—Shows whether system maintenance-related unsolicited messages are received by the output device
- **PU**—Shows whether program update-related unsolicited messages are received by the output device
- **DB**—Shows whether database-related unsolicited messages are received by the output device
- **UIMRD**—Shows whether Unsolicited Information Messages (UIMs) specific to the group are received by the output device

Part four of the `rtrv-trm` report contains these fields:

- **APP SERV**—Shows whether Application Server unsolicited messages are received by the output device
- **APP SS**—Shows whether Application Subsystem unsolicited messages are received by the output device
- **CARD**—Shows whether Card unsolicited messages are received by the output device
- **CLK**—Shows whether Clock unsolicited messages are received by the output device
- **DBG**—Shows whether Debug unsolicited messages are received by the output device
- **GTT**—Shows whether GTT unsolicited messages are received by the output device
- **GWS**—Shows whether GWS unsolicited messages are received by the output device
- **MEAS**—Shows whether Measurements Maintenance unsolicited messages are received by the output device
- **MON**—Shows whether Monitor unsolicited messages are received by the output device
- **MPS**—Shows whether MPS unsolicited messages are received by the output device
- **SEAS**—Shows whether SEAS Maintenance unsolicited messages are received by the output device

- **SLAN**—Shows whether STP LAN unsolicited messages are received by the output device

Related Commands

act-echo, *canc-echo*, *chg-trm*, *dact-echo*, *inh-trm*, *rept-stat-trm*, *rmv-trm*, *rst-trm*

rtrv-tt

Retrieve Translation Type

Use this command to show the translation types that are currently defined in the system database for global title translations.

Note: If the EGTT feature is turned on, then the GTT Selector (`ent/chg/dlt/rtrv-gttsel`), GTT Set (`ent/dlt/rtrv-gttset`), and GTA (`ent/chg/dlt/rtrv-gta`) commands replace the Translation Type (`ent/dlt/rtrv-tt`) and Global Title Translation (`ent/chg/dlt/rtrv-gtt`) commands. However, the Translation Type and Global Title Translation commands continue to work according to their original functionality when the EGTT feature is on.

Parameters

alias (optional)

The alias of the global title translation type

Range:

0 - 255

Default:

Display all

ovrlapd (optional)

Overlapped GTT Selectors.

Range:

yes

Default:

none

ttn (optional)

Translation type name.

Range:

ayyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

Default:

Display all

type/typea/typei/typen/typen24/typeis/typens (optional)

Translation type. The translation type and network type. This parameter is the decimal representation of the 1-byte field used in SS7.

The type and typea parameters specify an ANSI network.

The typei parameter specifies an ITU-international network.

The typen parameter specifies an ITU-national network.

The typen24 parameter specifies a 24-bit ITU-national network.

The typeis parameter specifies an ITU-international spare network.

The typens parameter specifies an ITU-national spare network.

A translation type numeric value may be entered as an ANSI type (type or typea) and as an ITU type (typei/typen/typen24/typeis/typens). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE protocol processing as ANSI or ITU. ITU applies to ITU-I, ITU-I spare, ITU-N, ITU-N spare, and ITU-N24.

Range:

0 - 255

Default:

No translation type is specified

Example

```
rtrv-tt
rtrv-tt:type=230
rtrv-tt:ttn=lidb
rtrv-tt:type=230:ttn=lidb
rtrv-tt:type=230:ttn=lidb:alias=012
rtrv-tt:typeis=2
rtrv-tt:ovrlapd=yes
```

Dependencies

If a translation type is specified, it must already exist in the database for the network type and cannot be an alias.

If both translation type and translation type name are specified, the translation type name must correspond to the specified translation type.

If an alias is specified with a translation type and/or translation type name, the alias must exist in the database for the specified network type, and it cannot be a translation type.

If an alias is specified without a translation type or translation type name, the alias must exist in the database for at least one of the network types. If it exists, the entries and the mapped translation type entries that exist in the database for all network types are displayed.

The value specified for the alias parameter must be associated with the value specified for the type/typea/typei/typen/typen24/typeis/typens parameter and cannot be the value of an existing translation type.

The value specified for the type/typea/typei/typen/typen24/typeis/typens parameter cannot be an alias value.

The value specified for the ttn parameter must already exist in the database.

The value specified for the ttn parameter must correspond to the value specified for the alias parameter.

The GTTSET associated with the translation type specified by the ttn parameter must have a set type of cdgta (see the `ent-gttset` command).

The ttn=none parameter cannot be specified.

The network domain of the translation type specified by the ttn parameter cannot be CROSS (see the `ent-gttset` command).

The Overlapped TT must exist with the specified filter criteria.

Notes

If a translation type, translation type name, or both, are specified, the translation type entry and all aliases mapped to that translation type are displayed.

This command retrieves only selector entries that were provisioned by GTT Selector commands, have a GTI value of 2, and a set type of CdGTA.

If the EGTT feature is turned on, the following occurs for the `rtrv-tt` command:

- For ANSI, if any selector for an entry made by TT commands is deleted using the `dlt-gttsel` command, that entry cannot be retrieved.
- For ITU, if the GTT set name of a true selector (GTI=2 or GTI=4) is deleted using the `dlt-gttsel` command, then that entry cannot be retrieved.
- If the GTT set name of a true selector is changed using the `chg-gttsel` command or if a selector is deleted using the `dlt-gttsel` command, none of the selector aliases can be retrieved.
- Any entry where the selid, lsn, cgssn, or eaglegen is provisioned for the GTT selector cannot be retrieved.

Output

`rtrv-tt`

```
tekelecstp 10-05-03 09:03:09 EST  EAGLE 42.0.0
TYPEA    TTN        NDGT
130      lidb       5
180      ansi180    9

ALIAS    TYPEA
1        130
7        130
10       180

TYPEI    TTN        NDGT
105      intlabc    15
119      intl119    18
```

```
    ALIAS    TYPEI
    29       119
    33       105

    TYPEN    TTN        NDGT
    204      natlxyz    8
    210      natl210    21

    ALIAS    TYPEN
    7        204

    TYPEN24  TTN        NDGT

    ALIAS    TYPEN24

    TYPEIS   TTN        NDGT
    5        --------   6

    ALIAS    TYPEIS

    TYPENS   TTN        NDGT

    ALIAS    TYPENS

;
```

rtrv-tt:type=130:ttn=LIDB

```
    tekelecstp 03-11-02 09:06:38 EST  EAGLE 30.0.0
    TYPEA    TTN        NDGT
    130      lidb       5

    ALIAS    TYPEA
    1        130
    7        130

;
```

rtrv-tt:ttn=intlabc

```
    tekelecstp 03-11-02 09:19:34 EST  EAGLE 30.0.0
    TYPEI    TTN        NDGT
    105      intlabc    15

    ALIAS    TYPEI
    33       105

;
```

rtrv-tt:alias=7

```
    tekelecstp 03-11-02 09:19:34 EST  EAGLE 30.0.0
    ALIAS    TYPEA
    7        130

    ALIAS    TYPEN
    7        204
```

```
;
```

`rtrv-tt`

```
    tekelecstp 10-03-10 09:19:34 EST  EAGLE 42.0.0
    TYPEA    TTN        NDGT

    TYPEI    TTN        NDGT

    TYPEN    TTN        NDGT

    TYPEN24  TTN        NDGT
    2        set24n002   6
    4        first       6

;
```

`rtrv-tt:typens=5`

```
    tekelecstp 10-05-03 16:58:03 EST  EAGLE 42.0.0
    TYPENS   TTN        NDGT
    5        abcde      6

    ALIAS    TYPENS

;
```

This example shows the output for overlapped GTT selectors. If a translation type name is specified by more than one entry, the entries specifying that translation type will be preceded by an asterisk (to indicate overlap).

`rtrv-tt:ovrlapd=yes`

```
    tekelecstp 10-05-03 17:11:36 EST  Eagle 42.0.0
    TYPEA    TTN        NDGT

    ALIAS    TYPEA

    TYPEI    TTN        NDGT
    *1       set1        6
    *2       set2        6

    ALIAS    TYPEI

    TYPEN    TTN        NDGT
    *3       set1        6
    *4       set2        6

    ALIAS    TYPEN

    TYPEN24  TTN        NDGT
    *5       set1        6
    *6       set2        6

    ALIAS    TYPEN24

    TYPEIS   TTN        NDGT
```

```
    ALIAS    TYPEIS

    TYPENS   TTN        NDGT

    ALIAS    TYPENS
;
```

Legend

- **TYPEA/TYPEI/TYPEN/TYPEN24/TYPEIS/TYPENS**—Global title translation type
- **TTN**—Name of the global title translation type
- **NDGT**—Number of digits in the global title translation type
- **ALIAS**—Alias global title translation type

Related Commands

dlt-tt, *ent-tt*

rtrv-ttmap

Display Translation Type Mapping

Use this command to display a mapped SS7 message translation type (TT) for a given gateway linkset name. This command can be used to display the identification of the type of allowed global title translation in the SS7 message before and after translation type mapping, see which linkset the mapping applies to, and see whether the mapping applies to incoming or outgoing messages.

Parameters

ett (optional)

Translation type before mapping. The identification of the type of allowed global title translation in the SS7 message *prior to* translation type mapping. This attribute is the decimal representation of the 1-octet binary field used by the SS7 protocol to identify the translation type.

Range:

0 - 255

Default:

Display all types allowed

io (optional)

Incoming or outgoing. The system uses this parameter to indicate whether the translation type mapping data provisioned for the gateway linkset is for SS7 messages *received* or *sent* on the linkset.

Range:

i

incoming

o

outgoing

Default:

Both incoming and outgoing

lsn (optional)

Linkset name

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

Default:

Display all

Example

```
rtrv-ttmap
rtrv-ttmap:lsn=nc001
rtrv-ttmap:lsn=nc001:io=i:ett=128
rtrv-ttmap:io=i:ett=128
rtrv-ttmap:ett=128
rtrv-ttmap:ett=40
```

Dependencies

The linkset must be defined.

The memory space accounting report (MSAR) is not produced if the io or ett parameter is specified, because the statistics presented may be misleading.

Notes

The order of display is by linkset index + I/O + ETT.

Output

`rtrv-ttmap`

```
rlghncxa03w 03-11-22 11:39:44 EST  EAGLE 30.0.0
LSN         IO  ETT  MTT
nc001       I   047  032
nc001       I   128  055
nc001       I   238  128
nc001       I   254  016
nc001       O   016  254
```

```
    nc001       O   128  238
    TTMAP table for nc001 is (6 of 64) 9% full

    nc002       I   128  055
    nc002       I   238  128
    nc002       O   128  238
    TTMAP table for nc002 is (3 of 64) 5% full

    lsi1        I   001  142
    lsi1        O   142  001
    TTMAP table for lsi1 is (2 of 64) 3% full

    lsi2        I   238  128
    TTMAP table for lsi2 is (1 of 64) 2% full

    lsi3        I   254  016
    TTMAP table for lsi3 is (1 of 64) 2% full

    lsn1        O   016  254
    lsn1        O   128  238
    TTMAP table for lsn1 is (2 of 64) 3% full

    lsn2        I   128  055
    lsn2        I   238  128
    lsn2        O   128  238
    TTMAP table for lsn2 is (3 of 64) 5% full
;
```

`rtrv-ttmap:lsn=nc001`

```
    rlghncxa03w  03-11-22 12:02:36 EST  EAGLE 30.0.0
    LSN         IO  ETT  MTT
    nc001       I   047  032
    nc001       I   128  055
    nc001       I   238  128
    nc001       I   254  016
    nc001       O   016  254
    nc001       O   128  238
    TTMAP table for nc001 is (6 of 64) 9% full
;
```

`rtrv-ttmap:lsn=nc001:io=i:ett=128`

```
    rlghncxa03w 03-11-22 12:04:21 EST  EAGLE 30.0.0
    LSN         IO  ETT  MTT
    nc001       I   128  055
;
```

`rtrv-ttmap:io=i:ett=128`

```
    rlghncxa03w 03-11-22 12:06:13 EST  EAGLE 30.0.0
    LSN         IO  ETT  MTT
    nc001       I   128  055
    nc002       I   128  055
    lsn2        I   128  055
;
```

```
rtrv-ttmap:ett=128
```

```
    rlghncxa03w 03-11-22 12:41:21 EST  EAGLE 30.0.0
    LSN         IO  ETT  MTT
    nc001       I   128  055
    nc001       O   128  238
    nc002       I   128  055
    nc002       O   128  238
    lsn1        O   128  238
    lsn2        I   128  055
    lsn2        O   128  238
;
```

```
rtrv-ttmap:ett=40
```

```
    rlghncxa03w 03-11-07 16:12:38 EST  EAGLE 30.0.0
    LSN         IO  ETT  MTT
    No mapped translation types defined for ETT specified.
;
```

Legend

- **LSN**—Linkset name
- **IO**—Incoming or outgoing linkset
- **ETT**—Translation type before mapping
- **MTT**—Mapped translation type

Related Commands

chg-ttmap, *dlt-ttmap*, *ent-ttmap*

rtrv-ttr-msg

Retreive Configured TTR messages

Use this command to display the configured Triggerless TCAP Relay message parameter values.

Parameters

msgn (mandatory)

Message number. This parameter specifies the number of the TTR message.

Range:

1 - 10

Default:

The values for all TTR messages are displayed.

Example

```
rtrv-ttr-msg:msgn=1
```

Dependencies

The Prepaid IDP Query Relay feature must be enabled before this command is entered.

Output

`rtrv-ttr-msg:msgn=1`

```
tekelecstp 08-05-05 17:36:25 EST  EAGLE 39.0.0
MSG = 1           TCAP_TYPE = CAP        ACTIVE = YES
     SK = 00006b00        BCSM = 02

     CGPA_GT = 2
     CGPA_GT_NAI = 4      CGPA = 0123456789abcde

     CDPA_GT = 2
     CDPA_GT_NAI = 8      CDPA = 12457896

     CGPN_NAI = 4         CGPN = 01234567890abcdef
     CDPN_NAI = 9         CDPN = 8764321

     LAC = abcdef
```

`rtrv-ttr-msg:msgn=2`

```
tekelecstp 11-10-05 11:43:13 EST  EAGLE 44.0.0

MSG = 2           TCAP_TYPE = INAP        ACTIVE = YES
     SK = 00006b00        BCSM = 02

     CGPA_GT = 2
     CGPA_GT_NAI = 4      CGPA = 1234567abcde

     CDPA_GT = 2
     CDPA_GT_NAI = 4      CDPA = 1234567

     CGPN_NAI = 4         CGPN = none
     CDPN_NAI = 4         CDPN = 9876543

     LAC = abcdef
```

Related Commands

chg-ttr-msg, *tst-msg*

rtrv-ttropts

Retrieve TTR Options

Use this command to display all of the Triggerless TCAP Relay options that are cofigured in the database.

Parameters

This command has no parameters.

Example

```
rtrv-ttropts
```

Dependencies

The Prepaid IDP Query Relay feature must be enabled before this command can be entered.

Notes

None

Output

This output example displays the default mapping values for NAI2TON MAP and TON2NAI MAP.

```
rtrv-ttropts
```

```
tekelecstp 11-05-10 15:46:44 EST  EAGLE 44.0.0

Command entered at terminal #4.
TTR OPTIONS
------------------------------------------------------------
CDPN DETAILS            CGPN DETAILS
NPTYPE  rnsp            CGNPTYPE     rnsp
SNAI    incoming        CGSNAI       incoming

CGPACCCK        nonintl
DLMA            NONE
DLMB            NONE
DLMC            NONE
DFLTRN          NONE
SPORTTYPE       none
SPFILL          off
RNSPFILL        off
CGPNSKRTG       no
DRAFRMT         grn
DRANAI          3
CDRNRSP         connect
CDSPRSP         relay
CDNOENTITYRSP   continue
CDDNNOTFNDRSP   release
CDDRA           rndn
CDDRANAI        natl
CDDRANP         e164
CDRELCAUSE      31
CDCNP           off
CGRNRSP         connect
CGSPRSP         relay
CGNOENTITYRSP   continue
CGDNNOTFNDRSP   release
CGDRA           rndn
CGDRANAI        natl
CGDRANP         e164
CGRELCAUSE      31
```

```
    CGCNP           off

    NAI2TON MAP
    NAI TON  NAI TON  NAI TON  NAI TON  NAI TON  NAI TON  NAI TON  NAI TON
      0   0    1   0    2   0    3   2    4   1    5   0    6   0    7   0
      8   0    9   0   10   0   11   0   12   0   13   0   14   0   15   0
     16   0   17   0   18   0   19   0   20   0   21   0   22   0   23   0
     24   0   25   0   26   0   27   0   28   0   29   0   30   0   31   0
     32   0   33   0   34   0   35   0   36   0   37   0   38   0   39   0
     40   0   41   0   42   0   43   0   44   0   45   0   46   0   47   0
     48   0   49   0   50   0   51   0   52   0   53   0   54   0   55   0
     56   0   57   0   58   0   59   0   60   0   61   0   62   0   63   0
     64   0   65   0   66   0   67   0   68   0   69   0   70   0   71   0
     72   0   73   0   74   0   75   0   76   0   77   0   78   0   79   0
     80   0   81   0   82   0   83   0   84   0   85   0   86   0   87   0
     88   0   89   0   90   0   91   0   92   0   93   0   94   0   95   0
     96   0   97   0   98   0   99   0  100   0  101   0  102   0  103   0
    104   0  105   0  106   0  107   0  108   0  109   0  110   0  111   0
    112   0  113   0  114   0  115   0  116   0  117   0  118   0  119   0
    120   0  121   0  122   0  123   0  124   0  125   0  126   0  127   0

    TON2NAI MAP
    TON NAI
      0   2
      1   4
      2   3
      3   2
      4   2
      5   2
      6   2
      7   2

;
```

Related Commands

chg-ttropts

rtrv-uaps

Retrieve UA Parameter Set

Use this command to retrieve one UA parameter set or all UA parameter sets.

Parameters

set (optional)

The UA parameter set to be displayed.

Range:

1 - 10

Default:

Display all

Example

`rtrv-uaps`

`rtrv-uaps:set=1`

Dependencies

None

Notes

This command can be canceled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

`rtrv-uaps:set=1`

```
    eagle2 15-03-15 23:29:52 MST  EAGLE5 46.2.0-65.42.0
    5425.1472    CARD 1102     INFO    Prolonged SCTP congestion Restart
assoc
                 Report Date:15-03-15  Time:23:29:52
    SET  TIMER      TVALUE  PARM      PVALUE
     10      1           0     1           3
     10      2        3000     2           0
     10      3       10000     3           0
     10      4        5000     4           0
     10      5           0     5           0
     10      6           0     6           0
     10      7           0     7           0
     10      8           0     8           0
     10      9           0     9           0
     10     10           0    10           0
    TIMER 2: False IP Connection Congestion Timer, max time an
             association can be congested before failing due to false
             congestion. SS7IPGW and IPGWI applications enforce
             0-30000(ms). Not supported on IPSG application.
    TVALUE : Valid range = 32-bits

    TIMER 3: UA HeartBeat Period Timer T(beat), time (ms) between sending
             of BEAT msgs by NE. IPSG, SS7IPGW and IPGWI applications
             enforce 100(ms)-60000(ms).
    TVALUE : Valid range = 32-bits

    TIMER 4: UA HeartBeat Received Timer T(beat ack), timeout period for
             response BEAT ACK msgs by NE. IPSG, SS7IPGW and IPGWI
             applications enforce 100(ms)-10000(ms).
    TVALUE : Valid range = 32-bits

TIMER 5: Timeout period for SCTP TX buffer full and stuck            condition
 during SCTP congestion enforce            200(ms)-15000(ms).    TVALUE : Valid
 range = 32-bits

    PARM  1: ASP SNM options.  Each bit is used as an enabled/disabled
             flag for a particular ASP SNM option. Not supported on IPSG
             application.
    PVALUE : Valid range = 32-bits
             BIT                                  BIT VALUE
```

```
          0=Broadcast                          0=Disabled, 1=Enabled
          1=Response Method                    0=Disabled, 1=Enabled
          2-5=Reserved
          6=Broadcast Congestion Status Change 0=Disabled, 1=Enabled
          7-31=Reserved

PARM  2: ASP/AS Notification options.  Each bit is used as an
          enabled/disabled flag for a particular ASP/AS
          Notification option.  Not supported on IPSG application.
PVALUE : Valid range = 32-bits
          BIT                                  BIT VALUE
          0=ASP Active Notifications           0=Disabled, 1=Enabled
          1=ASP Inactive Notifications         0=Disabled, 1=Enabled
          2=ASP AS State Query                 0=Disabled, 1=Enabled
          3-31=Reserved

PARM  3: UA Serviceability Options.  Each bit is used as an
          enabled/disabled flag for a particular UA Serviceability
          option. Supported on IPSG, SS7IPGW, and IPGWI applications.
          UA Graceful Shutdown supported on IPSG for M3UA only.
PVALUE : Valid range = 32-bits
          BIT                                  BIT VALUE
          0=UA Heartbeats                      0=Disabled, 1=Enabled
          1=UA Graceful Shutdown               0=Disabled, 1=Enabled
          2-31=Reserved

PARM  4: SCTP Payload Protocol Indicator byte order option. Bit indicates
          PPI value is RCV/TX in Big Endian or Little Endian byte format.
          Supported on IPSG-M2PA associations only.
PVALUE : Valid range = 32-bits
          BIT                              BIT VALUE
          0=Payload Protocol Indicator     0=Big Endian, 1=Little Endian
          1-31=Reserved
```

Related Commands

chg-uaps

rtrv-uim-acthresh Retrieve Activity Level Threshold for STP UIM Activity Reporting

Use this command to query the UIM number, limit, and interval period parameters that are used to report the thresholding of UIM messages.

Parameters

uimn (optional)

The UIM number.

Range:

1000 - 1499

Default:

Display all

Example

Display UIM number 1333 threshold:

`rtrv-uim-acthresh:uimn=1333`

Display the threshold for all UIMs that have been set:

`rtrv-uim-acthresh`

Dependencies

A valid value must be specified for the uimn parameter.

The value specified for the uimn parameter must already exist in the system Trouble Text Table.

Notes

None

Output

`rtrv-uim-acthresh:uimn=1333`

```
rlghncxa03w 03-11-01 08:50:12 EST  EAGLE 31.3.0
UIMN    LIMIT    INTRVL
1333     100      5
The UIM Threshold Table is (1 of 499) 1% full.
```

`rtrv-uim-acthresh`

```
rlghncxa03w 03-11-01 08:50:12 EST  EAGLE 31.3.0
UIMN    LIMIT    INTRVL
1333     100      5
1444     200      15
1155     50       30
The UIM Threshold Table is (3 of 499) 1% full.
```

Related Commands

dlt-uim-acthresh, *set-uim-acthresh*

rtrv-user

Retrieve User

Use this command to show the information about the user currently logged on to the terminal from which this command was entered.

Parameters

This command has no parameters.

Example

```
rtrv-user
```

Dependencies

None

Notes

The password is not shown.

This command shows the command class privileges for the user logged onto the system. No other users are shown.

All users have access to this command.

Output

This example shows the output when the Command Class Management feature is turned on:

```
rtrv-user
```

```
    rlghncxca03w 09-01-07   09:50:17  EST  EAGLE 40.1.0
    user id          age page uout rev link sa  sys pu  db  dbg
    manny            36  60   60   NO  YES  YES YES YES YES YES

            u01 u02 u03 u04 u05 u06 u07 u08 u09 u10 u11 u12 u13 u14 u15 u16
            NO  NO  NO  NO  YES YES YES YES YES YES YES YES YES YES YES YES

            u17 u18 u19 u20 u21 u22 u23 u24 u25 u26 u27 u28 u29 u30 u31 u32
            YES YES YES YES YES YES YES YES YES YES YES NO  NO  NO  NO  YES
;
```

This example shows the output when the Command Class Management feature is not turned on:

```
rtrv-user
```

```
    rlghncxca03w 09-01-07   09:50:17  EST  EAGLE 40.1.0
    USER ID          LINK  SA SYS  PU  DB DBG
    eagle             YES YES YES YES YES YES

    USER ID          AGE PAGE UOUT REV
    eagle            750 0    0     NO
;
```

Legend

- **USER ID**—Name of the user

- **AGE**—Current age, in days, of the password associated with this user ID. If the password age is greater than 999 days, then 999 is displayed.
- **PAGE**—Maximum password age established for this user ID. When AGE becomes greater than PAGE, the system forces the user to change the password at the next login. An asterisk (*) displayed after the value indicates that the system-wide default page parameter value, (see the `chg-secu-dflt` command), is in effect for the user ID.
- **UOUT**—User ID aging interval, in days. If the user ID is not used (that is, no successful login) for longer than this interval, the system does not allow a login. An asterisk (*) displayed after the value indicates that the system-wide default uout parameter value, (see the `chg-secu-dflt` command), is in effect for the user ID.
- **REV**—Shows whether the user ID is denied login (revoked). YES indicates that the user ID is revoked, NO indicates that the user ID is not revoked.
- **LINK**—Shows whether the user has access to all commands in the Link Maintenance command class
- **SA**—Shows whether the user has access to all commands in the Security Administration command class
- **SYS**—Shows whether the user has access to all commands in the System Maintenance command class
- **PU**—Shows whether the user has access to all commands in the Program Update command class
- **DB**—Shows whether the user has access to all commands in the Database Administration command class
- **DBG**—Shows whether the user has access to all commands in the Debug command class

If the Command Class Management feature is enabled and turned on, the following fields are displayed:

- **U01 - U32**—Default configurable command class names. If user-defined names have been provisioned, they will appear instead of the default names.

Related Commands

act-user, *chg-pid*, *chg-user*, *dact-user*, *dlt-user*, *ent-user*, *login*, *logout*, *rept-stat-user*, *rtrv-secu-user*

rtrv-vendid

Retrieve Vendor ID

Use this command to retrieve a list of Vendor ID entries from the VENDID table, for the GSM MAP SRI Redirect to Serving HLR feature.

Parameters

num (optional)

Number of Vendor ID entries to be retrieved.

Range:

1 - 500

Default:

500

vendnum (optional)

Vendor Number

Range:

1 - 32

Example

```
rtrv-vendid
```

```
rtrv-vendid:vendnum=15
```

```
rtrv-vendid:num=100
```

Dependencies

The GSM MAP SRI Redirect feature must be enabled before this command can be entered.

Notes

None.

Output

This example shows output when the command is entered with no parameter. Vendor Types are listed in numerical order. Vendor Numbers for each Vendor Type are listed in numerical order, followed by the Vendor ID for each Vendor Number.

```
rtrv-vendid
```

```
    tekelecstp 14-09-21 16:11:21 EST  EAGLE 46.1.0
    Vendor   Vendor  Vendor
    Type     Number  ID
    --------------------------------
    1        1       123123123456789
    1        1       1234567890abcde
    1        2       112233445566778
    1        2       214365870912543
    2        3       098765432112345
    2        3       098767890143251
    15       1       098888869321111
    32       32      098888811899721

    VENDID table is (8 of 500) 2% full


    Vendor ID Length = 15


;
```

This example shows output when a Vendor number is specified. Vendor Type and Vendor IDs for the specified Vendor number are listed in numerical order. The table capacity line shows the total number of entries in use, not just the number of entries displayed.

```
rtrv-vendid:vendnum=32
```

```
    tekelecstp 14-05-30 17:41:50 EST  EAGLE 46.1.0
    Vendor   Vendor  Vendor
    Type     Number  ID
    -------------------------------
    32       32      899721

    VENDID table is (37 of 500) 7% full


    Vendor ID Length = 6
;
```

This example shows the output when the number of Vendor IDs to be retrieved is specified with the num parameter.

```
rtrv-vendid:num=5
```

```
    tekelecstp 14-07-14 14:46:47 EST  EAGLE 46.1.0
    Vendor   Vendor  Vendor
    Type     Number  ID
    -------------------------------
    1        1       886932
    2        1       816932
    2        1       886942
    3        1       811932
    3        3       886989

    VENDID table is (38 of 500) 8% full


    Vendor ID Length = 6
;
```

Related Commands

dlt-vendid, *ent-vendid*

rtrv-vflx-cd

Retrieve V-Flex Call Decision Entry

Use this command to retrieve call decision information.

Parameters

cdn (optional)

Call decision name. The name of the call decision entry.

Range:

ayyy

1 alphabetic character followed by 3 alphanumeric characters

vmdig (optional)

Voice mail number or voice mail prefix digits. The voice mail number or voice mail digits associated with the call decision entry.

Range:

1 - 15 digits

Valid digits are *0-9, A-F, a-f*

Example

This command retrieves all entries from the Call Decision table.

`rtrv-vflx-cd`

This command retrieves a specific Call Decision entry.

`rtrv-vflx-cd:cdn=cdn1`

This command retrieves all call decision entries with a specified voice mail number or voice mail prefix digits.

`rtrv-vflx-cd:vmdig=123456789abcd2`

Dependencies

The cdn and vmdig parameters cannot be specified together in the command.

The value specified for the cdn parameter cannot be a reserved word, such as *none*.

The value specified for the cdn parameter must already exist in the Call Decision table.

The V-Flex feature must be enabled before this command can be entered.

Notes

This command can be cancelled using the **F9** function key or the `canc-cmd` command.

Output

`rtrv-vflx-cd`

```
tekelecstp 08-05-01 09:36:55 EST  EAGLE 39.0.0

RDI     DN Status   BCAP   VM Number/Prefix   VMRN Index   CD Name
---     ---------   ----   ----------------   ----------   -------
DIR     NFND        0      1                  9            c100
DIR     NFND        0      12                 9            c101
DIR     NFND        0      123                9            c102
DIR     NFND        0      1234               9            c103
DIR     FND         0      1                  9            c200
DIR     *           1      123                9            c201
DIR     *           2      2345678            9            c203
DIR     *           3      456789a            9            c204
DIR     *           4      56789ab            9            c205
REDIR   *           1      123456789abcdef    9            c202
```

```
    VFLEX Call Decision table is (10 of 4950) 1% full.

;
```

`rtrv-vflx-cd:cdn=c100`

```
    tekelecstp 08-05-31 17:04:25 EST  EAGLE 39.0.0
    RDI     DN Status   BCAP   VM Number/Prefix   VMRN Index   CD Name
    ---     ---------   ----   ----------------   ----------   -------
    DIR     NFND        0      1                  9            c100

    VFLEX Call Decision table is (7 of 4950) 1% full.

;
```

This example shows how all Call Decision Table entries whose digits match the starting digits of the specified VMDIG will be displayed.

`rtrv-vflx-cd:vmdig=123456789abcdef`

```
    tekelecstp 08-05-31 17:05:49 EST  EAGLE 39.0.0
    RDI     DN Status   BCAP   VM Number/Prefix   VMRN Index   CD Name
    ---     ---------   ----   ----------------   ----------   -------
    DIR     NFND        0      1                  9            c100
    DIR     NFND        0      12                 9            c101
    DIR     NFND        0      123                9            c102
    DIR     NFND        0      1234               9            c103
    DIR     FND         0      1                  9            c200
    DIR     *           1      123                9            c201
    REDIR   *           1      123456789abcdef    9            c202

    VFLEX Call Decision table is (7 of 4950) 1% full.
;
```

Legend

- **RDI**—Redirection Indicator - whether the call has been redirected or not (0 - Not redirected: VM retrieval or direct dial VM deposit, 1 - Redirected: VM deposit)
- **DN Status**—Status of the DN lookup in the RTDB - found in the RTDB, not found in the RTDB, don't care whether found in the RTDB or not
- **BCAP**—INAP/CAP Bearer Capabilities
- **VM Number/Prefix**—Voice Mail Number or Voice Mail Prefix associated with a Call Decision entry
- **VMRN Index**—Index into the list of Routing Numbers associated with a specific VMSID entry
- **CD Name**—Name of the Call Decision entry

Related Commands

chg-vflx-cd, *dlt-vflx-cd*, *ent-vflx-cd*

Use this command to retrieve the data that is used for number conditioning.

Parameters

This command has no parameters.

Example

This command displays V-Flex Options Table data.

```
rtrv-vflx-opts
```

Dependencies

The V-Flex feature must be enabled before this command can be specified.

Notes

If no DRANAI value or DRANAIV value has been provisioned, the command output displays the DRANAIV default value of 0.

Output

This example shows the output with default V-Flex Options:

```
rtrv-vflx-opts
```

```
    tekelecstp 08-05-04 07:53:46 EST  EAGLE 39.0.0

    VFLEX OPTIONS
    ---------------------
    DRANPV      = 0
    DRANAIV     = 0
    DRA         = RN
    NEQUERYONLY = OFF
    NETYPE      = VMSID
;
```

This example shows the output with some V-Flex Options provisioned:

```
rtrv-vflx-opts
```

```
    tekelecstp 08-05-04 07:55:30 EST  EAGLE 39.0.0

    VFLEX OPTIONS
    ---------------------
    DRANP       = E164
    DRANAI      = SUB
    DRA         = RN
    NEQUERYONLY = ON
    NETYPE      = GRN
;
```

Legend

- **DRANP**—Numbering plan for the destination routing address
- **DRANAI**—Nature of address indicator for the destination routing address
- **DRA**—Format of the destination routing address
- **NEQUERYONLY**—Network Entity Query Only option
- **NETYPE**—Network Entity Type for the NEQUERYONLY option

Related Commands

chg-vflx-opts

rtrv-vflx-rn

Retrieve V-Flex Routing Number

Use this command to retrieve voice mail routing numbers and routing number names and to view the associated reference count. The V-Flex feature must be enabled before this command can be entered.

Parameters

refcnt (optional)

Reference count. This parameter specifies whether to display the reference count.

Range:

yes

display the reference count

rn (optional)

Routing number. A voice mail routing number.

Range:

1-15 digits

Valid digits are *0-9, A-F, a-f*.

rnname (optional)

Routing number name. The name associated with a voice mail routing number.

Range:

ayyyyyyy

1 alphabetic character followed by 7 alphanumeric characters.

Example

```
rtrv-vflx-rn:rnname=rn01
rtrv-vflx-rn:rn=123456789ABC
```

```
rtrv-vflx-rn
rtrv-vflx-rn:rnname=rn01:refcnt=yes
rtrv-vflx-rn:rn=123456789ABC:refcnt=yes
```

Dependencies

The V-Flex feature must be enabled before this command can be entered.

The value specified for the rnname parameter must already exist in the Routing Number table.

The rn and rnname parameters cannot be specified together in the command.

The value specified for the rnname parameter cannot be a reserved word, such as *none*.

The value specified for the rn parameter must already exist in the Routing Number table.

Notes

This command can be cancelled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

This command shows the output for a routing number name:

`rtrv-vflx-rn:rnname=rn01`

```
    tekelecstp 08-05-29 15:07:01 EST  EAGLE 39.0.0

    RN Name    Routing Number
    -------    --------------
    rn01       123456789abcdef

    VFLEX Routing Number table is (2 of 10000) 1% full.

;
```

This command shows all of the entries in the Routing Number table:

`rtrv-vflx-rn`

```
    tekelecstp 08-05-29 15:07:01 EST  EAGLE 39.0.0

    RN Name    Routing Number
    -------    --------------
    rn01       123456789abcd01
    rn02       123456789abcd02
    rn03       123456789abcd03
    rn04       123456789abcd04
    rn05       123456789abcd05
    rn06       123456789abcd06
    rn07       123456789abcd07
    rn08       123456789abcd08
    rn09       123456789abcd09
```

```
    rn10       123456789abcd0A
    rn11       123456789abcd0B
    rn12       123456789abcd0C
    rn13       123456789abcd0D
    rn14       123456789abcd0E
    rn15       123456789abcd0F
    .    .
    .    .
    .    .
    .    .
    rn10000    100000000abcdef

    VFLEX Routing Number table is (10000 of 10000) 100% full.

;
```

This command shows the reference count for a specified routing number name:

`rtrv-vflx-rn:rnname=rn01:refcnt=yes`

```
    tekelecstp 08-05-29 15:07:01 EST  EAGLE 39.0.0

    RN Name    Routing Number     Ref Count
    -------    --------------     ---------
    rn01       123456789abcdef    2

    VFLEX Routing Number table is (2 of 10000) 1% full.

;
```

This command shows the reference count for a specified routing number:

`rtrv-vflx-rn:rn=123456789ABC:refcnt=yes`

```
    tekelecstp 08-05-29 15:07:01 EST  EAGLE 39.0.0

    RN Name    Routing Number    Ref Count
    -------    --------------    ---------
    rn02       123456789abc      3

    VFLEX Routing Number table is (2 of 10000) 1% full.

;
```

Legend

- **RN Name**—Voice mail routing number name
- **Routing Number**—Voice mail routing number digits
- **Ref Count**—Number of VMSID table entries that refer to an routing number entry

Related Commands

chg-vflx-rn, *dlt-vflx-rn*, *ent-vflx-rn*

rtrv-vflx-vmsid

Retrieve V-Flex VMSID Entry

Use this command to retrieve information for voice mail server IDs.

Parameters

id (optional)

The voice mail server ID.

Range:

1-15 digits, *dflt*

Valid digits are *0-9, A-F, a-f.*

dflt —a default set of routing numbers used when a query is received with an invalid MSISDN or an MSISDN that is not found in the RTDB

rnname (optional)

A routing number name associated with the voice mail server ID.

Range:

ayyyyyyy

1 alphabetic character followed by up to 7 alphanumeric characters.

Example

```
rtrv-vflx-vmsid
rtrv-vflx-vmsid:id=123456789012345
rtrv-vflx-vmsid:rnname=rn90
```

Dependencies

The value specified for the rnname parameter cannot be a reserved word, such as *none*.

The V-Flex feature must be enabled before this command can be entered.

The value specified for the rnname parameter must already exist in the Routing Number table.

The value specified for the id parameter must already exist in the VMSID table.

The rnname and id parameters cannot be specified together in the command.

Notes

This command can be cancelled using the **F9** function key or the `canc-cmd` command. See `canc-cmd` for more information.

Output

This command shows the output for all the entries from the VMSID table:

`rtrv-vflx-vmsid`

```
   rlghncxa03w 08-05-07 11:11:28 EST  EAGLE 39.0.0
   VMS ID           IDX0      IDX1      IDX2      IDX3      IDX4      IDX5
   ---------------  --------  --------  --------  --------  --------  --------
   123456789abcdef  RN000000  RN000001  RN000002  RN000003  RN000004  RN000005
      IDX6      IDX7      IDX8      IDX9
    --------  --------  --------  --------
    RN000006  RN000007  RN000008  RN000009

   VMS ID           IDX0      IDX1      IDX2      IDX3      IDX4      IDX5
   ---------------  --------  --------  --------  --------  --------  --------
   123456789012abc  RN000010  RN000011  RN000012  RN000013  RN000014  RN000015

      IDX6      IDX7      IDX8      IDX9
    --------  --------  --------  --------
    RN000016  RN000017  RN000018  RN000019

   VMS ID           IDX0      IDX1      IDX2      IDX3      IDX4      IDX5
   ---------------  --------  --------  --------  --------  --------  --------
   a23456789012abc  RN000020  RN000021  RN000022  RN000023  RN000024  RN000025
      IDX6      IDX7      IDX8      IDX9
    --------  --------  --------  --------
    RN000026  RN000027  RN000028  RN000029

    VFLEX VMSID table is (3 of 1000) 1% full.
;
```

This command shows the output for an entry with the default voice mail server ID:

`rtrv-vflx-vmsid:id=dflt`

```
   tekelecstp 08-05-29 15:07:01 EST  EAGLE 39.0.0
   VMS ID           IDX0      IDX1      IDX2      IDX3      IDX4      IDX5
   ---------------  --------  --------  --------  --------  --------  --------
   dflt             RN000040  RN000041  RN000042  RN000043  RN000044  RN000045

      IDX6      IDX7      IDX8      IDX9
    --------  --------  --------  --------
    RN000046  RN000047  RN000048  RN000049
    VFLEX VMSID table is (3 of 1000) 1% full.
;
```

Legend

- **VMS ID**—Voice Mail Server ID.
- **IDX0**—Routing Number Name for index 0
- **IDX1**—Routing Number Name for index 1
- **IDX2**—Routing Number Name for index 2

- **IDX3—**Routing Number Name for index 3
- **IDX4**—Routing Number Name for index 4
- **IDX5**—Routing Number Name for index 5
- **IDX6**—Routing Number Name for index 6
- **IDX7**—Routing Number Name for index 7
- **IDX8**—Routing Number Name for index 8
- **IDX9**—Routing Number Name for index 9

Related Commands

chg-vflx-vmsid, *dlt-vflx-vmsid*, *ent-vflx-vmsid*

set-date

Set Date

Use this command to set the date in the system.

Parameters

date (mandatory)

The system date, to be reflected on all reports and output messages.

Range:

000101 - 991231

(in the form *yymmdd*, where *yy*=year, *mm*=month, *dd*=day)

Example

```
set-date:date = 010307
```

Dependencies

None

Notes

None

Output

```
set-date:date = 010307
```

```
    rlghncxa03w  03-11-07  11:11:28 EST  EAGLE 31.3.0
    Date set complete.
;
```

Related Commands

set-time

set-gtwy-acthresh — Set Gateway Thresholds

Use this command to set or change the level of activity thresholds to be used when reporting gateway screening activity. The STP reports screening activity only if the threshold is set and only if the threshold is reached. The thresholds are set on a linkset basis.

Parameters

intrvl (mandatory)

Monitor interval. The examination period, in minutes, during which the gateway screening activity thresholds are to be tested.

Range:

5, 10, 15, 20, 30

System Default:

0 -Indicates that thresholds are not set

lsn (mandatory)

Linkset name

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

recv (optional)

Received message threshold. The threshold for MSUs received on the gateway linkset.

Range:

0 - 999999

Default:

The current value

System Default:

0

rej (optional)

Reject threshold. The threshold for MSUs rejected on the gateway linkset because of screening.

Range:

0 - 999999

Default:

The current value

System Default:

0

Example

This example shows how to set the linkset WY644368 rejection threshold to 100, with a 15 minute interval.

```
set-gtwy-acthresh:lsn=wy644368:rej=100:intrvl=15
```

This example shows how to set the linkset WY644368 message threshold to 1000 and the rejection threshold to 300, with an interval of 20 minutes.

```
set-gtwy-acthresh:lsn=wy644368:intrv=20:rej=300:recv=1000
```

This example shows how to set the linkset WY644368 so that no activity messages are produced.

```
set-gtwy-acthresh:lsn=wy644368:intrv=5:rej=0:recv=0
```

Dependencies

At least one optional parameter must be specified.

The linkset specified must exist in the gateway linkset entity set of the requesting system.

The linkset specified must exist in the active database.

A valid value must be specified for the intervl parameter.

Notes

None

Output

```
set-gtwy-acthresh:lsn=wy644368:rej=100:intrvl=15
```

```
    rlghncxa03w 03-11-18 08:50:12 EST  EAGLE 31.3.0
    SET-GTWY-TRHSHLD: MASP A - COMPLTD
;
```

Related Commands

rtrv-gtwy-acthresh

set-scrrej-prmtrs — Set Parameters for SS7 Message-Rejection Reporting

Use this command to change the STP values that limit the display of MSUs rejected because of gateway screening notification messages that could become excessive. The new values overwrite the existing values.

Parameters

intrvl (mandatory)

Monitor interval. The examination period, in minutes, during which the gateway screening activity thresholds are to be tested.

Range:

5, 10, 15, 20, 30

System Default:

5

limit (mandatory)

Threshold not to be exceeded.

Range:

0 - 9999

System Default:

9999

Example

```
set-scrrej-prmtrs:limit=200:intrvl=10
```

Dependencies

A valid value must be specified for the intrvl parameter.

Notes

None

Output

```
set-scrrej-prmtrs:limit=200:intrvl=10
```

```
    rlghncxa03w 03-11-18 08:50:12 EST  EAGLE 31.3.0
    SET-SCRREJ-PRMTRS: MASP A - COMPLTD
;
```

Related Commands

rtrv-gtwy-acthresh, *rtrv-gtwy-prmtrs*, *set-gtwy-acthresh*

Use this command to set the system clock. The clock is used to determine when measurements collection takes place as well as several other time-driven events.

Parameters

time (mandatory)

The system time that is to be reflected on all reports and output messages.

Range:

0000 - 2359

hhmm where *hh* = 00-23 (hour) and *mm* =*00-59*(minute)

tz (optional)

The time zone

Range:

est, edt, cst, cdt, mst, mdt, pst, pdt, hst, hdt, ast, adt, gmt, wet, west, utc, bst, cet, cest, met, mest, fwt, fst, eet, eest, sast, msk, msd, ist, idt, cct, awst, awdt, rok, acst, acdt, aest, aedt, nzst, nzdt, akst, akdt, nst, ndt, bra

The time zones are described in *Table 51: Time Zones Set by the set-time Command*.

Default:

Current value

Table 51: Time Zones Set by the set-time Command

Abbreviation	Time Zone	Abbreviation	Time Zone
est	Eastern Standard Time	edt	Eastern Daylight Time
cst	Central Standard Time	cdt	Central Daylight Time
mst	Mountain Standard Time	mdt	Mountain Daylight Time
pst	Pacific Standard Time	pdt	Pacific Daylight Time
hst	Hawaiian Standard Time	hdt	Hawaiian Daylight Time
ast	Atlantic Standard Time	adt	Atlantic Daylight Time
gmt	Greenwich Mean Time	wet	Western European Time
west	Western European Summer Time	utc	Universal Time Coordinated

Abbreviation	Time Zone	Abbreviation	Time Zone
bst	British Summer Time	cet	Central European Time
cest	Central European Summer Time	met	Middle European Time
mest	Middle European Summer Time	fwt	French Winter Time
fst	French Summer Time	eet	Eastern European Time
eest	Eastern European Summer Time	sast	South African Standard Time
msk	Moscow Time	msd	Moscow Summer Time
ist	India Standard Time	idt	India Daylight Time
cct	China Coast Time	awst	Australian Western Standard Time
awdt	Australian Western Daylight Time	rok	Republic of Korea
acst	Australian Central Standard Time	acdt	Australian Central Daylight Time
aest	Australian Eastern Standard Time	aedt	Australian Eastern Daylight Time
nzst	New Zealand Standard Time	nzdt	New Zealand Daylight Time
akst	Alaska Standard Time	akdt	Alaska Daylight Time
nst	Newfoundland Standard Time	ndt	Newfoundland Daylight Time
bra	Brazil Standard Time		

Example

```
set-time:time=1432:tz=est
```

Dependencies

None

Notes

None

Output

```
set-time:time=1432:tz=est
```

```
    rlghncxa03w  02-11-07  14:32:28 EST  EAGLE 30.0.0
    Time set complete.
;
```

Related Commands

set-date

set-uim-acthresh — Set Activity Level Thresholds for STP UIM Activity Reporting

Use this command to set or change the level-of-activity threshold for reporting UIM messages. The system suppresses the generation of UIM messages when message generation exceeds the threshold that was defined for the interval period. The values are set within five seconds after the command was entered. Any previous count is cleared and the new or changed threshold and limit is enforced. Refer to the *Database Administration Manual – System Management* for additional information.

Parameters

intrvl (mandatory)

The monitor interval in minutes.

Range:

5, 10, 15, 20, 25, 30

Default:

No change to the current value

uimn (mandatory)

The UIM number.

Range:

1000 - 1499

force (optional)

Required to set the limit parameter to *0* for a given interval.

Caution: Setting the limit to *0* turns off all occurrences of the specified UIM. Use this manner of creating thresholds only if you are certain you have specified the correct UIM.

Range:

yes

no

Default:

none

limit (optional)

The message threshold.

Caution: Setting the limit to *0* turns off all occurrences of the specified UIM. This can be dangerous if the wrong UIM number is specified by mistake. It is highly recommended that thresholds for UIMs are not set in this manner, but the ability is provided for certain extreme cases. The force parameter must be specified to specify limit=0, and an additional scroll area message is issued.

Range:

0 - 9999

Default:

No change to the current value

Example

This example sets UIM number 1333 threshold to 100 in a 5-minute interval:

```
set-uim-acthresh:uimn=1333:limit=100:intrvl=5
```

This example sets UIM number 1444 threshold to 200 in a 15-minute interval:

```
set-uim-acthresh:uimn=1444:limit=200:intrvl=15
```

Dependencies

At least one optional parameter must be specified.

A valid value must be specified for the uimn parameter.

A valid value must be specified for the limit parameter.

A valid value must be specified for the intrvl parameter.

The force=yes parameter must be specified before the limit=0 parameter can be specified for a given interval. Specifying limit=0 turns off all occurrences of the specified UIM. See the cautions under the force and limit parameters.

When creating a new UIM threshold, the limit and intrvl parameters must be specified.

The specified uimn parameter value must exist in the system Trouble Text table.

Notes

None

Output

```
set-uim-acthresh:uimn=1333:limit=100:intrvl=5
```

```
    rlghncxa03w 03-11-01 08:50:12 EST  EAGLE 31.3.0
    SET-UIM-ACTHRESH: MASP A - COMPLTD
;
```

Related Commands

dlt-uim-acthresh, *rtrv-uim-acthresh*

tst-bip

Test Board Identification PROM

Use this command to test each byte of the specified board identification PROM (BIP) by reading and writing to the PROM. The test is performed for the main assembly.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110, 1113, 1115

Example

```
tst-bip:loc=1211
```

Dependencies

The card location, frame, shelf, or slot must be within the allowed range.

The card location must be valid for the command.

The card specified by the loc parameter must be equipped in the database.

The card specified by the loc parameter must be in the OOS-MT-DSBLD state prior to BIP testing.

Notes

The specified card must be inhibited.

This command verifies that the PROM is good by writing and reading to the PROM. The `rtrv-bip` command show the level of the BIP, as well as the board part number, the revision number, and the serial number. If the `rtrv-bip` command fails, this indicates that communications to the card has failed, and the card should be replaced.

Output

`tst-bip:loc=1211`

```
    tekelecstp 10-02-20 17:10:32 CST  EAGLE 42.0.0
    Test Board Identification PROM  Location: 1211 - MBD  Packet: 1
    ------------------------------------------------------------------------
    BIP Passed
;
```

Related Commands

chg-bip-fld , *chg-bip-rec* , *rtrv-bip*

tst-disk

Test Disk

Use this command prior to an upgrade, or as a diagnostic tool, to test the integrity of an EAGLE fixed drive or removable media drive, at the specified location. The test is non-intrusive and non-destructive to the disk. A read-only test is executed for all logical blocks (LBAs) used on the specified target disk and a report identifying any bad or questionable LBAs is output.

Parameters

loc (mandatory)

The location of the disk to be tested.

Range:

1114

TDM

1116

TDM

1113

Latched USB port

1115

Latched USB port

disk (optional)

The disk that is being tested

Range:

remove

The removable drive

fixed

The fixed drive

usb

This parameter is to be used by Oracle personnel only.

partition (optional)

Portion of disk to be tested. This parameter specifies the individual physical disk partition (1, 2, 3, or 4) or all defined partitions for a given disk size up to a maximum of 4 partitions.

Range:

1, 2, 3, 4 —Tests the specified existing partition on the disk. Only the number or numbers for the partition or partitions that exist on the disk are valid. (For example, if the disk size allows only 2 partitions, partition=3 and partition=4 are invalid for that disk.)

all —Tests all existing partitions on the fixed disk or removable drive

Default:

all

Example

```
tst-disk:loc=1116
```

Dependencies

The card in the specified location (loc) must be an E5-TDM or E5-MCAP card.

The disk to be tested must be in service.

If a TDM location is specified, the TDM cannot be reserved (as when a copy-disk command is running).

The target drive must have low level format.

This command can be run simultaneously on both TDMs, if entered from different terminals.

The removable drive can be tested simultaneously with the standby TDM but not with the active TDM.

To test the removable cartridge when loc=1117 is specified, the disk must be inserted in the removable cartridge drive on the MDAL card.

The partition=3 and partition=4 values are invalid for a 4GB fixed drive. The only valid value for the 2.3 GB and 4.1 GB removable disks is partition=1

An error message will be generated for a disk that has been Formatted (`format-disk` command) but does not yet contain a DOS directory structure (created with the `copy-disk` command) when the partition= parameter is specified.

An E5-MCAP card must be installed before the disk=usb parameter can be specified.

This command cannot be entered when other database commands are running.

If an E5-TDM card is installed, then the disk=fixed parameter cannot be specified.

The disk to be tested must be available.

Notes

A physical fixed disk (TDM) or removable drive is formatted and given a DOS directory structure to define the number of physical partitions that the disk size can accommodate. (The logical partitions that contain database, backup, GPL, and measurements files are placed in these physical partitions, with no correlation between the physical numbers and the logical contents.)

For a fixed TDM disk, the partition parameter specifies the individual partition (1, 2, 3, or 4) or all existing partitions to be tested.

- One partition = 2 GB.
- The 4 GB drive contains two 2 GB partitions.
- The 9 GB drive and the 18 GB drive each contain four 2 GB partitions.
- The 9 GB drive contains four 2 GB partitions.
- Any disk space beyond the four 2 GB partitions is unused disk space (and always has been due to EAGLE DISK FAT structure used).

The partition=all parameter implies that testing starts with the first partition, then second, and so on, until the last existing disk partition is detected without skipping any non-existing or defined partitions.

Table 52: Test Disk Execution Times outlines execution time estimates based on disk capacity.

Table 52: Test Disk Execution Times

Capacity	Nominal Execution Time	Maximum Execution Time for 100% Errors
4.0 GB	40 minutes	27.5 hours
9.0 GB	1 hour 45 minutes	(Not determined)
18 GB	30 minutes (partition=1) 5 hours (partition=disk) depending on amount of disk tested and EAGLE provisioning/activity	(Not determined)
507 MB	5 minutes	3.4 hours

Capacity	Nominal Execution Time	Maximum Execution Time for 100% Errors
2.0 GB	20 minutes	13.5 hours
4.0 GB	40 minutes	27.5 hours
Removable Drive	30 seconds	Less than 1 minute

Nominal times for `tst-disk` command execution depend on the capacity of the disk being tested and assume that few or no errors are found. Maximum execution times are based on disk capacity, retry count, and retry delay. Each read error and retry may cause a delay of up to three seconds. If a TDM has 100% error sectors, the MASP will likely reset, terminating the disk test. A termination and reset will not occur, however, when testing the removable cartridge or drive.

Because of the intense, sustained disk activity created when `tst-disk` is executed, concurrently performing other disk-based activities, such as prolonged LNP command entry or database backups, will result in performance degradation up to twice the usual execution time.

Because of the extended processing time required for large disks, a progress message is displayed every five minutes providing the current LBA and the total LBA count for the partition.

Specific errors are reported for the first 10 error occurrences. Thereafter, only the error count is tracked and summary results are reported upon completion.

Output

`tst-disk:loc=1116`

```
    rlghncxa03w 03-11-27 11:40:02 EST  EAGLE 31.3.0
    TST-DISK of all partitions initiated for TDM 1116
;

    rlghncxa03w 03-11-27 11:40:02 EST  EAGLE 31.3.0
    TST-DISK: TDM 1116 in progress 868680 of 4124735 LBA read

;

    rlghncxa03w 03-11-27 11:40:02 EST  EAGLE 31.3.0
    TST-DISK Error: TDM 1116 LBA range 4124706 - 4124960
    Check Condition: DISK_NOT_READY
    TST-DISK results for TDM 1116
    Total LBAs = 4124735    LBA size = 512
    Retries    = 1    Errors   = 1
    Command Completed
;
```

`tst-disk:loc=1116:partition=2`

```
    rlghncxa03w 03-11-27 11:40:02 EST  EAGLE 31.3.0
    TST-DISK on Partition 2 initiated for TDM 1116
;

    rlghncxa03w 03-11-27 11:40:02 EST  EAGLE 31.3.0
    TST-DISK: TDM 1116 in progress 1234567 of 4194304 LBA read
;
```

```
    rlghncxa03w 03-11-27 11:40:02 EST  EAGLE 31.3.0
    TST-DISK Error: TDM 1116 LBA range 4194304 - 4194558
                             (NOTE: w/i 2nd disk partition)
      Check Condition: DISK_NOT_READY
    TST-DISK results for TDM 1116
    Total LBAs = 4194304    LBA size = 512
    Retries    = 1    Errors   = 1
    Command Completed
;
```

Related Commands

copy-disk

tst-dlk

Test Data Link

Use this command to test the specified TCP/IP data link. The TCP/IP data link is tested with an ethernet test that is an echo test type called ping.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

type (mandatory)

The type of test to run.

Range:

ping

ipaddr (optional)

The IP address of the remote host. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.126.100.5*, where *192.126.100* is the network number and *5* is the machine's host number.

Range:

1-223, 0-255

4 numbers separated by dots

1-223-first number

0-255-the other 3 numbers

Default:

Host IP

rc (optional)

The number of times the test is repeated.

Range:

1 - 15

Default:

1

Example

```
tst-dlk: loc=1206:type=ping
```

Dependencies

No other action command can be in progress when this command is entered.

The card location must contain an STPLAN card.

The shelf and card must be equipped.

The specified card must have a TCP/IP data link assigned to it.

If a test repeat count (rc) is not entered, the test is not repeated.

If a data link test is in progress, another data link test cannot be started.

The card location, frame, shelf, or slot must be within the allowed range.

A card location that is valid and defined in the database must be specified.

The ipaddr parameter must specify a valid IP address.

Notes

None

Output

```
tst-dlk:loc=1206:type=ping
```

```
rlghncxa03w 03-11-27 17:00:36 EST  EAGLE 31.3.0
Command Accepted: Test Link message is sent.

rlghncxa03w 03-11-27 17:00:36 EST  EAGLE 31.3.0
Command Completed.

rlghncxa03w 03-11-27 17:00:36 EST  EAGLE 31.3.0
1310.1132   CARD 1206    INFO  STPLAN DLK ping test completed
            TESTS REQUESTED= 1   PASSED COUNT= 1  FAILED COUNT= 0
```

```
                AVR RND TRIP=   10   MAX RND TRIP=10  MIN RND TRIP=10
                HOST IPADDR=198.089.040.069
;
```

Related Commands

act-dlk, *canc-dlk*, *dlt-dlk*, *ent-dlk*, *rept-stat-dlk*, *rtrv-dlk*

tst-e1 Test E1 Port

Use this command to test E1 ports. The command is rejected if a loopback test is not compatible with the port type. This command can be used with HC-MIM or E5-E1T1/E5-E1T1-B cards.

Parameters

e1port (mandatory)

E1 port number. The value must be an E1 port that has already been configured with an E1 interface on the specified card.

Range:

1 - 8

loc (mandatory)

Card location. The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

action (optional)

Indicator of command action to stop or start a test.

Range:

start

stop

Default:

start

loopback (optional)

Select loopback test type.

Range:

line

lxvr

local transceiver

payload

Default:

lxvr

Example

```
tst-e1:e1port=1:loc=1203:loopback=lxvr
tst-e1:e1port=1:loc=1203:action=stop
```

Dependencies

This command cannot be entered during upgrade.

The value specified for the loc parameter must indicate an HC-MIM or E5-E1T1 /E5-E1T1-B card with card type LIME1.

The card in the specified card location (loc parameter) must be equipped.

The card in the specified card location (loc parameter) must be in service.

The specified E1 port (e1port parameter) on the card (loc parameter) must have a defined E1 interface.

All signaling links that provide timeslots serviced by E1 interfaces on the specified card must be deactivated before this command can be entered. None of the signaling links can be running link diagnostic tests (`tst-slk` and `act-cdl`) when this command is entered.

Only one port test can be running on an E1 port (e1port parameter) at one time.

When the action=stop parameter is specified, the loopback parameter cannot be specified.

The action=stop parameter can be specified only when a port test is running.

Notes

Only one port test can be performed at a time on an E1 port. When a port test is in progress on an E1 port, subsequent test requests are rejected.

Output

`tst-e1:e1port=1:loc=1203:loopback=lxvr`

```
    rlghncxa03w 05-01-07 16:19:08 EST  EAGLE5 33.0.0
    Command Accepted: Test Port message is sent.
;
    rlghncxa03w 05-01-07 16:19:08 EST  EAGLE5 33.0.0
    Command Completed.
;
```

```
tst-e1:e1port=1:loc=1203:action=stop
```

```
    rlghncxa03w 05-01-07 16:19:08 EST  EAGLE5 33.0.0
    Command Accepted: Stop Port test message is sent.
;
    rlghncxa03w 05-01-07 16:19:08 EST  EAGLE5 33.0.0
    Command Completed.
;
```

Related Commands

chg-e1, *dlt-e1*, *ent-e1*, *rtrv-e1*

tst-imt

Test IMT Bus

Use this command to:

- Perform a Fault Isolation test to determine the location of faults on a failed or abnormal IMT bus. The Alternate Bus must be in the IS-NR state. The Target Bus must be in the OOS-MT-DSBLD state.
- Perform an Extended Bit Error Rate Test (BERT) on all IMT Buses. The Target Bus must be in the IS-NR or IS-ANR state. The Alternate Bus must be in the IS-NR state.
- Cancel an Extended BERT

Note: At least one card must be populated in each EAGLE extension shelf provisioned as ent-shlf:type=EXT to allow the command to successfully execute a Fault Isolation Test. See the "Notes" section for this command for more information about executing the command.

Note: No physical status change can be made to the IMT Bus (e.g., unplugging MUX cards) while an Extended BERT is running.

Parameters

type (mandatory)

The type of test to perform.

Range:

faulttest

perform a Fault Isolation test

extbert

perform an Extended BERT on all MUX cards on an IMT Bus

action (optional)

Indicator of command action to stop or start a test.

Currently, only the cancellation of an Extended BERT is supported by this parameter.

Range:

start

stop

Default:

start

bus (optional)

IMT bus to test.

Range:

a

b

maxerr (optional)

The number of errors allowed for the period during which an Extended BERT is being performed.

Note: This value is the Bit error threshold.

Range:

0 - 1000

Default:

20

time (optional)

The time, in minutes, for which an Extended BERT runs in order to determine success or failure.

Range:

1 - 60

Example

```
tst-imt:bus=a:type=faulttest
tst-imt:bus=b:type=extbert:time=50
tst-imt:bus=b:type=extbert:time=50:maxerr=30
tst-imt:bus=a:type=extbert:action=stop
```

Dependencies

Valid IMT bus entries are "A" or "B".

A related IMT command cannot be in progress. Only one Fault Isolation Test or Extended BERT can be active at a time.

An Extended BERT cannot be performed if the `init-sys, act-upgrade, init-flash, act-flash, init-network, flash-card`, or `init-card` (when initializing multiple cards using the appl parameter) commands are running.

This command cannot be entered if the alternate bus is other than in-service normal (IS-NR).

The target bus must be in the out of service - maintenance disabled (OOS-MT-DSBLD) state before this command can be entered for a Fault Isolation test.

This command cannot be entered during the IMT statistics collection period following an hourly boundary (IMT performance monitoring).

The target bus must be in the in-service normal (IS-NR) or in-service abnormal (IS-ANR) state before this command can be entered for an Extended BERT.

If the type=extbert parameter is specified, then the time parameter must be specified.

If the type=faulttest parameter is specified, then the time, maxerr, and action parameters cannot be specified.

If the action=stop parameter is specified for an extended BERT, then the time and maxerr parameters cannot be specified.

This command cannot be entered for an Extended BERT, if the target bus contains HMUX or HIPR cards.

The action=stop parameter cannot be specified until an Extended BERT acknowledgment from a MUX card is received.

If an Extended BERT is about to complete, then the action=stop parameter cannot be specified.

If an Extended BERT is not in progress, then the action=stop parameter cannot be specified.

Notes

Fault Isolation Test

Probable causes are listed in order of most probable to least probable. The listed components should be replaced in order listed by the output of this command.

Multiple, masking points of failure can occur in the same bus segment. Such faults are reported as a single bus segment fault. Because running this command on a system with no IMT bus faults prints an indication that no faults were found, you can iteratively replace components and run this test until all components in the segment are ruled out.

A detection of an IMT address mismatch indicates a faulty backplane or card.

A detection of an inconsistency with a particular card's IMT card list indicates an error of unknown origin, probably due to one or more lost messages.

When this command completes, either through normal termination of the command or because the command was ended for another reason, you must administratively enable the target bus. If all faults have meanwhile been isolated and corrected, the target bus becomes operational.

When a fault is detected, the possible error sources are listed in order from the most likely to the least likely. This ordering is based on operational experience.

At least one card must be populated in each EAGLE extension shelf provisioned as ent-shlf:type=EXT to allow this command to execute successfully. The card does not need to be a provisioned card; the card must be in IS-NR state on both IMT busses before this command is entered. If an empty shelf that is provisioned as ent-shlf:type = EXT or an un-provisioned shelf that is IMT enabled does exist, the following text is displayed when this command is entered:

Notice: IMT Fault test terminated.

Non-Standard cabling or IMT Bus-X state change detected.

Extended BERT

This command for an Extended BERT allows a BERT to be executed for a longer period of time during installation to verify there are no signal integrity issues. The standard BERT is used as a basic sanity test during bring-up of the ring.

When an Extended BERT is started, the target bus is inhibited. The bus is allowed when the test completes either through normal termination of the command or because the command was ended for another reason.

When the Extended BERT completes, the output is generated as a maintenance report indicating the test passed or failed. An error rate less than or equal to 1 error in 10E12 bits determines whether the test passed.

The maxerr parameter allows the Extended BERT to be performed for the longer duration even if the test fails for any of the MUX cards.

An on-going Extended BERT can be cancelled with the action=stop parameter.

Hourly report generation is not allowed if the request comes during an Extended BERT. Notification of the hourly boundary is multicast to all IMT processors to age out the least-recent error bucket and advance the current error bucket. The following notice is displayed if the Hourly report is bypassed during Extended BERT:

Extended BERT: Hourly Report is bypassed

One of the following notices is displayed if an Extended BERT terminates prematurely:

- *Extended BERT: Test aborted, Loss of Heartbeat*—Failure observed for the Extended BERT Heartbeat communication maintained between the Active OAM and the Control shelf MUX card.
- *Extended BERT: Test aborted, Alternate IMT Bus [A | B] abnormal*—Alternate IMT Bus becomes abnormal.
- *Extended BERT: Test terminated, Command cancelled*—Test is cancelled using `tst-imt` command with action=stop.
- *Extended BERT: Error in results retrieval, HIPR2 card(s) failure*—Extended BERT results are not displayed if an error is encountered during results retrieval from HIPR2 card.
- *Extended BERT: Active MASP failed to disconnect on IMT Bus [A | B]*—Active MASP did not disconnect on the IMT Bus undergoing Extended BERT.
- *Extended BERT: Active MASP failed to reconnect on IMT Bus [A | B]*—Active MASP did not reconnect on the IMT Bus undergoing Extended BERT.
- *Extended BERT: ACK for Extended BERT not received from IMT Bus [A | B]*—The acknowledgement for an Extended BERT is not received from MUX card.
- *Extended BERT: Test aborted, Card failure detected at X location*—Failure detected on a card due to both IMT Buses becoming unavailable.

Output

This example shows the output when the Connectivity test fails for the Fault Isolation test:

```
tst-imt:bus=a:type=faulttest
```

```
   rlghncxa03w 09-12-07 12:47:07 EST  EAGLE 42.0.0
   IMT Fault Isolation Bus A
   Fault Location    Probable Cause  Failure(s)
```

```
    Bus   1218-1301   HIPR2 1209
                      HIPR2 1309
                      Card  1218
                      Card  1301
                      Cable connecting Shelves 1200 and 1300 on Bus A
                      Backplane 1200
                      Backplane 1300
                                    Connectivity Test Failed
    Bus   1304-1305   HIPR2 1309
                      Card  1304
                      Card  1305
                      Backplane 1300
                                    Connectivity Test Failed
;
```

This example shows the output when the Pass-through test fails for the Fault Isolation test:

`tst-imt:bus=a:type=faulttest`

```
    rlghncxa03w 09-12-07 12:47:07 EST  EAGLE 42.0.0
    IMT Fault Isolation Bus B
    Fault Location    Probable Cause  Failure(s)
    Card  1201        Card 1201
                                    Pass-through Test Failed
    Card  1301        Card 1301
                                    Pass-through Test Failed
;
```

This example shows the output when all tests pass for Fault Isolation test:

`tst-imt:bus=b:type=faulttest`

```
    rlghncxa03w 09-12-07 12:47:07 EST  EAGLE 42.0.0
    IMT Fault Isolation Bus B
    Fault Location    Probable Cause  Failure(s)
    No Faults Found
                                    All Tests Passed.
;
```

This example shows the output when the Extended BERT fails for the HIPR2 cards at locations 1109 and 1309: however, the test continues for 20 minutes because none of the HIPR2 cards exceed the threshold:

`tst-imt:bus=a:type=extbert:time=20:maxerr=20`

```
    rlghncxa03w 09-12-09 12:47:07 EST  EAGLE 42.0.0
    Extended Bit Error Rate Test Bus A
    MAX ERROR = 20    TIME = 00:20:00    START TIME = 11:10:34
    TEST STATUS = FAIL

    CARD  TYPE      SERIAL_NUMBER    BERT_STATUS BIT_ERROR ERRORED_SEC DURATION

    1109  HIPR2     10208345027      FAIL        5         2           00:20:00

    1209  HIPR2     10208345047      PASS        2         8           00:20:00

    1309  HIPR2     10208345053      FAIL        19        15          00:20:00
```

```
;
```

This example shows the output when the test passes for all HIPR2 cards but the BERT terminates prematurely because the HIPR2 card at 1109 reaches the error threshold:

```
tst-imt:bus=a:type=extbert:time=20:maxerr=1
```

```
    rlghncxa03w 09-12-09 12:47:07 EST  EAGLE 42.0.0
    Extended Bit Error Rate Test Bus A
    MAX ERROR = 1     TIME = 00:20:00    START TIME = 11:10:34
    TEST STATUS = PASS

    CARD  TYPE      SERIAL_NUMBER    BERT_STATUS BIT_ERROR ERRORED_SEC DURATION

    1109  HIPR2     10208345027      PASS        2         1           00:10:00

    1209  HIPR2     10208345047      PASS        1         1           00:10:01

    1309  HIPR2     10208345053      PASS        0         0           00:10:01

;
```

This example shows the output when the BERT passes for all HIPR2 cards:

```
tst-imt:bus=b:type=extbert:time=60:maxerr=30
```

```
    rlghncxa03w 09-12-09 12:47:07 EST  EAGLE 42.0.0
    Extended Bit Error Rate Test Bus B
    MAX ERROR = 30    TIME = 01:00:00    START TIME = 12:10:30
    TEST STATUS = PASS

    CARD  TYPE      SERIAL_NUMBER    BERT_STATUS BIT_ERROR ERRORED_SEC DURATION

    1110  HIPR2     10208345012      PASS        3         2           01:00:00

    1210  HIPR2     10208345031      PASS        2         1           01:00:00

    1310  HIPR2     10208345052      PASS        5         3           01:00:00

;
```

This example shows the output when the Extended BERT is cancelled for Bus A:

```
tst-imt:bus=a:type=extbert:action=stop
```

```
    rlghncxa03w 09-12-09 16:02:05 EST  EAGLE5 42.0.0
    Extended BERT: Test terminated, Command cancelled
;
```

Legend

- **MAX ERROR**—Bit error threshold. The number of errors allowed for the specific time period during which the BERT is being performed. If this threshold is exceeded in the specified time period, the Extended BERT is prematurely terminated.
- **TIME**—Specified length of time (*hr:min:sec*) to run the test in order to determine success or failure

- **START TIME**—Time at which the test was started (*hr:min:sec*)
- **TEST STATUS**—PASS if the BERT Status is PASS for all the MUX cards, FAIL otherwise
- **CARD—**MUX Card location that contains the BERT being tested
- **TYPE**—MUX Card type
- **SERIAL_NUMBER**—Serial number of the main assembly board of the MUX card obtained from board identification PROM (BIP) data
- **BERT_STATUS**—Extended BERT PASS/FAIL status
- **BIT_ERROR**—Number of bit errors observed during the test
- **ERRORED_SEC**—Number of seconds that contained bit errors during the test. Bit errors are sampled once per second; each sample that contains bit errors adds one second to this count.
- **DURATION**—Length of time (*hr:min:sec*) that the test runs for the BERT. For a successful test, the TIME and DURATION should be the same. If a test runs for less than the specified amount of time, the DURATION is less than the TIME.

Related Commands

clr-imt-stats, *init-imt-gpl*, *rept-imt-lvl1*, *rept-imt-lvl2*

tst-j1 Test J1 Port

Use this command to test J1 ports. The command is rejected if a loopback test is not compatible with the port type.

Note: This command can be entered for E5-E1T1/E5-E1T1-B cards.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Default:

All T1 card locations having J1 interfaces configured are listed.

action (optional)

Indicator of command action to stop or start a test.

Range:

start

stop

Default:

start

loopback (optional)

Select loopback test type.

Range:

line

lxvr

local transceiver

payload

feline

far end line

far end payload

far end payload

Default:

line

j1port (optional)

J1 port number. The value must be a J1 port that has already been configured with a J1 interface on the specified card.

Range:

1-8

Example

```
tst-j1:j1port=1:loc=1102:action=stop
```

Dependencies

This command cannot be entered during upgrade.

The value specified for the loc parameter must indicate an E5-E1T1 or E5-E1T1-B card with card type LIMT1.

The card in the location specified by the loc parameter must be equipped.

The card in the location specified by the loc parameter must be in service.

The J1 port specified by the j1port parameter must have a defined J1 interface.

All signaling links that provide timeslots serviced by J1 interfaces on the specified card must be deactivated before this command can be entered. None of the signaling links can be running link diagnostic tests (`tst-slk` and `act-cdl` commands) when this command is entered.

Only one port test can be running on the J1 port specified by the j1port parameter at one time.

The J1 table must be accessible.

The action=stop parameter can be specified only when a port test is running.

If the action=stop parameter is specified, a value of feline or fepayload must be specified for the loopback parameter.

If the action=stop parameter is specified, and a value of feline or fepayload is specified for the loopback parameter, then there cannot be an active loopback for the T1 span, or the active loopback must be the one specified in the tst-t1:action=stop command.

Notes

Only one port test can be performed at a time on a J1 port. When a port test is in progress on a J1 port, subsequent test requests are rejected.

If a loopback type of feline or fepayload is specified, then the loopback requests are sent to the far end. No response is given from the far end indicate if the request was acted upon or received. The local card which hosts the J1 span in the EAGLE does not instrument the loopback locally but maintains a knowledge of the far end loopback request. If the local card boots, this knowledge is lost by the card.

To maintain the far end loopback states, if the J1 card with an active feline or fepayload test boots, the card loses any knowledge of the Far End loopback request, but the OAM retains that knowledge. If the OAM boots, the J1 card updates the OAM with its last known loopback state. If both the J1 card and the active OAM card boots while a Far End Loopback is active, then there is no way of determining the J1 state; however, a `tst-j1:action=stop:action=(feline or fepayload)` command can still be sent.

Output

`tst-j1:j1port=1:loc=1102:action=stop`

```
    tekelecstp 13-12-19 19:02:51 EST  46.0.0-65.3.0
    Command Accepted: Stop Port test message is sent.
;
    tekelecstp 13-12-19 19:02:51 EST  46.0.0-65.3.0
    Command Completed.
;
```

Related Commands

chg-j1, *dlt-j1*, *ent-j1*, *rtrv-j1*

tst-msg

Test Tool Test message

Use this command to invoke the Test Tool to test the feature call flow for the specified test message from the TESTMSG table.

The command sends the specified message from the TESTMSG table to an EAGLE feature. The test message that is sent does not create a new raw MSU. The test message is used only to modify the internal data structures of the Feature to study the call flow behavior when a message with the specified parameters is injected into the call path. The test message is never sent out to the network.

Parameters

feat (mandatory)

Feature. The Service Feature where the message is processed on the network card.

Range:

ttr

Service Feature for processing Prepaid IDP Query Relay test messages

tif

Service Feature for processing ISUP test messages when the provisioned Gateway Screening Stop Action is TIF.

tif2

Service Feature for processing ISUP test messages when the provisioned Gateway Screening Stop Action is TIF2.

tif3

Service Feature for processing ISUP test messages when the provisioned Gateway Screening Stop Action is TIF3.

mosmsnpp

Service Feature for processing MO SMS NPP test messages

gtt

Service feature for processing GTT test messages.

iar

Service Feature for processing IAR test messages

loc (mandatory)

Card location. The location of the network card where the message is to be sent.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

msgn (mandatory)

Message number. The message number of the test message to be sent for feature service processing.

Range:

1 - 10

prot (mandatory)

Protocol. The protocol of the test message that is sent to the feature for processing.

Range:

ttr

isup

is41

gsm

sccp

tatr

mode (optional)

Output mode. The mode in which output is shown while processing is performed on the specified test message.

Note: The most complete and accurate test results are obtained when mode=debug is used.

Range:

brief

summary format

full

full format

debug

debug format

Default:

brief

Example

```
tst-msg:loc=1103:prot=is41:feat=mosmsnpp:msgn=1:mode=full
tst-msg:loc=1103:prot=ttr:feat=ttr:msgn=1:mode=full
tst-msg:loc=1103:prot=gsm:feat=mosmsnpp:msgn=1:mode=debug
tst-msg:msgn=1:prot=isup:loc=1215:feat=tif:mode=debug
tst-msg:loc=1103:prot=sccp:feat=gtt:msgn=1
```

Dependencies

The Prepaid IDP Query Relay feature must be enabled before the feat=ttr parameter can be specified.

The card in the location that is specified in the loc parameter must be equipped in the system.

The value specified for the loc parameter must indicate a Service Module card running the VSCCP application.

The card in the location specified in the loc parameter must be in the Active state.

The values specified for the prot and feat parameters must be compatible as shown:

- feat=ttr — prot=ttr
- feat=iar — prot=tatr

- feat=tif, tif2, tif3 — prot=isup
- feat=mosmsnpp — prot=gsm, is41
- feat=gtt — prot=sccp

If the specified test message is defined with ACTIVE=YES (see the `chg-isup-msg` command), then the message is sent to the specified network card for test processing. (Test messages are never sent out to the live network.)

The MO SMS ASD, MO SMS GRN, MO SMS IS41-to-GSM Migration, or MO-based IS1 SMS NP feature must be enabled before the feat=mosmsnpp and prot=is41 parameters can be specified.

The MO SMS ASD, MO SMS GRN, Prepaid SMS Intercept Ph1, MO-based GSM SMS NP, or Portability Check for MO SMS feature must be enabled before the feat=mosmsnpp and prot=gsm parameters can be specified.

At least one TIF feature must be enabled before a value of *tif*, *tif2*, or *tif3* can be specified for the feat parameter.

For an ANSI message, the CDPA GTI must be 2 and the CGPA GTI must be 0 or 2 (see the `chg-sccp-msg` command). For an ITU message, the CDPA GTI must be 2 or 4 and the CGPA GTI must be 0, 2, or 4.

The linkset specified by the lsn parameter must already exist.

The network domain of the values specified for the OPC, CGPA PC, CDPA PC and DPC must match.

The IAR Base feature must be enabled before the feat=iar parameter can be specified.

Notes

None

Output

When the mode=full or mode=debug parameter is specified, the FORMAT field indicates whether formatting actions are executed. If formatting actions are not executed, then the OUTG DIGITS field displays a value of UNMODIFIED. If any digit string is blank, then the associated field displays a value of EMPTY.

This example shows the output in brief format:

```
tst-msg:feat=ttr:prot=ttr:msgn=1:mode=brief
```

```
    tekelecstp 09-08-05 18:20:46 EST  EAGLE 41.1.0
    tst-msg:feat=ttr:prot=ttr:msgn=1:mode=brief
    Command Accepted: Test message is sent.
;

     TST-MSG-RESULT
    ==============
    MSG = 1         TCAP_TYPE = INAP

    SCCP
     CGPA_GT = 2
     CGPA_GT_NAI = 4       CGPA = 9111111111
     CDPA_GT = 2
```

```
     CDPA_GT_NAI = 4       CDPA = 9818555001

    TCAP
     SK = 6ba1b1c1         BCSM = 02
     CGPN_NAI = 4          CGPN = 919818000005
     CDPN_NAI = 4          CDPN = 919818000001

    CDPN NPP PROCESSING

    SERVICE NAME = idprcdpn SERVICE STATUS = ON
         INC DIGITS = 919818000001
         NAI = 4 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = cdpnintl

    CONDITIONING RESULT
         INC DIGITS = 919818000001
         COND DIGITS = 919818000001

    FORMATING RESULT
         OUTG DIGITS = 00910123459818000001
         OUTG FNAI = intl
;

    tekelecstp 09-08-05 18:20:46 EST  EAGLE 41.1.0

    CGPN NPP PROCESSING

    SERVICE NAME = idprcgpn SERVICE STATUS = ON
         INC DIGITS = 919818000005
         NAI = 4 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = 12 FPFX = *
         ACTION SET NAME = cgpn1

    CONDITIONING RESULT
         INC DIGITS = 919818000005
         COND DIGITS = 919818000005

    FORMATING RESULT
         OUTG DIGITS = 00915432109818000005
         OUTG FNAI = intl
;
```

This example shows the output in full format:

`tst-msg:feat=ttr:prot=ttr:msgn=1:mode=full`

```
    tekelecstp 09-08-05 18:20:46 EST  EAGLE 41.1.0
    tst-msg:feat=ttr:prot=ttr:msgn=1:mode=full
    Command Accepted: Test message is sent.
;

    TST-MSG-RESULT
    ==============

    MSG = 1         TCAP_TYPE = INAP

    SCCP
```

```
     CGPA_GT = 2
     CGPA_GT_NAI = 4       CGPA = 9111111111
     CDPA_GT = 2
     CDPA_GT_NAI = 4       CDPA = 9818555001

    TCAP
     SK = 6ba1b1c1         BCSM = 02
     CGPN_NAI = 4          CGPN = 919818000005
     CDPN_NAI = 4          CDPN = 919818000001

    CDPN NPP PROCESSING

    SERVICE NAME = idprcdpn SERVICE STATUS = ON
         INC DIGITS = 919818000001
         NAI = 4 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = cdpnintl

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = ac2        EXECUTED = Y RESULT = PASS
         CA3 = snx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919818000001
         COND DIGITS = 919818000001

    SERVICE APPLICATION
         SA1 = ccncchk    EXECUTED = Y FORMAT = Y
         SA2 = cdpnnp     EXECUTED = Y FORMAT = Y
         SA3 = cgpnnprqd  EXECUTED = Y FORMAT = Y

    FORMATING RESULT
         FA1 = dlma       EXECUTED = Y RESULT = PASS
         FA2 = cc         EXECUTED = Y RESULT = PASS
         FA3 = rn         EXECUTED = Y RESULT = PASS
         FA4 = ac         EXECUTED = Y RESULT = PASS
         FA5 = sn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 00910123459818000001
         OUTG FNAI = intl
;

    tekelecstp 09-08-05 18:20:46 EST  EAGLE 41.1.0

    CGPN NPP PROCESSING

    SERVICE NAME = idprcgpn SERVICE STATUS = ON
         INC DIGITS = 919818000005
         NAI = 4 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = 12 FPFX = *
         ACTION SET NAME = cgpn1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = ac2        EXECUTED = Y RESULT = PASS
         CA3 = sn8        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919818000005
         COND DIGITS = 919818000005

    SERVICE APPLICATION
         SA1 = cgpnnp     EXECUTED = Y FORMAT = Y
```

```
    FORMATING RESULT
         FA1 = dlma       EXECUTED = Y RESULT = PASS
         FA2 = cc         EXECUTED = Y RESULT = PASS
         FA3 = rn         EXECUTED = Y RESULT = PASS
         FA4 = ac         EXECUTED = Y RESULT = PASS
         FA5 = sn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 00915432109818000005
         OUTG FNAI = intl
;
```

This example shows the output in debug format for the TTR protocol:

`tst-msg:feat=ttr:prot=ttr:msgn=1:mode=debug`

```
    tekelecstp 09-08-05 18:20:46 EST  EAGLE 41.1.0
    tst-msg:feat=ttr:prot=ttr:msgn=1:mode=debug
    Command Accepted: Test message is sent.
;
    TST-MSG-RESULT
    ==============

    MSG = 2         TCAP_TYPE = INAP

    SCCP
     CGPA_GT = 4
     CGPA_GT_NAI = 4       CGPA = 9111111111
     CDPA_GT = 4
     CDPA_GT_NAI = 4       CDPA = 9818555001

    TCAP
     SK = 6ba1b1c1         BCSM = 02
     CGPN_NAI = 4          CGPN = 919818000005
     CDPN_NAI = 4          CDPN = 009090919818000001

    CDPN NPP PROCESSING

    SERVICE NAME = idprcdpn SERVICE STATUS = ON
         INC DIGITS = 009090919818000001
         NAI = 4 FNAI = intl FDL = 18

    MATCHING RULE
         FNAI = intl FDL = 18 FPFX = 00
         ACTION SET NAME = cdpn6

    CONDITIONING RESULT
         CA1 = fpfx       EXECUTED = Y RESULT = PASS
         CA2 = pfxa4      EXECUTED = Y RESULT = PASS
         CA3 = cc2        EXECUTED = Y RESULT = PASS
         CA4 = ac2        EXECUTED = Y RESULT = PASS
         CA5 = sn8        EXECUTED = Y RESULT = PASS
         INC DIGITS = 009090919818000001
         COND DIGITS = 919818000001

    SERVICE APPLICATION
         SA1 = ccncchk    EXECUTED = Y FORMAT = Y
         CCNC Check Passed
         SA2 = cdpnnp     EXECUTED = Y FORMAT = Y
         RTDB LKPSUCC Entity=1 Cdpn=919818000001
         SA3 = lacck      EXECUTED = Y FORMAT = Y
         FPFX & PFXA FAs set to None
         SA4 = cgpnnprqd  EXECUTED = Y FORMAT = Y
```

```
    FORMATING RESULT
         FA1 = fpfx       EXECUTED = Y RESULT = PASS
         FA2 = pfxa       EXECUTED = Y RESULT = PASS
         FA3 = dlma       EXECUTED = Y RESULT = PASS
         FA4 = cc         EXECUTED = Y RESULT = PASS
         FA5 = rn         EXECUTED = Y RESULT = PASS
         FA6 = ac         EXECUTED = Y RESULT = PASS
         FA7 = sn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 009101234598180000001
         OUTG FNAI = intl
;

    tekelecstp 09-08-05 18:20:46 EST  EAGLE 41.1.0

    CGPN NPP PROCESSING

    SERVICE NAME = idprcgpn SERVICE STATUS = ON
         INC DIGITS = 919818000005
         NAI = 4 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = 12 FPFX = *
         ACTION SET NAME = cgpn1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = ac2        EXECUTED = Y RESULT = PASS
         CA3 = sn8        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919818000005
         COND DIGITS = 919818000005

    SERVICE APPLICATION
         SA1 = cgpnnp     EXECUTED = Y FORMAT = Y
         RTDB LKPSUCC Entity=1 Cgpn=919818000005

    FORMATING RESULT
         FA1 = dlma       EXECUTED = Y RESULT = PASS
         FA2 = cc         EXECUTED = Y RESULT = PASS

;
```

This example shows the output in debug format when the ISUP protocol is used:

`tst-msg:msgn=1:loc=2217:prot=isup:feat=tif3:mode=debug`

```
    tklc1191001 09-08-08 08:06:03 EST  EAGLE5 41.1.0

    SERVICE NAME = tif3 SERVICE STATUS = ON
         INC DIGITS = 1970442001
         NAI = 4 FNAI = intl FDL = 10

    MATCHING RULE
         FNAI = intl FDL = * FPFX = 1970
         ACTION SET NAME = temp3

    CONDITIONING RESULT
         CA1 = cc1        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 1970442001
         COND DIGITS = 1970442001

    SERVICE APPLICATION
```

```
          SA1 = nprls      EXECUTED = Y FORMAT = Y
          INDIV RLS redir=1 cause=np(0) RN=ffffff SP=dd02001

     FORMATING RESULT
          FA1 = rn         EXECUTED = Y RESULT = PASS
          FA2 = cc         EXECUTED = Y RESULT = PASS
          OUTG DIGITS = ffffff1
          OUTG FNAI = intl

;
```

This example shows the output in brief format when the MO SMS NPP IS41 protocol is used:

`tst-msg:feat=mosmsnpp:loc=1101:prot=is41:msgn=1:mode=brief`

```
     tekelecstp 09-08-02 10:46:51 EST  EAGLE 41.1.0
     tst-msg:feat=mosmsnpp:loc=1101:prot=is41:msgn=1:mode=brief
     Command Accepted: Test message is sent.
;

     TST-MSG-RESULT
     ==============
     MSG = 1

     CGPA_GT = 4
     CGPA_GT_NAI = 4    CGPA = 0123456789abcde

     CDPA_GT = 4
     CDPA_GT_NAI = 4    CDPA = 0123456789abcde

     CGPN_NAI = 1       CGPN_NP = 2
     CGPN_ES =  1       CGPN = 919899999901

     CDPN_NAI = 1       CDPN_NP = 2
     CDPN_ES =  1       CDPN = 919918000004

     MOSMSICGPN NPP PROCESSING

     SERVICE NAME = mosmsicgpn SERVICE STATUS = ON
          INC DIGITS = 919899999901
          NAI = 1 FNAI = intl FDL = 12

     MATCHING RULE
          FNAI = intl FDL = * FPFX = *
          ACTION SET NAME = asdgrn1

     CONDITIONING RESULT
          INC DIGITS = 919899999901
          COND DIGITS = 919899999901

     FORMATING RESULT
          OUTG DIGITS = 919899999901
          OUTG FNAI = intl
;

     eagle1 09-08-02 08:45:05 EST  EAGLE 41.1.0

     MOSMSICDPN NPP PROCESSING

     SERVICE NAME = mosmsicdpn SERVICE STATUS = ON
          INC DIGITS = 919918000004
          NAI = 1 FNAI = intl FDL = 12
```

```
    MATCHING RULE
         FNAI = intl FDL = 12 FPFX = *
         ACTION SET NAME = cgpnasd1

    CONDITIONING RESULT
         INC DIGITS = 919918000004
         COND DIGITS = 919918000004

    FORMATING RESULT
         OUTG DIGITS = 917777444409918000004
         OUTG FNAI = intl
;
```

This example shows the output in full format when the MO SMS NPP IS41 protocol is used:

`tst-msg:feat=mosmsnpp:loc=1101:prot=is41:msgn=1:mode=full`

```
    tekelecstp 09-08-02 10:51:51 EST  EAGLE 41.1.0
    tst-msg:feat=mosmsnpp:loc=1101:prot=is41:msgn=1:mode=full
    Command Accepted: Test message is sent.
;

    TST-MSG-RESULT
    ==============
    MSG = 1

    CGPA_GT = 4
    CGPA_GT_NAI = 4    CGPA = 0123456789abcde

    CDPA_GT = 4
    CDPA_GT_NAI = 4    CDPA = 0123456789abcde

    CGPN_NAI = 1       CGPN_NP = 2
    CGPN_ES =  1       CGPN = 919899999901

    CDPN_NAI = 1       CDPN_NP = 2
    CDPN_ES =  1       CDPN = 919918000004

    MOSMSICGPN NPP PROCESSING

    SERVICE NAME = mosmsicgpn SERVICE STATUS = ON
         INC DIGITS = 919899999901
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = asdgrn1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919899999901
         COND DIGITS = 919899999901

    SERVICE APPLICATION
         SA1 = asdlkup    EXECUTED = Y FORMAT IND = N
         SA2 = grnlkup    EXECUTED = Y FORMAT IND = N

    FORMATING RESULT
         FA1 = orig       EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 919899999901
```

```
         OUTG FNAI = intl
;
    eagle1 09-08-02 08:45:26 EST  EAGLE 41.1.0

    MOSMSICDPN NPP PROCESSING

    SERVICE NAME = mosmsicdpn SERVICE STATUS = ON
         INC DIGITS = 919918000004
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = 12 FPFX = *
         ACTION SET NAME = cgpnasd1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dn10       EXECUTED = Y RESULT = PASS
         INC DIGITS = 919918000004
         COND DIGITS = 919918000004

    SERVICE APPLICATION
         SA1 = migrate    EXECUTED = Y FORMAT IND = N
         SA2 = cdpnnp     EXECUTED = Y FORMAT IND = N
         SA3 = cgpnasdrqd EXECUTED = Y FORMAT IND = N
         SA4 = cgpngrnrqd EXECUTED = Y FORMAT IND = N

    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = rn         EXECUTED = Y RESULT = PASS
         FA3 = asd        EXECUTED = Y RESULT = PASS
         FA4 = grn        EXECUTED = Y RESULT = PASS
         FA5 = dn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 917777444409918000004
         OUTG FNAI = intl
;
```

This example shows the output in brief format when the MO SMS NPP GSM protocol is used:

`tst-msg:feat=mosmsnpp:loc=1101:prot=gsm:msgn=1:mode=brief`

```
    tekelecstp 09-08-03 09:23:01 EST  EAGLE 41.1.0
    tst-msg:feat=mosmsnpp:loc=1101:prot=gsm:msgn=1:mode=brief
    Command Accepted: Test message is sent.
;

    TST-MSG-RESULT
    ==============
    MSG = 1
    CGPA_GT = 4
    CGPA_GT_NAI = 4      CGPA = 0123456789abcde

    CDPA_GT = 4
    CDPA_GT_NAI = 4      CDPA = 123456789

    CGPN_NAI = 1
    CGPN_NP = 1          CGPN = 919899999901

    CDPN_NAI = 1
    CDPN_NP = 1          CDPN = 919918000004

    MOSMSGCGPN NPP PROCESSING
```

```
    SERVICE NAME = mosmsgcgpn SERVICE STATUS = ON
         INC DIGITS = 919899999901
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = gcgpn1

    CONDITIONING RESULT
         INC DIGITS = 919899999901
         COND DIGITS = 919899999901

    FORMATING RESULT
         OUTG DIGITS =
         OUTG FNAI = unkn
;
    tekelecstp 09-08-03 09:23:01 EST  EAGLE 41.1.0

    MOSMSGCDPN NPP PROCESSING

    SERVICE NAME = mosmsgcdpn SERVICE STATUS = ON
         INC DIGITS = 919918000004
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = gcdpn1

    CONDITIONING RESULT
         INC DIGITS = 919918000004
         COND DIGITS = 919918000004

    FORMATING RESULT
         OUTG DIGITS = 91777744409918000004
         OUTG FNAI = intl
;
```

This example shows the output in full format when the MO SMS NPP GSM protocol is used:

`tst-msg:feat=mosmsnpp:loc=1101:prot=gsm:msgn=1:mode=full`

```
    tekelecstp 09-08-03 09:50:01 EST  EAGLE 41.1.0
    tst-msg:feat=mosmsnpp:loc=1101:prot=gsm:msgn=1:mode=full
    Command Accepted: Test message is sent.
;

    TST-MSG-RESULT
    ==============
    MSG = 1
    CGPA_GT = 4
    CGPA_GT_NAI = 4      CGPA = 0123456789abcde

    CDPA_GT = 4
    CDPA_GT_NAI = 4      CDPA = 123456789

    CGPN_NAI = 1
    CGPN_NP = 1          CGPN = 919899999901

    CDPN_NAI = 1
    CDPN_NP = 1          CDPN = 919918000004

    MOSMSGCGPN NPP PROCESSING
```

```
    SERVICE NAME = mosmsgcgpn SERVICE STATUS = ON
         INC DIGITS = 919899999901
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = gcgpn1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919899999901
         COND DIGITS = 919899999901

    SERVICE APPLICATION
         SA1 = fraudchk   EXECUTED = Y FORMAT IND = N
         SA2 = pprelay    EXECUTED = Y FORMAT IND = Y
         SA3 = asdlkup    EXECUTED = Y FORMAT IND = N
         SA4 = grnlkup    EXECUTED = Y FORMAT IND = N

    FORMATING RESULT
         OUTG DIGITS =
         OUTG FNAI = unkn
;
    tekelecstp 09-08-03 09:50:01 EST  EAGLE 41.1.0

    MOSMSGCDPN NPP PROCESSING

    SERVICE NAME = mosmsgcdpn SERVICE STATUS = ON
         INC DIGITS = 919918000004
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = gcdpn1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919918000004
         COND DIGITS = 919918000004

    SERVICE APPLICATION
         SA1 = pprelay    EXECUTED = Y FORMAT IND = N
         SA2 = cdpnnp     EXECUTED = Y FORMAT IND = N
         SA3 = cgpnasdrqd EXECUTED = Y FORMAT IND = N

         SA4 = cgpngrnrqd EXECUTED = Y FORMAT IND = N
    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = rn         EXECUTED = Y RESULT = PASS
         FA3 = asd        EXECUTED = Y RESULT = PASS
         FA4 = grn        EXECUTED = Y RESULT = PASS
         FA5 = dn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 91777744409918000004
         OUTG FNAI = intl
;
```

This example shows the output in debug format when the MO SMS NPP IS41 protocol is used:

```
tst-msg:feat=mosmsnpp:loc=1101:prot=is41:msgn=1:mode=debug
```

```
    tekelecstp 09-08-02 10:46:51 EST  EAGLE 41.1.0
    tst-msg:feat=mosmsnpp:loc=1101:prot=is41:msgn=1:mode=debug
    Command Accepted: Test message is sent.
;
    tekelecstp 09-08-02 10:46:51 EST  EAGLE 41.1.0
    TST-MSG-RESULT
    ==============
    MSG = 1

    CGPA_GT = 4
    CGPA_GT_NAI = 4    CGPA = 0123456789abcde

    CDPA_GT = 4
    CDPA_GT_NAI = 4    CDPA = 0123456789abcde

    CGPN_NAI = 1       CGPN_NP = 2
    CGPN_ES =  1       CGPN = 919899999901

    CDPN_NAI = 1       CDPN_NP = 2
    CDPN_ES =  1       CDPN = 919918000004

    MOSMSICGPN NPP PROCESSING

    SERVICE NAME = mosmsicgpn SERVICE STATUS = ON
         INC DIGITS = 919899999901
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = asdgrn1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919899999901
         COND DIGITS = 919899999901

    SERVICE APPLICATION
         SA1 = asdlkup    EXECUTED = Y FORMAT IND = N
         ASDLKUP: ASD Data Copied to NPPSTATE:ASD
         RTDB LKPSUCC DN=919899999901
         PT   =5               ASD    =444
         SP   =NONE            SRFIMSI=NONE
         RN   =3000            SRFIMSI=NONE
         VMSID=NONE            SRFIMSI=NONE
         GRN  =40              SRFIMSI=NONE
         SA2 = grnlkup    EXECUTED = Y FORMAT IND = N
         GRN Data Copied to NPPSTATE:GRN

    FORMATING RESULT
         FA1 = orig       EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 919899999901
         OUTG FNAI = intl
;

    tekelecstp 09-08-02 10:46:51 EST  EAGLE 41.1.0

    MOSMSICDPN NPP PROCESSING

    SERVICE NAME = mosmsicdpn SERVICE STATUS = ON
         INC DIGITS = 919918000004
```

```
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = 12 FPFX = *
         ACTION SET NAME = cgpnasd1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dn10       EXECUTED = Y RESULT = PASS
         INC DIGITS = 919918000004
         COND DIGITS = 919918000004

    SERVICE APPLICATION
         SA1 = migrate    EXECUTED = Y FORMAT IND = N
         I2GM:Subscriber is not migrated
         RTDB LKPSUCC DN=919918000004
         PT   = 255            ASD    =56
         SP   =NONE            SRFIMSI=NONE
         RN   =7777            SRFIMSI=98989
         VMSID=NONE            SRFIMSI=NONE
         GRN  =40              SRFIMSI=NONE
         SA2 = cdpnnp     EXECUTED = Y FORMAT IND = N
         SMS NP:Validation Passed: NPPSTATE:RN=7777.
         SA3 = cgpnasdrqd EXECUTED = Y FORMAT IND = N
         CGPNASDRQD:CgPN ASD Data Copied to NPPSTATE:ASD
         SA4 = cgpngrnrqd EXECUTED = Y FORMAT IND = N
         CGPNGRNRQD:CgPN GRN Data Copied to NPPSTATE:GRN

    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = rn         EXECUTED = Y RESULT = PASS
         FA3 = asd        EXECUTED = Y RESULT = PASS
         FA4 = grn        EXECUTED = Y RESULT = PASS
         FA5 = dn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 917777444409918000004
         OUTG FNAI = intl
;
```

This example shows the output in debug format when the MO SMS NPP GSM protocol is used:

`tst-msg:feat=mosmsnpp:loc=1101:prot=gsm:msgn=1:mode=debug`

```
    tekelecstp 09-08-02 10:46:51 EST  EAGLE 41.1.0
    tst-msg:feat=mosmsnpp:loc=1101:prot=gsm:msgn=1:mode=debug
    Command Accepted: Test message is sent.
;
    tekelecstp 09-08-02 10:46:51 EST  EAGLE 41.1.0

    TST-MSG-RESULT
    ==============
    MSG = 1
    CGPA_GT = 4
    CGPA_GT_NAI = 4      CGPA = 0123456789abcde

    CDPA_GT = 4
    CDPA_GT_NAI = 4      CDPA = 123456789

    CGPN_NAI = 1
    CGPN_NP = 1          CGPN = 919899999901

    CDPN_NAI = 1
    CDPN_NP = 1          CDPN = 919918000004
```

```
    MOSMSGCGPN NPP PROCESSING

    SERVICE NAME = mosmsgcgpn SERVICE STATUS = ON
         INC DIGITS = 919899999901
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = gcgpn1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919899999901
         COND DIGITS = 919899999901

    SERVICE APPLICATION
         SA1 = fraudchk   EXECUTED = Y FORMAT IND = N
         FRAUDCHK:CgPN is not Ported/Migrated
         RTDB LKPSUCC DN=919899999901
         PT   =5               ASD    =44
         SP   =NONE            SRFIMSI=NONE
         RN   =3000            SRFIMSI=NONE
         VMSID=NONE            SRFIMSI=NONE
         GRN  =40              SRFIMSI=NONE
         SA2 = pprelay    EXECUTED = Y FORMAT IND = Y
         PPRELAY:DN is Prepaid
         SA3 = asdlkup    EXECUTED = Y FORMAT IND = N
         ASDLKUP: ASD Data Copied to NPPSTATE:ASD
         SA4 = grnlkup    EXECUTED = Y FORMAT IND = N
         GRN Data Copied to NPPSTATE:GRN

    FORMATING RESULT
         OUTG DIGITS =
         OUTG FNAI = unkn
;

    tekelecstp 09-08-02 10:46:51 EST  EAGLE 41.1.0

    MOSMSGCDPN NPP PROCESSING

    SERVICE NAME = mosmsgcdpn SERVICE STATUS = ON
         INC DIGITS = 919918000004
         NAI = 1 FNAI = intl FDL = 12

    MATCHING RULE
         FNAI = intl FDL = * FPFX = *
         ACTION SET NAME = gcdpn1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 919918000004
         COND DIGITS = 919918000004

    SERVICE APPLICATION
         SA1 = pprelay    EXECUTED = Y FORMAT IND = N
         PPRELAY:CgPN is Prepaid, Do not check CdPN prepaid status
         SA2 = cdpnnp     EXECUTED = Y FORMAT IND = N
         SMS NP:Validation Passed: NPPSTATE:RN=7777.
         RTDB LKPSUCC DN=919918000004
         PT   = 40             ASD    =56
         SP   =NONE            SRFIMSI=NONE
```

```
         RN   =7777            SRFIMSI=98989
         VMSID=NONE            SRFIMSI=NONE
         GRN  =40              SRFIMSI=NONE
         SA3 = cgpnasdrqd EXECUTED = Y FORMAT IND = N
         CGPNASDRQD:CgPN ASD Data Copied to NPPSTATE:ASD
         SA4 = cgpngrnrqd EXECUTED = Y FORMAT IND = N
         CGPNGRNRQD:CgPN GRN Data Copied to NPPSTATE:GRN

    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = rn         EXECUTED = Y RESULT = PASS
         FA3 = asd        EXECUTED = Y RESULT = PASS
         FA4 = grn        EXECUTED = Y RESULT = PASS
         FA5 = dn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 91777744409918000004
         OUTG FNAI = intl
;
```

This example shows the output in debug mode for TIF Number Substitution:

`tst-msg:msgn=1:prot=isup:loc=1215:feat=tif:mode=debug`

```
    tifstp 09-08-06 19:54:03 GMT  EAGLE 41.1.0

    SERVICE NAME = tif SERVICE STATUS = ON
         INC DIGITS = 88123456
         NAI = 4 FNAI = intl FDL = 8

    MATCHING RULE
         FNAI = intl FDL = 8 FPFX = 88
         ACTION SET NAME = set1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = ac1        EXECUTED = Y RESULT = PASS
         CA3 = snx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 88123456
         COND DIGITS = 88123456

    SERVICE APPLICATION
         SA1 = nscdpn     EXECUTED = Y FORMAT = Y
         INDIV CC=91 AC=5 SN=46789
         SA2 = nscgpn     EXECUTED = Y FORMAT = Y
         INDIV InCat=244  InDN=91123456
               OutCat=4   OutDN=741852

    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = ac         EXECUTED = Y RESULT = PASS
         FA3 = sn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 91546789
         OUTG FNAI = intl
;
```

This example shows the output in debug mode for TIF Number Substitution:

`tst-msg:msgn=2:prot=isup:loc=1215:feat=tif:mode=debug`

```
    tklc1071001 09-08-05 10:13:22 EDT  EAGLE 41.1.0
```

```
    SERVICE NAME = tif SERVICE STATUS = ON
         INC DIGITS = 2345678197001
         NAI = 4 FNAI = intl FDL = 20

    MATCHING RULE
         FNAI = intl FDL = 20 FPFX = 2345
         ACTION SET NAME = tifasn1

    CONDITIONING RESULT
         CA1 = ign3       EXECUTED = Y RESULT = PASS
         CA2 = znx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 2345678197001
         COND DIGITS = 5678197001

    SERVICE APPLICATION
         SA1 = nscdpn     EXECUTED = Y FORMAT = Y
         INDIV ZN=8474657346
         SA2 = nscgpn     EXECUTED = Y FORMAT = Y
         INDIV InCat=5    InDN=7463467238
               OutCat=7   OutDN=4736475834

    FORMATING RESULT
         OUTG DIGITS = 8474657346
         OUTG FNAI = intl
;
```

This example shows the output in debug mode for TIF Number Substitution when the Formatting Action for the outgoing CgPN is RN (`tifopts:iamcgpn=rn`):

`tst-msg:msgn=3:prot=isup:loc=1103:feat=tif:mode=debug`

```
    tifstp 09-08-06 19:52:42 GMT  EAGLE 41.1.0

    SERVICE NAME = tif SERVICE STATUS = ON
         INC DIGITS = 88123456
         NAI = 4 FNAI = intl FDL = 8

    MATCHING RULE
         FNAI = intl FDL = 8 FPFX = 88
         ACTION SET NAME = set1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = ac1        EXECUTED = Y RESULT = PASS
         CA3 = snx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 88123456
         COND DIGITS = 88123456

    SERVICE APPLICATION
         SA1 = nscdpn     EXECUTED = Y FORMAT = Y
         INDIV CC=91 AC=5 SN=46789
         SA2 = nscgpn     EXECUTED = Y FORMAT = Y
         No operation for IAMCGPN=RN

    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = ac         EXECUTED = Y RESULT = PASS
         FA3 = sn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 91546789
         OUTG FNAI = intl
;
```

This example shows the output in debug mode for TIF Number Substitution when no CgPN is present in the IAM message:

```
tst-msg:msgn=4:prot=isup:loc=1215:feat=tif:mode=debug
```

```
    tifstp 09-08-06 19:50:08 GMT  EAGLE 41.1.0

    SERVICE NAME = tif SERVICE STATUS = ON
         INC DIGITS = 88123456
         NAI = 4 FNAI = intl FDL = 8

    MATCHING RULE
         FNAI = intl FDL = 8 FPFX = 88
         ACTION SET NAME = set1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = ac1        EXECUTED = Y RESULT = PASS
         CA3 = snx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 88123456
         COND DIGITS = 88123456

    SERVICE APPLICATION
         SA1 = nscdpn     EXECUTED = Y FORMAT = Y
         INDIV CC=91 AC=5 SN=46789
         SA2 = nscgpn     EXECUTED = Y FORMAT = Y
         no cgpn

    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = ac         EXECUTED = Y RESULT = PASS
         FA3 = sn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 91546789
         OUTG FNAI = intl
;
```

This example shows the output in debug mode for TIF Number Substitution when the incoming Calling Party's Category value is the same as the TIFOPTS nspublic option value and the TIFOPTS nsaddldata option value is *yes* :

```
tst-msg:msgn=5:prot=isup:loc=1103:feat=tif:mode=debug
```

```
    tifstp 09-08-06 20:16:09 GMT  EAGLE 41.1.0

    SERVICE NAME = tif SERVICE STATUS = ON
         INC DIGITS = 88123456
         NAI = 4 FNAI = intl FDL = 8

    MATCHING RULE
         FNAI = intl FDL = 8 FPFX = 88
         ACTION SET NAME = set1

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = ac1        EXECUTED = Y RESULT = PASS
         CA3 = snx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 88123456
         COND DIGITS = 88123456

    SERVICE APPLICATION
         SA1 = nscdpn     EXECUTED = Y FORMAT = Y
```

```
          INDIV CC=91 AC=5 SN=46789
          SA2 = nscgpn     EXECUTED = Y FORMAT = Y
          Incoming CgPN category is NSPublic

     FORMATING RESULT
          FA1 = cc         EXECUTED = Y RESULT = PASS
          FA2 = ac         EXECUTED = Y RESULT = PASS
          FA3 = sn         EXECUTED = Y RESULT = PASS
          OUTG DIGITS = 91546789
          OUTG FNAI = intl
;
```

This example shows the output when the GTT feature is turned on:

`tst-msg:msgn=1:feat=gtt:prot=sccp:loc=1101`

```
     tekelecstp 10-03-05 16:38:22 EST  EAGLE 42.0.0

     GTT Trace Tool:

     Input:
     EAGLE-Generated? No
     OPCI    = 1-001-4
     LSN    = ls4
     DPCI    = 1-001-1
     SelId  = -----

     CDPA:  GTI=2
            TT=10
            SSN=6
            PCI=1-001-1
            ADDR=9818316478

     CGPA:  GTI=2
            TT=0
            SSN=8
            PCI=1-001-4
            ADDR=12345
     Family=9

     Opcode=46

     Pkgtype=bgn (0x62)

     Acn= 1-2-3-4-5

     GTT Search Results:

     Search Hierarchy:  FLOBR CGPA CDPA

                              CgPA/CdPA

     GTT Set Name     Set Type  SELID TestMode FallBack Found Matching Key

     setcdgta         CDPA GTA    ----- OFF    Dft        Y   9818316478

     setcggta         CGPA GTA    ----- OFF    Dft        Y   12345

     setcgpc          CGPA PC     ----- OFF    Dft        Y   1-001-4

     Search Depth = 3
     Loop Detected = No
```

```
    Translation Results:
    Translation Found: Yes [GTT Set Name = setcgpc]
    DPCI = 1-001-5
    RI  = GT
    Action Set = setdup1
    GTT user action: Discard MSU

    Actid     Action  DPC           RI   SSN  MAPSET/  ErrCode      UIMREQD
                                                MRNSET

    act1      DUP     1-001-4       GT   ---  DFLT     ----            -

    act2      DUP     1-001-4       GT   ---  DFLT     ----            -

    act3      DUP     1-001-4       GT   ---  DFLT     ----            -

    act4      DUP     1-001-5       GT   ---  DFLT     ----            -

    dup1      DUP     1-001-6       GT   ---  DFLT     ----            -

    disc1     DISC    ----          ---  ---  -----    ----            Y

    Command Complete
;
```

This example shows the output in brief mode for the Info Analyzed Relay Base feature:

`tst-msg:loc=1101:prot=tatr:feat=iar:msgn=1:mode=brief`

```
    tekelecstp 09-07-24 18:20:46 EST  EAGLE 41.1.0
    tst-msg:feat=iar:prot=tatr:msgn=1:mode=brief
    Command Accepted: Test message is sent.
;

    TST-MSG-RESULT
    ==============
    IAR Decoding Successfull., (0)
    TTR Preprocessing successful.
    TTR CgPN Encoded

    MSG = 1

    SCCP
     CGPA_GTI = 2
     CGPA_GT_NAI = 4       CGPA = 9194605500
     CDPA_GTI = 2
     CDPA_GT_NAI = 3       CDPA = 404009246139988

    TCAP
     TRIG = 26
     CGPN_NAI = 48         CGPN = 9246138610
     CDPN_NAI = 48         CDPN = 9246138700

    CDPN NPP PROCESSING
    SERVICE NAME = iarcdpn SERVICE STATUS = ON
         INC DIGITS = 9246138700
         NAI = 48 FNAI = intl FDIGLEN = 10

    MATCHING RULE
         FNAI = intl FDIGLEN = 0 FPFX = *
         ACTION SET NAME = DSET1
```

```
    CONDITIONING RESULT
         INC DIGITS = 9246138700
         COND DIGITS = 19246138700

    FORMATING RESULT
         OUTG DIGITS = 198769246138700
         OUTG FNAI = intl

    CGPN NPP PROCESSING
    SERVICE NAME = iarcgpn SERVICE STATUS = ON
         INC DIGITS = 9246138610
         NAI = 49 FNAI = natl FDIGLEN = 10

    MATCHING RULE
         FNAI = natl FDIGLEN = 0 FPFX = *
         ACTION SET NAME = DSET2

    CONDITIONING RESULT
         INC DIGITS = 9246138610
         COND DIGITS = 19246138610

    FORMATING RESULT
         OUTG DIGITS = 155555924613861044443333
         OUTG FNAI = intl
```

This example shows the output in full mode for the Info Analyzed Relay Base feature:

`tst-msg:loc=1101:prot=tatr:feat=iar:msgn=1:mode=full`

```
    tekelecstp 09-07-24 18:20:46 EST  EAGLE 41.1.0
    tst-msg:feat=iar:prot=tatr:msgn=1:mode=full
    Command Accepted: Test message is sent.
;

    TST-MSG-RESULT
    ==============
    IAR Decoding Successfull., (0)
    TTR Preprocessing successful.
    TTR CgPN Encoded

    MSG = 1

    SCCP
     CGPA_GTI = 2
     CGPA_GT_NAI = 4       CGPA = 9194605500
     CDPA_GTI = 2
     CDPA_GT_NAI = 3       CDPA = 404009246139988

    TCAP
     TRIG = 26
     CGPN_NAI = 48         CGPN = 9246138610
     CDPN_NAI = 48         CDPN = 9246138700

    CDPN NPP PROCESSING
    SERVICE NAME = iarcdpn SERVICE STATUS = ON
         INC DIGITS = 9246138700
         NAI = 48 FNAI = intl FDIGLEN = 10

    MATCHING RULE
         FNAI = intl FDIGLEN = 0 FPFX = *
         ACTION SET NAME = DSET1
```

```
CONDITIONING RESULT
     CA1 = ccdef      EXECUTED = Y RESULT = PASS
     CA2 = dnx        EXECUTED = Y RESULT = PASS
     INC DIGITS = 9246138700
     COND DIGITS = 19246138700

SERVICE APPLICATION
     SA1 = cdpnnp     EXECUTED = Y FORMAT = Y
     SA2 = cgpnasdrqd EXECUTED = Y FORMAT = Y
     SA3 = cgpngrnrqd EXECUTED = Y FORMAT = Y

FORMATING RESULT
     FA1 = cc         EXECUTED = Y RESULT = PASS
     FA2 = rn         EXECUTED = Y RESULT = PASS
     FA3 = sp         EXECUTED = Y RESULT = PASS
     FA4 = srfimsi    EXECUTED = Y RESULT = PASS
     FA5 = dn         EXECUTED = Y RESULT = PASS
     FA6 = asd        EXECUTED = Y RESULT = PASS
     FA7 = grn        EXECUTED = Y RESULT = PASS
     OUTG DIGITS = 198769246138700
     OUTG FNAI = intl

CGPN NPP PROCESSING

SERVICE NAME = iarcgpn SERVICE STATUS = ON
     INC DIGITS = 9246138610
     NAI = 49 FNAI = natl FDIGLEN = 10

MATCHING RULE
     FNAI = natl FDIGLEN = 0 FPFX = *
     ACTION SET NAME = DSET2

CONDITIONING RESULT
     CA1 = ccdef      EXECUTED = Y RESULT = PASS
     CA2 = dnx        EXECUTED = Y RESULT = PASS
     INC DIGITS = 9246138610
     COND DIGITS = 19246138610

SERVICE APPLICATION
     SA1 = cgpnnp     EXECUTED = Y FORMAT = Y
     SA2 = asdlkup    EXECUTED = Y FORMAT = Y
     SA3 = grnlkup    EXECUTED = Y FORMAT = Y

FORMATING RESULT
     FA1 = cc         EXECUTED = Y RESULT = PASS
     FA2 = rn         EXECUTED = Y RESULT = PASS
     FA3 = sp         EXECUTED = Y RESULT = PASS
     FA4 = srfimsi    EXECUTED = Y RESULT = PASS
     FA5 = dn         EXECUTED = Y RESULT = PASS
     FA6 = asd        EXECUTED = Y RESULT = PASS
     FA7 = grn        EXECUTED = Y RESULT = PASS
     OUTG DIGITS = 155555924613861044443333
     OUTG FNAI = intl
```

This example shows the output in debug mode for the Info Analyzed Relay Base feature:

`tst-msg:loc=1101:prot=tatr:feat=iar:msgn=2:mode=debug`

```
tekelecstp 09-07-24 18:20:46 EST  EAGLE 41.1.0
tst-msg:feat=iar:prot=tatr:msgn=2:mode=debug
Command Accepted: Test message is sent.
```

```
;

    TST-MSG-RESULT
    ==============
    IAR DEST NUM decode error., (0)
    TTR Preprocessing successful.
    TTR CgPN Encoded

    MSG = 2

    SCCP
     CGPA_GTI = 2
     CGPA_GT_NAI = 4       CGPA = 9194605500
     CDPA_GTI = 2
     CDPA_GT_NAI = 3       CDPA = 404009246139988

    TCAP
     TRIG = 26
     CGPN_NAI = 48         CGPN = 9876543210
     CDPN_NAI = 49         CDPN = 135792468011223344

    CDPN NPP PROCESSING
    SERVICE NAME = iarcdpn SERVICE STATUS = ON
         INC DIGITS = 135792468011223344
         NAI = 48 FNAI = intl FDIGLEN = 18

    MATCHING RULE
         FNAI = intl FDIGLEN = 0 FPFX = *
         ACTION SET NAME = DSET1

    CONDITIONING RESULT
         CA1 = ccdef      EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 135792468011223344
         COND DIGITS = 1135792468011223344

    SERVICE APPLICATION
         SA1 = cdpnnp     EXECUTED = Y FORMAT = Y
    ENTITY = RN - SPORT APPLIED, RESULT = SUCCESS     SA2 = cgpnasdrqd EXECUTED
 = Y FORMAT = Y
         CgPN ASD will be made available during CdPN FAE.
         SA3 = cgpngrnrqd EXECUTED = Y FORMAT = Y
         CgPN GRN will be made available during CdPN FAE.

    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = rn         EXECUTED = Y RESULT = PASS
         FA3 = sp         EXECUTED = Y RESULT = PASS
         FA4 = srfimsi    EXECUTED = Y RESULT = PASS
         FA5 = dn         EXECUTED = Y RESULT = PASS
         FA6 = asd        EXECUTED = Y RESULT = PASS
         FA7 = grn        EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 19876135792468011223344
         OUTG FNAI = natl

    CGPN NPP PROCESSING
    SERVICE NAME = iarcgpn SERVICE STATUS = ON
         INC DIGITS = 9876543210
         NAI = 48 FNAI = intl FDIGLEN = 10

    MATCHING RULE
         FNAI = intl FDIGLEN = 0 FPFX = *
         ACTION SET NAME = DSET2
```

```
    CONDITIONING RESULT
         CA1 = ccdef      EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 9876543210
         COND DIGITS = 19876543210

    SERVICE APPLICATION
         SA1 = cgpnnp     EXECUTED = Y FORMAT = Y
         ENTITY = SP, RESULT = SUCCESS

         SA2 = asdlkup    EXECUTED = Y FORMAT = Y
         ASD lkup done
         SA3 = grnlkup    EXECUTED = Y FORMAT = Y
         GRN lkup done

    FORMATING RESULT
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = rn         EXECUTED = Y RESULT = PASS
         FA3 = sp         EXECUTED = Y RESULT = PASS
         FA4 = srfimsi    EXECUTED = Y RESULT = PASS
         FA5 = dn         EXECUTED = Y RESULT = PASS
         FA6 = asd        EXECUTED = Y RESULT = PASS
         FA7 = grn        EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 155555987654321044443333
         OUTG FNAI = intl
```

This example shows the output in brief mode with TIF processing that invokes the TIFCGPN service:

`tst-msg:loc=1105:prot=isup:feat=tif:msgn=8:mode=brief`

```
    tekelecstp 11-02-16 13:54:10 EAGLE  EST 44.0.0
    SERVICE NAME = tif SERVICE STATUS = ON
         INC DIGITS = 5001234567890
         NAI = 4 FNAI = intl FDL = 13

    MATCHING RULE
         FNAI = intl FDL = 13 FPFX = 500
         ACTION SET NAME = as90
         INVOKE SERVICE = tifcgpn

    CONDITIONING RESULT
         INC DIGITS = 5001234567890
         COND DIGITS = 5001234567890

    FORMATING RESULT
         OUTG DIGITS = 1234567890
         OUTG FNAI = intl
;

    tekelecstp 11-02-16 13:54:10 EAGLE  EST 44.0.0

    SERVICE NAME = tifcgpn SERVICE STATUS = ON
         INC DIGITS = 5701234567
         NAI = 4 FNAI = intl FDL = 10

    MATCHING RULE
         FNAI = intl FDL = 10 FPFX = 570
         ACTION SET NAME = as130
         INVOKE SERVICE = none

    CONDITIONING RESULT
         INC DIGITS = 5701234567
```

```
         COND DIGITS = 5701234567

    FORMATING RESULT
         OUTG DIGITS = UNMODIFIED
         OUTG FNAI = UNMODIFIED
;
    tekelecstp 11-02-16 13:54:10 EAGLE  EST 44.0.0

    TIF SERVICE
         REL will be sent without redirection number
;
```

This example shows the output in Full mode shows TIF processing that invokes the TIFCGPN service:

`tst-msg:loc=1105:prot=isup:feat=tif:msgn=8:mode=full`

```
    tekelecstp 11-02-16 13:52:44 EAGLE  EST 44.0.0

    SERVICE NAME = tif SERVICE STATUS = ON
         INC DIGITS = 5001234567890
         NAI = 4 FNAI = intl FDL = 13

    MATCHING RULE
         FNAI = intl FDL = 13 FPFX = 500
         ACTION SET NAME = as90
         INVOKE SERVICE = tifcgpn

    CONDITIONING RESULT
         CA1 = cc3        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 5001234567890
         COND DIGITS = 5001234567890

    SERVICE APPLICATION
         SA1 = cdial      EXECUTED = Y FORMAT = Y

    FORMATING RESULT
         FA1 = dn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 1234567890
         OUTG FNAI = intl
;

    tekelecstp 11-02-16 13:52:44 EAGLE  EST 44.0.0

    SERVICE NAME = tifcgpn SERVICE STATUS = ON
         INC DIGITS = 5701234567
         NAI = 4 FNAI = intl FDL = 10

    MATCHING RULE
         FNAI = intl FDL = 10 FPFX = 570
         ACTION SET NAME = as130
         INVOKE SERVICE = none

    CONDITIONING RESULT
         CA1 = cc3        EXECUTED = Y RESULT = PASS
         CA2 = ac3        EXECUTED = Y RESULT = PASS
         CA3 = snx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 5701234567
         COND DIGITS = 5701234567

    SERVICE APPLICATION
         SA1 = fpfxrls    EXECUTED = Y FORMAT = N
```

```
    FORMATING RESULT
         OUTG DIGITS = UNMODIFIED
         OUTG FNAI = UNMODIFIED
;
    tekelecstp 11-02-16 13:52:44 EAGLE  EST 44.0.0

    TIF SERVICE
         REL will be sent without redirection number
;
```

This example shows the output in DEBUG mode with TIF processing that invokes the TIFCGPN service:

`tst-msg:loc=1105:prot=isup:feat=tif:msgn=8:mode=debug`

```
    tekelecstp 11-02-16 13:55:39 EAGLE  EST 44.0.0

    SERVICE NAME = tif SERVICE STATUS = ON
         INC DIGITS = 5001234567890
         NAI = 4 FNAI = intl FDL = 13

    MATCHING RULE
         FNAI = intl FDL = 13 FPFX = 500
         ACTION SET NAME = as90
         INVOKE SERVICE = tifcgpn

    CONDITIONING RESULT
         CA1 = cc3        EXECUTED = Y RESULT = PASS
         CA2 = dnx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 5001234567890
         COND DIGITS = 5001234567890

    SERVICE APPLICATION
         SA1 = cdial      EXECUTED = Y FORMAT = Y
         Set FASKIP to FALSE, previous value was FALSE.

    FORMATING RESULT
         FA1 = dn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 1234567890
         OUTG FNAI = intl
;
    tekelecstp 11-02-16 13:55:39 EAGLE  EST 44.0.0

    SERVICE NAME = tifcgpn SERVICE STATUS = ON
         INC DIGITS = 5701234567
         NAI = 4 FNAI = intl FDL = 10

    MATCHING RULE
         FNAI = intl FDL = 10 FPFX = 570
         ACTION SET NAME = as130
         INVOKE SERVICE = none

    CONDITIONING RESULT
         CA1 = cc3        EXECUTED = Y RESULT = PASS
         CA2 = ac3        EXECUTED = Y RESULT = PASS
         CA3 = snx        EXECUTED = Y RESULT = PASS
         INC DIGITS = 5701234567
         COND DIGITS = 5701234567

    SERVICE APPLICATION
         SA1 = fpfxrls    EXECUTED = Y FORMAT = N
```

```
         SAVAL1 (ANSI ISUP)=54  SAVAL2 (ITU ISUP)=43
         NOT SEARCHED,  RLS cause=FPFXRLS(4)

    FORMATING RESULT
         OUTG DIGITS = UNMODIFIED
         OUTG FNAI = UNMODIFIED
;
    tekelecstp 11-02-16 13:55:39 EAGLE  EST 44.0.0

    TIF SERVICE
         REL will be sent without redirection number
;
```

This example displays the command output in debug format for the IDPRCDPN2 service when the INPRTG Service Action generates a connect response and the DRA digits are formatted by NPP.

`tst-msg:feat=ttr:prot=ttr:msgn=1:mode=debug`

```
    tekelecstp 12-02-31 18:20:46 EST  EAGLE 45.0.0
    tst-msg:feat=ttr:prot=ttr:msgn=1:mode=debug
    Command Accepted: Test message is sent.
;
    TST-MSG-RESULT
    ==============

    MSG = 1         TCAP_TYPE = INAP

    SCCP
     CGPA_GT = 2
     CGPA_GT_NAI = 4       CGPA = 0123456789abcde
     CDPA_GT = 2
     CDPA_GT_NAI = 4       CDPA = 9912345

    TCAP
     SK = 00000003         BCSM = 02
     CGPN_NAI = 4          CGPN = 81123457
     CDPN_NAI = 4          CDPN = 91123457

    CDPN NPP PROCESSING

    SERVICE NAME = idprcdpn3 SERVICE STATUS = ON
         INC DIGITS = 91123457
         NAI = 4 FNAI = intl FDL = 8

    MATCHING RULE
         FNAI = intl FDL = 8 FPFX = 91
         ACTION SET NAME = cdset5

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = dn6        EXECUTED = Y RESULT = PASS
         INC DIGITS = 91123457
         COND DIGITS = 91123457

    SERVICE APPLICATION
         SA1 = inprtg     EXECUTED = Y FORMAT = N
         INPRTG SA executed from IDPRCDPN3 NPP service
         INDIV Action=INPRTG CONNECT Tokens: RN=a12
         SA2 = cdpnnp     EXECUTED = Y FORMAT = N
         CDPNNP SA processing bypassed if INPRTG SA
         generating a response
         SA3 = cgpnsvcrqd EXECUTED = Y FORMAT = N
         SA4 = skgtartg   EXECUTED = Y FORMAT = N
```

```
         SA5 = grnlkup    EXECUTED = Y FORMAT = N
         Entity = 3 GRN = c12
         SA6 = asdlkup    EXECUTED = Y FORMAT = N
         ASD = d12

    FORMATING RESULT
         OUTG DIGITS = UNMODIFIED
         OUTG FNAI = UNMODIFIED
;

    CGPN NPP PROCESSING

    SERVICE NAME = idprcgpn SERVICE STATUS = ON
         INC DIGITS = 81123457
         NAI = 4 FNAI = intl FDL = 8

    MATCHING RULE
         FNAI = intl FDL = 8 FPFX = 81
         ACTION SET NAME = cgset2

    CONDITIONING RESULT
         CA1 = cc2        EXECUTED = Y RESULT = PASS
         CA2 = ac2        EXECUTED = Y RESULT = PASS
         CA3 = sn4        EXECUTED = Y RESULT = PASS
         INC DIGITS = 81123457
         COND DIGITS = 81123457

    SERVICE APPLICATION
         SA1 = inprtg     EXECUTED = Y FORMAT = Y
         INPRTG SA execution bypassed for IDPRCGPN NPP service
         since it has already executed in IDPRCDPN3 NPP service
         SA2 = cgpnnp     EXECUTED = Y FORMAT = Y
         CGPNNP SA processing bypassed if INPRTG SA
         generating a response
         SA3 = asdlkup    EXECUTED = Y FORMAT = Y
         ASD = ddd1
         SA4 = grnlkup    EXECUTED = Y FORMAT = Y
         Entity = 3 GRN = ccc1

    FORMATING RESULT
         FA1 = asd        EXECUTED = Y RESULT = PASS
         FA2 = grn        EXECUTED = Y RESULT = PASS
         OUTG DIGITS = ddd1ccc1
         OUTG FNAI = intl
;

    INPRTG CONNECT RESPONSE DRA FORMATING RESULT
         ACTION SET NAME = cdset5
         FA LIST = FARN
         FA1 = cc         EXECUTED = Y RESULT = PASS
         FA2 = grn        EXECUTED = Y RESULT = PASS
         FA3 = rn         EXECUTED = Y RESULT = PASS
         FA4 = dn         EXECUTED = Y RESULT = PASS
         OUTG DIGITS = 91c12a12123457
;
```

Related Commands

chg-gsm-msg, *chg-is41-msg*, *chg-isup-msg*, *chg-sccp-msg*, *chg-tatr-msg*, *chg-ttr-msg*, *rtrv-gsm-msg*, *rtrv-is41-msg*, *rtrv-isup-msg*, *rtrv-sccp-msg*, *rtrv-tatr-msg*, *rtrv-ttr-msg*

tst-npp-msg

Change NPP Test Service Parameters

Use this command to provision and test the NPP provided service, NPPT. The NPP Test Service allows customers to provision NPP Action Sets and Rules associated with the NPPT Service Rule Set. Customers can inject test messages to a provsioned NPPT Service Rule to verify proper digit string processing.

Parameters

digs (mandatory)

Digits. The incoming digit string for NPP to process.

Range:

1 - 32

loc (mandatory)

The Service Module card to which the test message is issued.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

nai (mandatory)

Incoming digit string Nature of Address Indicator (NAI) mapping value.

Range:

0 - 255

mode (optional)

The output format.

Range:

brief

summary format

full

full format

debug

debug format

Default:

brief

Example

```
tst-npp-msg:loc=1101:mode=full:digs=0ab4041234567:nai=3
```

Dependencies

None.

Output

When the mode=full or mode=debug parameter is specified, the FORMAT field indicates whether formatting actions are executed. If formatting actions are not executed, then the OUTG DIGITS field displays a value of UNMODIFIED. If any digit string is blank, then the associated field displays a value of EMPTY.

The numbers shown to identify Conditioning Actions, Service Actions, and Formatting Actions are the individual parameter numbers or the position of the value in the parameter list when the command was entered. For example, CA2 identifies either the value for the ca2 parameter or the second CA value in the ca parameter list in the command (such as *ac3* in the ca=cc2, ac3 parameter).

```
tst-npp-msg:loc=1101:digs=9090920292252645:nai=7:mode=full
```

```
SERVICE NAME = nppt SERVICE STATUS = ON
     INC DIGITS = 9090920292252645
     NAI = 7 FNAI = intl FDL = 16

MATCHING RULE
     FNAI = intl FDL = 16 FPFX = 9090
     ACTION SET NAME = set1

CONDITIONING RESULT
     CA1 = ign4       EXECUTED = Y RESULT = PASS
     CA2 = cc2        EXECUTED = Y RESULT = PASS
     CA3 = dn10       EXECUTED = Y RESULT = PASS
     INC DIGITS = 9090920292252645
     COND DIGITS = 920292252645

SERVICE APPLICATION
     SA1 = rtdbtrn    EXECUTED = Y FORMAT = Y

FORMATING RESULT
     FA1 = cc         EXECUTED = Y RESULT = PASS
     FA2 = rn         EXECUTED = Y RESULT = PASS
     FA3 = dn         EXECUTED = Y RESULT = PASS
     OUTG DIGITS = 92abcd0292252645
     OUTG FNAI = intl
```

```
tst-npp-msg:loc=1101:digs=0609192252645:nai=5:mode=full
```

```
SERVICE NAME = nppt SERVICE STATUS = ON
     INC DIGITS = 0609192252645
     NAI = 5 FNAI = natl FDL = 13

MATCHING RULE
```

```
        FNAI = natl FDL = 13 FPFX = 060
        ACTION SET NAME = set2

   CONDITIONING RESULT
        CA1 = ccdef      EXECUTED = Y RESULT = PASS
        CA2 = ign3       EXECUTED = Y RESULT = PASS
        CA3 = dn7        EXECUTED = Y RESULT = PASS
        INC DIGITS = 0609192252645
        COND DIGITS = 989192252

   SERVICE APPLICATION
        SA1 = rtdbtrnsp  EXECUTED = Y FORMAT = Y

   FORMATING RESULT
        FA1 = rn         EXECUTED = Y RESULT = PASS
        FA2 = sp         EXECUTED = Y RESULT = PASS
        FA3 = orig       EXECUTED = Y RESULT = PASS
        OUTG DIGITS = 1bce0609192252645
        OUTG FNAI = natl
```

Related Commands

None.

tst-slk

Test Signaling Link

Use this command for testing signaling links.

- The loopback parameter on the tst-slk command provides the ability to select from among the following loopback tests: local transceiver (lxvr), oam, line, payload, and either low-speed signaling links or ATM high-speed signaling links (sltc).
- The command is not valid on E5-ENET or E5-ENET-B cards with SS7IPGW and IPGWI links.
- For low-speed links, LXVR and SLTC tests are allowed.
- For E5-ATM and E5-ATM-B cards, the LXVR, SLTC, PAYLOAD, LINE, and OAM tests are allowed.
- For E5-ENET or E5-ENET-B cards with IPLIM or IPLIMI links, the SLTC test is allowed.
- For E5-E1T1 or E5-E1T1-B cards, only the SLTC test is allowed.
- For E5-ENET or E5-ENET-B cards running the IPSG application, the command is only supported for IPSG-M2PA signaling links, and the SLTC test is allowed.

See *Summary of Loopback Testing Commands and Functions* in Appendix A.

Parameters

link (mandatory)

The signaling link on the card specified in the loc parameter. The links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

action (optional)

Indicator of command action to stop or start a test.

Range:

start

stop

Default:

start

force (optional)

Range:

yes

no

Default:

no

loopback (optional)

The type of loopback test to run

Range:

line

This test is similar to the payload loopback test, but the data transmitted to the remote system is received by the remote system's ATM driver.

lxvr

Loopback at the local transceiver without involving the remote STP. For the ADS0, AINF, AOCU, and AV35 appliques, the MTP-2 protocol stack and ISCC hardware are tested. For AATM applique and DS1 interface, the AATM hardware, ATM level 2 protocol stack, and AAL5CP portion of ATM driver are tested,

oam

Messages are passed between local and remote systems to guarantee that the ATMM portion of ATM driver is functioning.

payload

This test is similar to the local transceiver loopback test. The wire is also tested because the loopback is at the remote's DS1 interface instead of the local's DS1 interface.

sltc

This test can be run on either the low-speed signaling links or the ATM high-speed signaling links. This is the only test that is supported for *m2pa* links on IPLIMx cards.

Default:

sltc

time (optional)

The time duration for testing the link.

Range:

1 - 240000

hhmmss

hh=hours (00-24)

mm=minutes (00-59)

ss=seconds (00-59)

For example, time=1 or time=000001 is one second; time=240000 is 24 hours; time=200 or time=000200 is 2 minutes.

Default:

1

Example

```
tst-slk:loc=1203:link=a
tst-slk:loc=1203:link=a:loopback=lxvr
tst-slk:loc=1205:link=b:time=000200:force=yes:action=start
tst-slk:loc=1205:link=b:action=stop
tst-slk:loc=1205:link=b:time=200
```

Dependencies

The card in the location indicated by the loc parameter must already be equipped.

A card location that is valid and defined in the database must be specified.

- A card location equipped with an E5-APP-B card cannot be specified.

- A card location equipped with a Telco Switch cannot be specified.

If the signaling link is an ATM HSL signaling link, only the link=a parameter can be specified.

This command is not supported for cards running the SS7IPGW application.

If IPSG-M2PA signaling links or IPLIMx signaling links are used, and the ipliml2=m2pa parameter is specified, then only the loopback=sltc test is allowed.

The *payload* and *line* values are not valid for the loopback parameter when the card is an E1 ATM.

Only the SLTC test can be run on card types LIME1 and LIMT1.

The card must contain the specified signaling link.

The specified signaling link must be provisioned in the database.

The specified signaling link must be an SS7 signaling link.

The signaling link that is used for LFS (Link Fault Sectionalization) testing cannot be active.

A previously entered command for a link test must be accepted before another link test command can be entered.

This command cannot be entered if the LFS test is running on the specified link.

The specified link cannot be in Command Driven Loopback (CDL) when this command is entered. The link must be removed from CDL before this command can be entered for the link. (See the `act/dact-cdl` commands).

The force=yes parameter must be specified to start a test when 256 or more tests are already running in the system.

This command cannot be entered if the maximum number of LFS or link tests are already running in the system. At least one active test must complete before the command can be entered again.

Only one link test can be running on a signaling link at one time.

The action=stop parameter cannot be specified when there is no active link test running on the specified link.

When the action=stop parameter is specified, the loopback, time, and force parameters cannot be specified.

If an IPSG-M3UA signaling link is used, then this command cannot be entered.

If an IPSG-M2PA signaling link is used, the loopback=sltc parameter must be specified.

The card must be equipped and in service, and must be one of the following cards:

- E5-E1T1, E5-E1T1-B, or HC-MIM card running the SS7ANSI or CCS7ITU application
- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPLIM, IPLIMI, or IPSG application

Notes

The *lxvr* and *sltc* loopback tests can be run on low-speed signaling links. All the loopback tests can be run on the ATM high-speed signaling links.

Output

If the card is inhibited (not in service), this message appears when a link test is attempted:

```
tst-slk:loc=1203:link=a
```

```
   rlghncxa03w 03-11-07 16:19:08 EST  EAGLE 31.3.0
   Command Rejected : Card is not in service.
;
```

```
tst-slk:loc=1205:link=b:time=000200:force=yes:action=start
```

```
    tekelecstp 03-11-27 16:15:20 EST  EAGLE 31.3.0
    tst-slk:loc=1205:link=b:time=000200:force=yes:action=start
    Command Accepted: Test Link message is sent.
;

    tekelecstp 03-11-27 16:15:22 EST  EAGLE 31.3.0
    Command Completed.
;

    tekelecstp 03-11-27 16:22:25 EST  EAGLE 31.3.0
    LOC = 1205  Link = B  LSN = ls12345678  Start time = 16:22:25
    LOOPBACK = SLTC      TIME = 00:02:00
    TEST STATUS = Loopback success
;
```

```
tst-slk:loc=1205:link=b:action=stop
```

```
    tekelecstp 03-11-27 16:15:20 EST  EAGLE 31.3.0
    tst-slk:l oc=1205:link=b:action=stop
    Command Accepted: Stop Test Link message is sent.
;

    tekelecstp 03-11-27 16:15:22 EST  EAGLE 31.3.0
    Command Completed.
;

    tekelecstp 03-11-27 16:22:25 EST  EAGLE 31.3.0
    LOC = 1205   = B  LSN = ls12345678  Start time = 16:22:25
    LOOPBACK = LXVR      TIME = 00:01:00
    TEST STATUS = Loopback cleared
;
```

```
tst-slk:loc=1205:link=b:time=200
```

```
    tekelecstp 03-11-27 16:15:20 EST  EAGLE 31.3.0
    tst-slk:loc=1205:link=b:time=200
    Command Accepted: Stop Test Link message is sent.
;

    tekelecstp 03-11-27 16:15:22 EST  EAGLE 31.3.0
    Command Completed.
;

    tekelecstp 03-11-27 16:22:25 EST  EAGLE 31.3.0
    LOC = 1205  Link = B  LSN = ls12345678  Start time = 16:22:25
    LOOPBACK = SLTC      TIME = 00:00:53
    TEST STATUS = Loopback failed
;
```

Legend

- **LOC**—Card location that contains the signaling being tested
- **Link**—Signaling link being tested on the card
- **LSN**—Name of the linkset that contains the link being tested
- **Start time**—Time that the test started
- **LOOPBACK**—Type of loopback test being run
- **TIME**—Length of time that the test ran. This value can exceed the value specified in the time parameter if the test requires more than the specified time to complete.
- **TEST STATUS**—
  - If the action=start (specified or default) is specified, any of the following *TEST STATUS* values can appear:
    - Loopback success
    - Loopback failed
    - Loopback aborted
    - Loopback in-progress
    - Loopback prevented
    - Loopback invalid
  - If the action=stop parameter is specified, any of the following *TEST STATUS* values can appear:
    - Loopback cleared
    - Loopback could not be cleared

Related Commands

act-lpo, *act-slk*, *blk-slk*, *canc-lpo*, *canc-slk* , *dact-slk*, *inh-slk*, *rept-stat-tstslk*, *rtrv-slk*, *ublk-slk*, *unhb-slk*

tst-t1 Test T1 Port

Use this command to test T1 ports. The command is rejected if a loopback test is not compatible with the port type.

Note: This command can be entered for HC-MIM or E5-E1T1/E5-E1T1-B cards.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 -

4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

t1port (mandatory)

T1 port number. The value must be a T1 port that has already been configured with a T1 interface on the specified card.

Range:

1 - 8

action (optional)

Indicator of command action to stop or start a test.

Range:

start

stop

Default:

start

loopback (optional)

Select loopback test type.

Range:

line

lxvr

local transceiver

payload

feline

far end line

fepayload

far end payload

Default:

lxvr

Example

```
tst-t1:t1port=1:loc=1203:loopback=lxvr
tst-t1:t1port=1:loc=1203:action=stop
```

Dependencies

This command cannot be entered during upgrade.

The value specified for the loc parameter must indicate an HC-MIM or E5-E1T1 /E5-E1T1-B card with card type LIMT1.

The card in the location specified by the loc parameter must be equipped.

The card in the location specified by the loc parameter must be in service.

The T1 port specified by the t1port parameter must have a defined T1 interface.

All signaling links that provide timeslots serviced by T1 interfaces on the specified card must be deactivated before this command can be entered. None of the signaling links can be running link diagnostic tests (`tst-slk` and `act-cdl` commands) when this command is entered.

Only one port test can be running on the T1 port specified by the t1port parameter at one time.

The action=stop parameter can be specified only when a port test is running.

If the action=stop parameter is specified, a value of *feline* or *fepayload* must be specified for the loopback parameter.

If the action=stop parameter is specified, and a value of *feline* or *fepayload* is specified for the loopback parameter, then there cannot be an active loopback for the T1 span, or the active loopback must be the one specified in the `tst-t1:action=stop` command.

Notes

Only one port test can be performed at a time on a T1 port. When a port test is in progress on a T1 port, subsequent test requests are rejected.

If a loopback type of *feline* or *fepayload* is specified, then the loopback requests are sent to the far end. No response is given from the far end to indicate if the request was acted upon or received. The local card which hosts the T1 span in the EAGLE does not instrument the loopback locally but maintains knowledge of the far end loopback request. If the local card boots, this knowledge is lost by the card.

To maintain the far end loopback states, if the T1 card with an active *feline* or *fepayload* test boots, the card loses any knowledge of the Far End loopback request, but the OAM retains that knowledge. If the OAM boots, the T1 card updates the OAM with its last known loopback state. If both the T1 card and the active OAM card boot while a Far End Loopback is active, then there is no way of determining the T1 state; however, a `tst-t1:action=stop:action=(feline or fepayload)` command can still be sent.

Output

`tst-t1:t1port=1:loc=1203:loopback=lxvr`

```
    rlghncxa03w 05-01-07 16:19:08 EST  EAGLE5 33.0.0
    Command Accepted: Test Port message is sent.
;
    rlghncxa03w 05-01-07 16:19:08 EST  EAGLE5 33.0.0
    Command Completed.
;
```

`tst-t1:t1port=1:loc=1203:action=stop`

```
    rlghncxa03w 05-01-07 16:19:08 EST  EAGLE5 33.0.0
```

```
    Command Accepted: Stop Port test message is sent.
;
    tekelecstp 03-12-16 14:31:23 EST  EAGLE5 33.0.0
    Command Completed.
;
```

Related Commands

chg-t1, *dlt-t1*, *ent-t1*, *rtrv-t1*

ublk-slk

Unblock Signaling Link

Use this command to cancel a local processor outage (LPO) and restore the link to its previous state. Link status signal units (LSSU) with status of processor outage are stopped, and the link begins sending MSUs again. IPSG-M3UA signaling links are allowed to enter service by allowing received AS-ACTIVE messages to be accepted.

Note: The blocked status of the signaling link is not preserved across a LIM reboot.

Parameters

link (mandatory)

The signaling link on the card specified in the loc parameter. The signaling links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, *b*, *a1 - a31*, *b1 - b31*

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, *1111 - 1112*, *1201 - 1208*, *1211 - 1218*, *1301 - 1308*, *1311 - 1318*, *2101 - 2108*, *2111 - 2118*, *2201 - 2208*, *2211 - 2218*, *2301 - 2308*, *2311 - 2318*, *3101 - 3108*, *3111 - 3118*, *3201 - 3208*, *3211 - 3218*, *3301 - 3308*, *3311 - 3318*, *4101 - 4108*, *4111 - 4118*, *4201 - 4208*, *4211 - 4218*, *4301 - 4308*, *4311 - 4318*, *5101 - 5108*, *5111 - 5118*, *5201 - 5208*, *5211 - 5218*, *5301 - 5308*, *5311 - 5318*, *6101 - 6108*, *6111 - 6118*

Example

```
ublk-slk:loc=2311:link=b
```

Dependencies

A card location that is valid and defined in the database must be specified.

No other action command can be in progress when this command is entered.

The value specified for the loc parameter must refer to one of the following cards, and the referenced card must be equipped:

- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPLIM, IPLIMI, or IPSG application
- HC-MIM, E5-E1T1, or E5-E1T1-B card running the SS7ANSI or CCS7ITU application

This command can be entered only for IPLIMx signaling links that have an ipliml2 parameter setting of *m2pa*.

This command is not valid for E5-ENET or E5-ENET-B cards with SS7IPGW or IPGWI or TCP/IP links.

The card must contain signaling links.

The signaling link must be equipped in the database.

The card in the specified card location cannot be an E5-TDM card, an E5-MDAL card, a MUX card, or the cards running the OAM application.

This command is not valid for links belonging to proxy linksets.

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

This command is not supported for links associated with J7 APCs.

Notes

Unblocking a signaling link removes a Level 2 failure resulting from a `blk-slk` of an ATM high-speed signaling link.

The function of this command is the same as the `canc-lpo` command.

The *Installation Guide* provides an illustration of card locations.

Output

`ublk-slk:loc=2311:link=b`

```
    rlghncxa03w  03-03-07  11:11:28 EST  EAGLE 31.3.0
    Local processor outage being cleared.
;
```

`ublk-slk:loc=1113:link=a`

```
    rlghncxa03w  03-03-07  11:11:28 EST  EAGLE 31.3.0
```

```
    Command Rejected : Location is not valid for command.
;
```

Related Commands

act-lpo, *blk-slk*, *canc-lpo*

unhb-alm Restore Alarm Reporting

Use this command to restore the reporting of alarms for the given device.

Parameters

Note: See *Point Code Formats and Conversion* for a detailed description of point code formats, rules for specification, and examples.

dev (mandatory)

Device. The device where the reporting of alarms is to be restored.

Range:

applsock

IP gateway application socket

as

IP gateway application. Application Server

card

Cards in the database

cdt

Customer defined troubles

clock

System clock

dlk

IP ports on the VSCCP, EROUTE, SLAN, MCPM, and FC-capable cards

e1port

E1 port on HC-MIM, E5-E1T1, or E5-E1T1-B cards

ls

Linksets

lsmsconn

Communication link between the LSMS and the EMS

route

Route

slk

Signaling links

t1port

T1 port on HC-MIM, E5-E1T1, or E5-E1T1-B cards

trm

Terminals

rtx

Exception Route

enet

Ethernet

tps

TPS subsystem

asname (optional)

Gateway Application Server name. When used with the dev=as parameter, this parameter can be used to uninhibit alarms for the named Application Server.

Range:

ayyyyyyyyyyyyyy

Up to 15 alphanumeric characters; the first character must be a letter

cic (optional)

Starting Circuit Identification Code. This parameter is used alone or together with the ecic parameter to define the CIC range, which is used as an exception routing criterion for the specified exception route.

Range:

0 - 16383

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code *(prefix-ni-nc-ncm)*.

Synonym:

dpca

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

Destination point code for inhibiting alarms for routes.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area (un-sna-mna)*. The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

e1port (optional)

Port ID. The E1 port on the specified HC-MIM, E5-E1T1, or E5-E1T1-B card. This parameter is mandatory if the dev=e1port parameter is specified.

Range:

1 - 8

ecic (optional)

Ending Circuit Identification Code. This parameter is used with the cic parameter to define the CIC range, which is used as an exception routing criterion for the specified exception route.

Range:

0 - 16383

id (optional)

Customer Defined Trouble (CDT) ID. Customer Defined Trouble IDs 1 through 4 are generated critical alarms. Because critical alarms cannot be turned off, Customer Defined Trouble IDs 1 through 4 cannot be specified as values for the id parameter. This parameter is mandatory if the dev=cdt parameter is specified.

Range:

5 - 16

ilsn (optional)

Incoming Link Set Name. The name of the originating linkset. This value is used as part of the exception routing criteria for the specified exception route.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

link (optional)

Signaling link on the card specified in the *loc* parameter.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

a1, a2, b1, b2 — dev=lsmsconn

a, b, a1-a31, b1-b31 — dev=slk for an HC-MIM or E5-E1T1-B card

a, b, a1-a15, b1-b15 — dev=slk for an E5-E1T1 card

a1, b1 — dev=dlk for an FC-capable card

a, b — dev=enet for an E5-ENET or E5-ENET-B card

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

lsn (optional)

Linkset name. The name of the linkset containing the device where alarm reporting is to be restored.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters

opc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

opca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

opc/opca/opci/opcn/opcn24/opcn16 (optional)

Origination point code

opci (optional)

ITU international origination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national origination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*). The *prefix* subfield indicates a private point code (*prefix-un-sna-mna*).

Range:

p--, 000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix---p

un---000---127

sna---000---15

mna---000---31

si (optional)

Service Indicator. This parameter is used as the exception routing criterion for the specified exception route.

Range:

0 - 15

sname (optional)

Gateway application socket. When used with the dev=applsock parameter, this parameter can be used to uninhibit alarms for the named IP7 application socket.

Range:

ayyyyyyyyyyyyyy

1 to 15 alphanumeric characters

t1port (optional)

Port ID. T1 port on the specified HC-MIM, E5-E1T1, or E5-E1T1-B card. This parameter is mandatory if the dev=t1port parameter is specified.

Range:

1 - 8

trm (optional)

Terminal ID. The ID number of the terminal whose alarms are to be uninhibited.

Range:

1 - 40

Default:

Report displays on the terminal where the command was issued.

Example

```
unhb-alm:dev=route:dpc=1-1-1
unhb-alm:dpc=1-101-1:opc=4-4-4:dev=rtx
unhb-alm:loc=1102:dev=dlk:port=a1
unhb-alm:dpcn16=121-10-15:opcn16=121-10-15:dev=rtx
```

Dependencies

This command is not allowed in the upgrade mode.

No other action command can be in progress when this command is entered.

When the dev=card parameter is specified, the loc parameter must be specified.

When the dev=dlk parameter is specified, the loc parameter must be specified.

When the dev=slk parameter is specified, the loc and link parameters must be specified.

When the dev=e1port parameter is specified, the loc and e1port parameters must be specified.

When the dev=t1port parameter is specified, the loc and t1port parameters must be specified.

When the dev=ls parameter is specified, the lsn parameter must be specified.

When the dev=trm parameter is specified, the trm parameter must be specified.

When the dev=cdt parameter is specified, the id parameter must be specified.

When the dev=lsmsconn parameter is specified, the link parameter must be specified.

When the dev=route parameter is specified, a dpc/dpca/dpci/dpcn/dpcn24/dpcn16 parameter must be specified.

When the dev=applsock parameter is specified, the sname parameter must be specified.

When the dev=as parameter is specified, the asname parameter must be specified.

The linkset specified by the lsn parameter must be equipped in the database.

If the dev=slk or dev=dlk parameter is specified, the specified link must exist in the database.

The parameters that can be specified with the dev parameter vary, depending on the value specified for the dev parameter as shown:

- dev= (any value)— dur or lvl
- dev=asname — as
- dev=dpc/dpca/dpci/dpcn/dpcn24/dpcn16 — route
- dev=id — cdt

- dev=loc — card, dlk, e1port, slk, t1port, enet
- dev=lsn — ls
- dev=e1port — e1port
- dev=link (link=a, b)— dlk, slk, enet
- dev=link (link=a1, b1)— dlk (For FC-capable cards)
- dev=link (link=a, b, a1, a2, b1, b2, a3, b3)— slk
- dev=link (link=a1, a2, b1, b2)— lsmsconn
- dev=sname — applsock
- dev=t1port — t1port
- dev=trm — trm

If the sname parameter is specified, the socket name must exist in the IPAPSOCK table.

If a point code parameter is specified, the point code must exist in the Routing table.

The card location that is specified in the loc parameter must be equipped.

The specified device type must be supported by the card in the specified card location.

The Origin-Based MTP Routing feature must be turned on before specifying the dev=rtx parameter.

The link parameter must be valid for the selected device type.

The card specified by the loc parameter must have an IPS, MCP, STPLAN, EROUTE, VSCCP, IPSG, IPLIM, IPLIMI, SS7IPGW, or IPGWI application.

The J7 Support feature must be enabled before the opcn16/dpcn16 parameters can be specified.

Notes

In this command, only ITU-international and ITU national point codes support the spare point code subtype prefix (s-) and the private and spare point code subtype prefix (ps-). All of the point code types support the private (internal) point code subtype prefix (p-).

Output

`unhb-alm:dev=route:dpc=1-1-1`

```
    rlghncxa03w 03-03-23 13:20:59 EST  EAGLE 31.3.0
    Alarms are inhibited.

    rlghncxa03w 03-03-23 13:20:59 EST  EAGLE 31.3.0
    Command Completed.
;
```

`unhb-alm:dpc=1-101-1:opc=4-4-4:dev=rtx`

```
    stdcfg2b 06-05-27 20:22:02 EST  EAGLE 35.0.0
    Alarms are enabled
    Command Completed.
;
```

Related Commands

inh-alm, *rept-stat-alm*, *rept-stat-card*, *rept-stat-cdt*, *rept-stat-dlk*, *rept-stat-dstn*, *rept-stat-ls*, *rept-stat-rte*, *rept-stat-rtx*, *rept-stat-seas*, *rept-stat-slk*, *rept-stat-sys*, *rept-stat-trbl*, *rept-stat-trm*, *rtrv-log*

unhb-slk

Uninhibit Signaling Link

Use this command to return an inhibited signaling link to service. If the link was aligned when it was inhibited, a changeover occurred. This command causes a changeback on the specified link. MSUs are transmitted on the link after the changeback is issued.

Note: The inhibited status of the signaling link is not preserved across a LIM reboot.

Parameters

link (mandatory)

The signaling link on the card specified in the loc parameter. The signaling links can be specified in any sequence or pattern.

Synonym:

port

Range:

a, b, a1 - a31, b1 - b31

Not all card types support all link parameter values.

See *Table 54: Summary of Ranges for link Parameter* for valid link parameter range values for each type of card that can have a location specified in the loc parameter.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
unhb-slk:loc=1301:link=a
```

Dependencies

A card location that is valid and defined in the database must be specified.

No other action command can be in progress when this command is entered.

The value specified for the loc parameter must refer to one of the following cards, and the referenced card must be equipped:

- E5-E1T1, E5-E1T1-B, or HC-MIM card running the SS7ANSI or CCS7ITU application
- E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application
- E5-ENET or E5-ENET-B card running the IPLIM, IPLIMI, or IPSG application

The card must contain signaling links.

The signaling link must be equipped in the database.

The inhibit and uninhibit actions are valid for links on E5-ENET and E5-ENET-B cards running the IPLIMx application.

The card in the specified card location cannot be an E5-TDM card, an E5-MDAL card, a MUX card, or the cards running the OAM application.

This command is not valid on E5-ENET or E5-ENET-B cards with SS7IPGW, IPGWI, or IPSG-M3UA links. IPLIM and IPLIMI links can be uninhibited.

If an IPSG-M3UA signaling link is used, then this command cannot be entered.

An appropriate value must be specified for the link parameter when an ATM card is used:

- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

This command is not supported for links associated with J7 APCs.

Notes

The function of this command is the same as the `canc-lpo` command.

The *Installation Guide* provides an illustration of card locations.

Output

`unhb-slk:loc=1301:link=a`

```
    rlghncxa03w 03-03-23 13:20:59 EST  EAGLE 31.3.0
    Allow Link message sent to card
;
```

Related Commands

act-slk, *blk-slk*, *dact-slk*, *dlt-slk*, *ent-slk*, *inh-slk*, *rept-stat-slk*, *rtrv-slk*, *tst-slk*, *ublk-slk*

unlock

Unlock Keyboard

Use this command to unlock a previously locked terminal keyboard. Anyone attempting to use the keyboard is prompted to enter the password of the currently logged-in user.

Parameters

This command has no parameters.

Example

`unlock`

Dependencies

You must enter the password of the logged in user to unlock the keyboard.

This command is valid only if the keyboard is locked.

The port must not be in an unlock disabled state because of excessive successive unlock failures.

Notes

None

Output

`unlock`

```
    Enter LOGIN password to unlock keyboard  :
```

Related Commands

lock

Chapter 5

Debug Commands

This chapter contains information about debug commands used in troubleshooting and debugging the system. These commands are intended only for *My Oracle Support (MOS)* personnel and authorized engineering personnel in the operating companies. The use of these commands is restricted to personnel who have access to the command class Debug.

CAUTION: These commands are to be used precisely as they are described in this chapter, and only under the direction of Customer Care Center personnel. Any other use of these commands can result in a system failure.

This chapter contains the debug commands in alphabetical order.

act-gedti

Activate GEDTI Hub

Use this command to activate a GEDTI Hub for Eagle Eyes. The state of the GEDTI Hub is changed from DACT(Deactivated) to ACT(Active).

Note: The GEDTI hub must be Deactived on the specified card before the command can be executed. If the card boots, then the status of the GEDTI Hub will be reset to DACT.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
act-gedti:loc=1102
```

Dependencies

The value specified for the loc parameter must refer to an equipped card location.

The card at the specified location must be configured as GEDTI Hub.

Activating the state of GEDTI Hub that is already activated has no effect.

The card at the specified location must not be a reserved location.

Notes

None.

Output

```
act-gedti:loc=1101
```

```
Command Accepted - Processing

tekelecstp 11-08-16 18:35:44 MST EAGLE 46.0.0 act-gedti:loc=1101
Command entered at terminal #1.;

tekelecstp 11-08-16 18:35:44 MST
UNKNOWN EAGLE 46.0.0 Activate GEDTI Hub message sent to card.;
```

```
tekelecstp 11-08-16 18:35:44 MST EAGLE 46.0.0
Command Completed.;
```

Related Commands

chg-gedti-card, *dact-gedti*, *rept-stat-gedti*

act-ip-lnk

Activate Internet Protocol Link

Use this command to activate an IP link and put the link into service. The state of the link is changed from OOS-MT-DSBLD (Out-Of-Service-Maintenance-Disabled) to OOS-MT (Out-Of-Service-Maintenance), IS-ANR (In-Service-Abnormal) or IS-NR (In-Service-Normal).

Note: The specified card must be Active before the command can be executed. If the card boots, then the status of the IP link will be reset.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

port (mandatory)

Ethernet interface Port ID.

Range:

a

IP Port A

b

IP Port B

fca

Fast Copy Port A

fcb

Fast Copy Port B

Example

```
act-ip-lnk:loc=1102:port=a
act-ip-lnk:loc=1203:port=fca
```

Dependencies

The value specified for the loc parameter must refer to one of the following cards, and the referenced card must be equipped:

- E5-ENET or E5-ENET-B card running the EROUTE, IPGWx, IPLIMx, IPSG, or STPLAN application
- IPSM card
- E5-SM4G or E5-SM8G-B card running the VSCCP application
- E5-OAM card running the OAMHC application
- E5-MCPM-B

A valid value must be specified for the loc parameter.

The value specified for the port parameter must be supported by the card:

- port A - E5-OAM card running OAMHC application, IPSM card, E5-MCPM-B card, E5-ENET or E5-ENET-B card running the STPLAN application
- port A, B - E5-ENET or E5-ENET-B card running the EROUTE or IPLIMx application, E5-SM4G or E5-SM8G-B card running the VSCCP application
- port A, B, FCA, FCB - E5-ENET or E5-ENET-B card running the IPGWx or IPSG application

The card at the specified location must be configured.

The card in the specified location must be Active before this command can be executed.

2387 E2387 Cmd Rej: Card is not in service

Notes

The act-ip-lnk/dact-ip-lnk commands were created as debug means - aids to turn off or disable the IP interface to troubleshoot network problems, specifically to allow the operator to troubleshoot IP network flooding issues that can cause EAGLE cards to boot repeatedly while trying to come up. These commands should NOT be used for general maintenance actions since they have not been rigorously tested and their usage should be limited to situations like described above.

Output

```
act-ip-lnk:loc=1101:port=a
```

```
Command Accepted - Processing

    tekelecstp 11-08-16 19:52:01 MST  EAGLE 44.0.0
    act-ip-lnk:loc=1101:port=a
    Command entered at terminal #1.
;

    tekelecstp 11-08-16 19:52:01 MST  EAGLE 44.0.0
    Activate IP link message sent to card.
;

    tekelecstp 11-08-16 19:52:01 MST  EAGLE 44.0.0
```

```
    Command Completed.
;
```

Related Commands

rtrv-ip-lnk

act-upgrade

Activate Upgrade

Use this command to perform a software upgrade from a source release to the target release on an in-service system.

Caution: It is strongly recommended that this command be used only in conjunction with the system Upgrade Procedure for your target release. The Upgrade Procedure provides step-by-step information on performing an upgrade.

Parameters

action (mandatory)

The action to be performed for the upgrade process.

Caution: The convertoam and netcomplete actions should be used only under the direction of the Customer Care Center.

Range:

yyyyyyyyyy

Up to 10 alphabetic characters. Valid actions are:

- *chkrel*—Validates the stored upgrade target release on the physical disk as specified by the src parameter.
- *convertoam*—Converts the standby OAM database.
- *convertstp*—Performs all OAM and network conversions necessary for an upgrade. This command transitions through all of the upgrade phases to upgrade completion. If measurement collection is turned on, this command automatically inhibits measurements during the upgrade. Upon completion of the upgrade, this command returns the MASPs to full-function mode with measurement collection turned back on.
- *createsets*—Assigns network cards to upgrade-grouping sets.
- *dbstatus*—Reports the status of all database partitions on the TDM fixed disks and the removable drive(s) (similar to the `rept-stat-db:display=version` command).
- *displaysets*—Reports the upgrade-grouping sets of network cards.
- *getrel*—Retrieves the upgrade target release file from either the EAGLE software release distribution server or the plug-in flash drive. It then expands the data on the inactive partition group of the hard disks.
- *netcomplete*—Indicates upgrade completion and places the system in a fully functional mode.

- *oamcomplete*—Sets the upgrade phase number to 3, and enables the beginning of controlled card loading.
- *refreshsets*—Not yet supported.
- *verifysets*—Not yet supported.

release (optional)

The name of the software release file to be downloaded.

This file contains the upgrade target release on the software release distribution server or plug-in flash drive.

Range:

xyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

1 alphabetic character followed by up to 29 alphanumeric characters. One or more periods can be used.

Note: The value must be at least 11 characters in length and must contain a hyphen (-). The format of the value must be *xx.xx.xx-yy.yy.yy*, where *xx.xx.xx* is the release number, and *yy.yy.yy* is the engineering build number.

src (optional)

The physical disk that contains the upgrade target release.

Range:

fixed

The upgrade target release is on the fixed disk

remove

The upgrade target release is on the removable cartridge

usb

The upgrade target release is on the plug-in flash drive

server

The upgrade target release is on the remote server

thres (optional)

Network Threshold value. The percentage of signaling links that is to remain in service (IS) during the network conversion phase and enables SCCP thresholding and flashing on non-provisioned cards during the upgrade.

Range:

50 - 90

Default:

Network cards are updated serially

Example

```
act-upgrade:action=convertstp
```

```
act-upgrade:action=dbstatus
act-upgrade:action=convertstp:thres=75
act-upgrade:action=getrel:release="37.5.2-58.41.2":src=usb
act-upgrade:action=chkrel:src=fixed
```

Dependencies

The value specified for the action parameter must correspond to a specific upgrade phase:

- action=convertoam—upgrade phase=0 and 1
- action=oamcomplete—upgrade phase=2
- action=convertnet—upgrade phase=3
- action=netcomplete—upgrade phase=3
- action=convertstp—upgrade phase=0-3

The Measurements Collection function must be turned off (`chg-meas:collect=off`) or the Measurements Platform feature must be turned on (`chg-measopts:platformenable=on`) before a value of *convertoam*, *oamcomplete*, or *netcomplete* can be specified for the action parameter.

A valid upgrade release must reside on the plug-in flash drive or the inactive partition of the fixed disk.

The standby OAM database must be the source release.

The current OAM database must be the source release.

The database partition must be coherent.

The database partition must be in the correct functional mode.

The action=convertstp and thres parameters must be specified together in the command.

The destination of a static IP route or the local interface network address of an IP card cannot be the same as the PVN, FCNA, or FCNB network address.

Upgrade conversion cannot be initiated from a telnet-type terminal (terminal IDs 17-40).

The DCM cards are obsolete for SS7IPGW, IPGWI, IPLIM, and IPLIMI applications.

The action=getrel and release parameters must be specified together in the command.

An IPSM card must be provisioned and in service before a value of *getrel* or *chkrel* can be specified for the action parameter.

The `ent-ftp-serv:app=dist` command must be entered before a value of *getrel* or *chkrel* can be specified for the action parameter.

An E5-MCAP card must be provisioned in the system before the src=usb parameter can be specified.

If the src=fixed parameter is specified, then a plug-in flash drive cannot be inserted.

If the src=remove parameter is specified, then a removable cartridge must be inserted in the system.

If an E5-MCAP or E5-MDAL card is used, then the src=remove parameter cannot be specified.

Invalid hardware configuration alarms are set or an HMUX alarm must be addressed.

All cards that are in the auto-inhibited state must be removed before this command can be entered.

Cards that prevent the IMT buses from being inhibited during the upgrade cannot exist in the system.

The specified source drive must be at the correct database version for the upgrade to proceed.

The plug-in flash drive cannot contain an EAGLE backup image.

If the src=usb parameter is selected, then the plug-in flash drive upgrade media must be inserted in the Active OAM's flush-mounted USB port.

The internal RAM disk must be available for the plug-in flash drive's upgrade image to be unpackaged.

The disk that contains the upgrade target release must be in a known upgrade mode.

If the src=usb or src=server parameter is specified, then the action=getrel parameter must be specified. If the src=remove or src=fixed parameter is specified, then the action=getrel parameter cannot be specified.

The EAGLE PVN address in the source database cannot be identical to the EAGLE FCNA or FCNB network address in the target database.

The icdpnunknx and icdpnunknX and the gcdpnunknx and gcdpnunknX NPP Action Sets cannot co-exist in the source release.

The value specified for the release parameter must be at least 11 characters in length and contain a hyphen (-). The format of the value must be *xx.xx.xx-yy.yy.yy*, where *xx.xx.xx* is the release number, and *yy.yy.yy* is the engineering build number.

The card must have sufficient DRAM memory to perform the GTMOD table Health Check.

The AMGTT data in the GTT table cannot exceed the capacity of the GTMOD table (100 K).

The MFC feature must be ON prior to upgrading to release 46.2 or later.

The action=refreshsets and action=verifysets parameters are not supported.

The thres parameter cannot be specified if the threshold type (threstype) has been changed to `set`.

When issuing the `act-upgrade` command with the threstype assigned to card sets, the list of card sets needs to be created and valid.

Notes

The `act-upgrade:action=convertstp` command executes all four upgrade phases consecutively.

If the `act-upgrade:action=convertstp` command is entered following a command abort, the upgrade processing determines the last upgrade phase that was successfully completed. The upgrade processing then attempts to restart from that point to successful completion. Re-entering the `act-upgrade:action=convertstp` command following a command abort is the recommended method for recovery.

The TDMs and plug-in flash drives have upgrade phase indicators. The upgrade command expects the disks to be in certain phases before executing a specific action. If the disks are not in the correct phases, an error is generated.

The `act-upgrade:action=dbstatus` command generates output similar to that provided by the `rept-stat-db:display=version` command.

The thres parameter is used to:

- Allow multiple cards to be upgraded together, as long as the specified percentage of links remain in service. The value is applied to groups of links based upon the link-supporting group or the entire system. The grouping is set by the `chg-upgrade-config:threstype=` command.
- Enable SCCP thresholding, which allows multiple Service Module cards to be upgraded together. The specified thres parameter value is not used to determine the number of Service Module cards to upgrade. The peak SCCP load since the last OAM boot is used to determine the number of cards that must remain in service (at least half of the cards must remain in service).
- Enable the non-provisioned flash function, which flash-downloads any boot-prom type card if the card is in the system but not provisioned.

The `act-upgrade:action=getrel` action defaults to getting the release from the provisioned IPSM card using the provisioned FTP Server. If the src=usb parameter is specified, then the release is obtained from the plug-in flash drive upgrade media.

Output

Note: The `act-upgrade:action=convertstp` command performs the OAM conversion and the network conversion. During the conversion, this command broadcasts the current activity in the scroll area. Refer to Appendix B of the EAGLE Release Software Upgrade Procedure for a sample of message output.

The action *dbstatus* reports the current database status.

`act-upgrade:action=dbstatus`

```
    tekelecstp 03-08-01 08:30:00 EST  Rel 31.3.0 Upg Phase 2

    DATABASE STATUS: >> OK <<
            TDM 1114 (STDBY)                TDM 1116 ( ACTV )
             C   LEVEL    TIME LAST BACKUP    C   LEVEL    TIME LAST BACKUP
             - -------- -------------------- - -------- -------------------
    FD BKUP  Y     1    03-08-01 08:30:00 EST Y     1    03-08-01 08:30:00EST
    FD CRNT  Y     1                          Y     1

            MDAL 1117
             - --------
    RD BKUP  Y     1    -------- -------- ---

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE     VERSION STATUS
    ---------  ----  -  -  ----------  -----------------    -----------------
    TDM-CRNT   1114  Y  N  1           03-08-01 08:30:00    123-001123-000-000
UPG 2
    TDM-BKUP   1114  Y  -  1           03-08-01 08:30:00    123-001123-000-000
UPG 2
    TDM-CRNT   1116  Y  N  1           03-08-01 08:30:00    123-001123-000-000
UPG 2
    TDM-BKUP   1116  Y  -  1           03-08-01 08:30:00    123-001123-000-000
UPG 2
    MDAL       1117  Y  -  1           -------- --------    123-001123-000-000
UPG 2

    INACTIVE PARTITION GROUP
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE     VERSION STATUS
    ---------  ----  -  -  ----------  -----------------    -----------------
    TDM-CRNT   1114  Y  N  1           03-08-01 08:30:00    118-000-000 NORMAL
    TDM-BKUP   1114  Y  -  1           03-08-01 08:30:00    118-000-000 NORMAL
    TDM-CRNT   1116  Y  N  1           03-08-01 08:30:00    118-000-000 NORMAL
```

```
    TDM-BKUP   1116  Y  -  1          03-08-01 08:30:00    118-000-000 NORMAL
;
```

Related Commands

rept-stat-db

cdu

CAP Downloadable Utility

The CAP Downloadable Utility (CDU) is a diagnostic program that can be downloaded to any card including the DSM/DCM cards on the system by entering the `alw/rst-card:loc=xxxx:code=utility` command.

This command is used to enter commands to perform diagnostic functions. The command syntax is as follows:

```
cdu:loc=xxxx:cmd="command string"
```

The loc and cmd parameters are mandatory. The command string, enclosed in double quotes (" "), specifies the diagnostic function to perform and includes any optional or mandatory parameters for the specified `cmd` keyword.

This command uses the VCDU or CDU GPL. The CDU or the VCDU utility is downloaded automatically depending on the type of the board. For the DSM the VCDU utility is downloaded; for the TSM the CDU utility is downloaded.

Parameters

cmd (mandatory)

The commands that are used to perform diagnostic functions. The command string contains a keyword (listed in the following Range section) and one or more parameters (listed in the Subrange section that follows the Range section). The command string must be enclosed in double quotes (" ").

Range:

zzzz

- `canc-qcktst`—Aborts the quick test. This command applies to the DSM card only and has no parameters.
- `rtrv-qcktst`—Displays the quick test results. This command applies to the DSM card only and has no parameters.
- `fill-mempat`—Fills a section of memory with a specific data pattern.
- `tst-mempa` —Tests the memory pattern that was initialized by the fill-mempat command.
- `dump-mempat`—Displays the memory pattern test results continuously without any other output messages. This command has no parameters.
- `rtrv-mempat`—Displays the memory pattern test results. This command can be entered while the test is still running or as soon as a failure occurs. This command has no parameters.
- `act-checkbit`—Tests the M256 checkbit DRAM.
- `rtrv-checkbit`—Displays the M256 checkbit test results. This command has no parameters.
- `act-memflt`—Tests M256 error detection and correction capabilities (fault insertion test).
- `rtrv-memflt`—Displays the fault insertion test results. This command has no parameters.
- `act-cachetst`—Starts the cache test on the specified memory range.
- `dump-cachetst`—Displays the results of the cache test. This command has no parameters.
- `act-pingtst` —Implements a network test in the VCDU utility only. The ping test is applicable to DCM/DSM cards only and will not work in the other cards.
- `canc-pingtst`—Aborts the ping test. This command has no parameters.
- `rtrv-pingtst`—Displays the results of the ping test. This command has no parameters.

The keywords used in the command strings use the parameters shown in *Table 53: Subrange Parameters for cmd Keywords*.

Table 53: Subrange Parameters for cmd Keywords

beg =(mandatory) The start address of the physical memory range to be tested. The value is a hexadecimal number. This parameter is used with the keywords `act-cachetst`, `act-checkbit, act-memtst, fill-mempat`, and `tst-mempat`. **Range:** **For cards other than the DSM** *h'00100000–h'bfffffffe* **For act-checkbit only** *h'80000000–h'bfffffffc* **For act-cachetst only** *h'01400000–h'ffd40000* **For DSM card only** *h'01400000–h'ffdfffffc*

end = (mandatory)

The first address beyond the last address of the physical memory range to be tested. The value is a hexadecimal number. This parameter is used with keywords `act-checkbit, act-cachetst, act-memtst, fill-mempat`, and `tst-mempat`.

Range:

For cards other than the DSM

`h'00100002–h'c0000000`

For act-checkbit only

h'80000004–h'c0000000

For act-cachetst only

h'01440000–h'ffdfffff

For act-memtst on DSM card only

h'01400000–h'ffe00000

loop = (optional)

The number of times a test is performed. The value is a hexadecimal or a decimal number. This parameter is used with keywords `act-memtst, act-cachetst, act-memflt, actcheckbit, act-qcktst`, and `act-pingtst`.

Range: *h'0–h'ffff*

The value *h'0* indicates that an infinite number of tests is performed.

Default: *h'1*

data = (mandatory)

The hexadecimal of the data pattern. This parameter is used with keywords `act-cachetst, fill-mempat`, and `tst-mempat`.

Range: *h'0000–h'ffff*

port =(mandatory)

The port address from which to start the ping. This parameter is used with keyword `act-pingtst`.

Range: *a, b*

dest = (mandatory)

The destination IP address to be pinged. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where 192.126.100 is the network number and 5 is the machine's host number. This parameter is used with keyword `act-pingtst`.

Range: 4 numbers separated by dots, with each number in the range of 0–255.

router =(optional)

The router through which the network interface can be tested. This is a TCP/IP address expressed in standard dot notation. IP addresses consist of the system's network number and the machine's unique host number. An example IP address is 192.126.100.5, where 192.126.100 is the network number and 5 is the machine's host number. This parameter is used with keyword `act-pingtst`.

Range: 4 numbers separated by dots, with each number in the range of 0–255.

type =(optional)

Indicates the type of memory test to perform: a comprehensive high-memory test or a fast high-memory test. The fast test performs two tests: the Write/Read block and the Address Write/Read. The comprehensive test performs the fast test as well as a Write/Read Walking 1/0s. This parameter is used with keyword `act-memtst`.

Range: *full, fast*

Default: *full*

addr = (mandatory)

Indicates the physical address to test. This parameter must be dword aligned and must not be the first or last dword of the installed M256 expansion DRAM. This parameter is used with keyword `act-memflt`.

Range: *h'80000004–h'bffffff8*

loc (mandatory)

The card location of the card as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113 - 1117

Example

```
cdu:loc=1215:cmd="act-memtst:beg=h'00100000:end=h'00100002:loop=3:type=fast"
cdu:loc=1215:cmd="canc-memtst"
cdu:loc=1215:cmd="fill-mempat:beg=h'00100000:end=h'c0000000:data=h'ffff"
cdu:loc=1215:cmd="tst-mempat:beg=h'00100000:end=h'c0000000:data=h'ffff"
cdu:loc=1215:cmd="act-qcktst:loop=h'2"
cdu:loc=1215:cmd= "rtrv-qcktst"
cdu:loc=1215:cmd="act-pingtst:port=a:dest=215:200:100.6:router=150.1.1.105:loop=h'2"
cdu:loc=1215:cmd="canc-pingtst"
```

```
cdu:loc=1107:cmd=“act-cachetst:beg=h'01400000:end=h'01440000:data=h'ffff”
cdu:loc=1107:cmd=“dump-cachetst”
cdu:loc=1215:cmd=“act-checkbit:beg=h'80000000:end=h'80000004:loop=h'2”
cdu:loc=1215:cmd=“rtrv-checkbit”
cdu:loc=1215:cmd=“act-memflt:addr=h'80000004:loop=h’3”
cdu:loc=1215:cmd=“rtrv-memflt”
```

Dependencies

If the `act-cachetst` keyword is entered, the address range should not be less than 256 KB.

The `ill-mempat` keyword must be entered before the `act-cachetst` keyword can be entered.

The quick memory test commands can be entered only on DSM cards.

The ping test commands can be entered only on DSM or DCM cards.

Notes

The `act-memtst:type=full` test takes approximately 21 hours to run on a 1 GB TSM. The `actmemtst:type=fast` test takes approximately 1 hour. The VCDU utility has the capability to test the 4 GB of memory in 4 hours if the `act-memtst` command is entered with the type=fast parameter.

Output

`cdu:loc=1107:cmd="dump-memtst"`

```
cdu: paced memtst output begins
  address          written  read  address     written  read
  bad: h'01400000, h'5a5a, h'ffff h'01400002, h'5a5a, h'ffff
  bad: h'01400004, h'5a5a, h'ffff h'01400006, h'5a5a, h'ffff
  bad: h'01400008, h'5a5a, h'ffff h'0140000a, h'5a5a, h'ffff
  bad: h'0140000c, h'5a5a, h'ffff h'0140000e, h'5a5a, h'ffff
  bad: h'01400010, h'5a5a, h'ffff h'01400012, h'5a5a, h'ffff
  bad: h'01400014, h'5a5a, h'ffff h'01400016, h'5a5a, h'ffff
  bad: h'01400018, h'5a5a, h'ffff h'0140001a, h'5a5a, h'ffff
```

`cdu:loc=1107:cmd="dump-mempat"`

```
cdu: paced mempat output begins
  address          written  read  address     written  read
  bad: h'01400000, h'1234, h'ffff h'01400002, h'1234, h'ffff
  bad: h'01400004, h'1234, h'ffff h'01400006, h'1234, h'ffff
  bad: h'01400008, h'1234, h'ffff h'0140000a, h'1234, h'ffff
  bad: h'0140000c, h'1234, h'ffff h'0140000e, h'1234, h'ffff
  bad: h'01400010, h'1234, h'ffff h'01400012, h'1234, h'ffff
  bad: h'01400014, h'1234, h'ffff h'01400016, h'1234, h'ffff
  bad: h'01400018, h'1234, h'ffff h'0140001a, h'1234, h'ffff
  bad: h'0140001c, h'1234, h'ffff h'0140001e, h'1234, h'ffff
  bad: h'01400020, h'1234, h'ffff h'01400022, h'1234, h'ffff
```

```
  bad: h'01400024, h'1234, h'ffff h'01400026, h'1234, h'ffff
  bad: h'01400028, h'1234, h'ffff h'0140002a, h'1234, h'ffff
```

Note: The `fill-mempat` keyword must be specified before the `act-cachetst` keyword is specified.

```
cdu:loc=1107:cmd="fill-mempat:beg=h'11000000:end=h'11001000:data=h'1234"
cdu:loc=1107:cmd="act-cachetst:beg=h'11000000:end=h'11001000:data=h'1234"
```

```
CARD : 1107 CDU: Cache Test Strt Loop 0x1
CARD : 1107 CDU: Cache Test Pass Loop 0x1
or
CARD : 1107 CDU: Cache Test Strt Loop 0x2
CARD : 1107 CDU: Cache Test Fail Loop 0x2

or

CARD : 1107 CDU: Cache write back may not occur w/ address range less than 256KB

or

CARD : 1107 CDU: Cache Test Already Running
```

```
cdu:loc=1107:cmd="dump-cachetst"
```

```
CARD 1107  CDU: PACED CACHETST OUTPUT BEGINS
CARD 1107  B:11000004,1234,55aa
```

```
cdu:loc=1107:cmd="act-qcktst"
```

```
CARD: 1107  CDU: Quick Test Started: Loop 0x1
CARD: 1107  CDU: Quick Test Passed: Loop 0x1

or

CARD: 1107 CDU: Quick Test Already In progress

or

CARD: 1107 CDU: Quick Test Started: Loop 0x1
CARD: 1107 CDU: Quick Test Failed: Loop 0x1
```

```
cdu:loc=1107:cmd="rtrv-qcktst"
```

```
Location: 1107 Loop: 0x1
Memory Range : 0x01400000 - 0xFFDFFFFF Number of D1G = 4
Number of Failures: 15
Data Lines Test
Fault detected in data line D12 for chip xx
Fault detected in data line D20 for chip yy
:
Address Lines Test
Fault detected in address line A14 for chip xx
Fault detected in address line A26 for chip yy
:
Memory Device Test
Address: 0x01410000 Write: 0xaaaa Read: 0xaaa5
Address: 0x01410100 Write: 0xaaaa Read: 0xaa5a
```

```
cdu:loc=1107:cmd="act-pingtst:port=a:dest=128.113.14.95: loop=2"
```

```
CARD: 1107 CDU: PING Test Started: PORT A: Loop 0x1
CARD: 1107 CDU: PING Test Passed: PORT A: Loop 0x1

or

CARD: 1107 CDU:PING Test Already In Progress
```

```
cdu:loc=1107:cmd="rtrv-pingtst"
```

```
CARD: 1107 CDU: Ping Test: PORT A: Loop: 0x1
Total Attempts: 10 # of Successful Attempts: 2 # of Failed Attempts: 8
```

Related Commands

None.

chg-bip-fld

Change Board Identification Field

Use this command to manually update the board identification PROM (BIP) data during an upgrade in the field.

Note: Initial programming of the BIP data occurs during manufacturing.

Parameters

data (mandatory)

Board Identification (BID) record field data.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A character string, specifying board identification field data based on the value of the fld parameter.

fld (mandatory)

Board identification field.

Range:

rev

revision

sm

software match

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1112, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118, 6202 - 6212, 6302 - 6312

type (optional)

Type of board.

Range:

mbd

main assembly

Example

This example shows changing of the **sm** (Software MatchID) field in BIP data of Main assembly:

```
chg-bip-fld:loc=1102:fld=sm:data="001"
```

Dependencies

The value of the loc parameter cannot specify a location for a fixed disk or removable drive.

Notes

The card in the specified location must be inhibited.

Output

```
chg-bip-fld:loc=1103:fld=rev:data="B"

    tekelecstp 10-04-01 12:05:44 IST  EAGLE 42.0.0
    Board ID Prom updated.
;
```

Related Commands

chg-bip-rec , *disp-bip* , *rtrv-bip*, *tst-bip*

chg-bip-rec

Change Board Identification PROMs Record

Use this command to manually update the Board Identification PROM (BIP) data during an upgrade in the field.

Note: Initial programming of the BIP data occurs during manufacturing.

Parameters

data (mandatory)

Board identification data.

Range:

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz

A patterned character string. This data string is generated by entering valid input parameters to the BIP tool.

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1112, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118, 6202 - 6212, 6302 - 6312

init (optional)

This parameter initializes the contents of a PROM to contain only the record specified in the data parameter, if that record is a board identification record.

Range:

yes

The contents of the PROM are initialized.

no

The contents of the PROM are not initialized.

Default:

no

typed (optional)

Type of board.

Range:

mbd

main assembly

Example

This example initializes the contents of a main assembly BIP to contain only the record specified in the data parameter:

chg-bip-rec:loc=1105:data=xxxx:init=yes

This example displays the programming of the DCM Ethernet Addresses for Port A (ENT01):

```
chg-bip-rec:loc=1102:data="ENT01,AD00001704000D,cs104"
```

Dependencies

The value of the loc parameter cannot specify a location for a fixed disk or removable drive.

If the init=yes parameter is specified, then the value of the data parameter must be a Board IDentification (BID) record.

Notes

The card in the specified location must be inhibited.

Output

```
chg-bip-rec:loc=1107:data=xxx:init=yes
```

```
    tekelecstp 10-04-01 12:05:44 IST  EAGLE 42.0.0
    Board ID Prom updated.
;
```

Related Commands

chg-bip-fld , *disp-bip* , *rtrv-bip*, *tst-bip*

chg-ee-card

Change Eagle Eyes Card

Use this command to enter/modify Eagle Eyes Network card data in the Eagle Eyes Card (EE CARD) table. The EE CARD entry consists of Card location and Eagle Eyes specific data.

Parameters

loc (mandatory)

Eagle Eyes Card location.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

action (optional)

Action to be performed on the specified filter ID for the card.

Range:

attach

detach

Default:

No change to the current value.

System Default:

0

fltid (optional)

A comma-separated Eagle Eyes Filter ID list to be associated or disassociated with the card. Up to 8 FLT IDs can be specified in the list.

Range:

1-200

Default:

No change to the current value.

System Default:

0

kblim (optional)

Sets the file size limit of the capture file created, in kilobytes.

Range:

1-4000000

Default:

No change to the current value.

System Default:

none

pktlim (optional)

Sets the limit on the number of Ethernet frames to send.

Range:

1-10000000

none

Default:

No change to the current value.

System Default:

none

seclim (optional)

Sets the limit on the amount of time to perform the trace, in seconds.

Range:

1-5644800

none

Default:

No change to the current value.

System Default:

none

thr (optional)

Sets the sending rate of the Eagle Eyes throttle task in IMT packets per second. The packets will not be captured unless this parameter is set to a non-zero value for the particular card.

Range:

1000--10000

Default:

No change to the current value.

System Default:

0

Example

```
chg-ee-card:loc=1101:fltid=12:action=attach:thr=2000:pktlim=5000
chg-ee-card:loc=1102:kblim=40000:seclim=3000000
chg-ee-card:loc=1101:fltid=13:action=detach:pktlim=none
```

Dependencies

If the fltid parameter is specified, then the action parameter must be specified.

The EE CARD table cannot contain more than 256 entries.

The EE CARD table must be accessible.

At least one optional parameter must be specified.

The fltid specified should not be already associated with the card.

The value specified for the fltid parameter must already exist in the EE FLT table.

Maximum of 16 include filters can be attached to a card.

Maximum of 16 exclude filters can be attached to a card.

The value specified for the loc parameter must not be a system reserved location.

The IMT table must be accessible.

The card in the location specified by the loc parameter must have Eagle Eyes service capability.

The card loc specified to detach a filter must have Eagle Eyes configured.

The card at the specified location must be equipped.

The Filter appl and card appl should be same.

Notes

The value specified for the loc parameter must refer to a card running one of the following GPLs, and the referenced card must be equipped:

- IPSG, IPLHC, IPGHC
- ATMHC
- SS7HC
- SIPHC
- DEIRHC

Output

```
chg-ee-card:loc=1101:fltid=12:action=attach:thr=2000:pktlim=5000
```

```
tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
EE CARD table is (2 of 256) 1% full
CHG-EE-CARD: MASP A - COMPLTD
```

Related Commands

dact-ee, *rept-stat-ee*, *rtrv-ee-card*

chg-gedti-card Change GEDTI Hub

Use this command to configure GEDTI Hub for Eagle Eyes traffic capture.

Parameters

loc (mandatory)

IPSM Card location to be configured as GEDTI Hub.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

port (mandatory)

GEDTI Port to be set.

Range:

1025 - 65354

Example

```
chg-gedti-card:loc=1211:port=1124
```

Dependencies

The value specified for the loc parameter must correspond to the location of an IPSM card.

The value specified for the port parameter must not be configured on any other IPSM card.

If the GEDTI Hub is in ACTIVE state then port cannot be changed.

The EE Card table must be accessible.

Notes

None.

Output

```
chg-gedti-card:loc=1211:port=1245
```

```
tekelecstp 10-03-08 14:43:31 EST EAGLE 46.0.0
EE CARD table is (2 of 256) 1% full
CHG-GEDTI-CARD:MASP A - COMPLTD ;
```

Related Commands

act-gedti, *dact-gedti*, *rept-stat-gedti*

chg-tbl Change Table

Use this command to create, rename, or reset any table on a fixed disk or removable drive.

Caution: Before entering the `chg-tbl` command, contact My Oracle Support.

Parameters

action (mandatory)

The desired action to perform on the table.

Range:

create

Creates a DOS entry in the FAT table and updates the DOS directory table.

rename

Changes the name of an existing system table to a new DOS file name (does not update the *dms.cfg* file).

reset

Initializes an existing table to the value designated by the resetchar parameter.

disk (mandatory)

Target disk. The disk that contains the file.

Range:

remove

Removable drive

fixed

Fixed disk

usb

Argument to be used by Oracle personnel only.

ext (optional)

Extension. The three character DOS filename extension.

Range:

azz

0–3 ASCII characters

filelength (optional)

The amount of space the file occupies on the disk.

Range:

1 - 32505856

id (optional)

Table identification number.

Range:

0 - 499

name (optional)

Name of the file.

Range:

azzzzzzz

1–8 ASCII characters

prtngrp (optional)

Partition group. The disk partition group to be changed.

Range:

active

inactive

Default:

active

resetchar (optional)

Reset character. The table reset character that is written to every byte of the table.

Range:

0 - 255

Example

```
chg-tbl:action=create:disk=remove:name=test:ext=sys:filelength=150000
chg-tbl:action=reset:disk=remove:id=0
chg-tbl:action=rename:disk=remove:id=0:name=dms:ext=old
```

Dependencies

If the action=create/rename parameter is specified, then the name parameter must be specified.

If the action=create parameter is specified, then the name, ext, and filelength parameters must be specified.

If the file type is a directory, the filelength parameter is not required. The directory entry file length is always 1 cluster in length.

The attributes used during file creation are current date and time of the active MASP. Readable/writable files are allocated contiguously from the last free FAT cluster.

If the action=reset parameter is specified, then the id parameter must be specified.

If the action=rename parameter is specified, then the id, name, and ext parameters must be specified.

This command cannot be used to modify the security log.

An E5-MCAP card must be installed before the disk=usb parameter can be specified.

Notes

None

Output

```
chg-tbl:action=create:disk=remove:name=test:ext=sys:filelength=150000
```

```
chg-tbl: CREATE 0K : filename = test.sys, byte length = 150000
chg-tbl: command complete
;
```

```
chg-tbl:action=reset:disk=remove:id=0
```

```
chg-tbl: RESET OK : Table 0, DMS.CFG
chg-tbl: command complete
;
```

```
chg-tbl:action=rename:disk=remove:id=0:name=dms:ext=old
```

```
chg-tbl: RENAME 0K : Table 0, DMS.CFG to DMS.OLD
chg-tbl: command complete
;
```

Related Commands

disp-disk-dir

chg-upgrade-config

Change Upgrade Configuration

Use this command to configure data used by the upgrade software during an upgrade of an in-service EAGLE from a source release to the target release.

Note: This command stores data that will be used during the software upgrade. The command does not start the software upgrade.

Parameters

assignset (optional)

Assigned Set. The card specified by the loc parameter is assigned to the upgrade-grouping set specified by this parameter.

Range:

2 - 10

deltblcnv (optional)

This parameter clears the flag of the corresponding entry in the Table Conversion Definition table that forces the table to be converted during a software upgrade.

Caution: The deltblcnv parameter should be used only under the direction of My Oracle Support (MOS).

Range:

0 - 1023

limsets (optional)

LIM Sets. This parameter sets the number of sets for link cards.

Range:

2 - 10

loc (optional)

Location. The location of a network card to be assigned to a set specified by the assignset parameter.

Range:

1101 - 1113, 1115, 1201 - 1218, 1301 - 1318, 2101 - 2118, 2201 - 2218, 2301 - 2318, 3101 - 3118, 3201 - 3218, 3301 - 3318, 4101 - 4118, 4201 - 4218, 4301 - 4318, 5101 - 5118, 5201 - 5218, 5301 - 5318, 6101 - 6118

src (optional)

Source. The disk that physically contains the upgrade target release.

Range:

fixed

The upgrade target release is on the fixed disk

remove

The upgrade target release is on the removable drive

srvsets (optional)

Service Sets. This parameter sets the number of sets for service cards.

Range:

2 - 10

threstype (optional)

Threshold type. The type of thresholding to be used during the upgrade.

Range:

system

upgrade threshold value applied at a system level

group

upgrade threshold value applied at group level

set

network conversion is based on the defined sets of cards

Example

```
chg-upgrade-config:addtblcnv=327
chg-upgrade-config:deltblcnv=327
chg-upgrade-config:threstype=set:srvsets=2:limsets=4
```

Dependencies

One of the optional parameters must be specified in the command.

The srvsets and limsets parameters cannot be specified unless the threstype is being changed to or has been changed to `set`.

The loc parameter is required when the assignset parameter is specified.

The value specified for the assignset parameter cannot be greater than the current value of srvsets or limsets for the specified card.

Output

`chg-upgrade-config:addtblcnv=327`

```
    rlghncxa03w  07-03-13  08:15:45 EST  EAGLE 37.5.0
    Command Completed.
;
```

Related Commands

act-upgrade , *rtrv-upgrade-config*

clr-disk-stats Clear Disk Statistics

Use this command to clear the disk performance statistics. All associated disk statistics are zeroed.

Parameters

loc (mandatory)

Location. The location of the card.

Range:

1113, 1115

Default:

none

Example

`clr-disk-stats:loc=1113`

Dependencies

The specified card location must contain a card that is running an OAM (1113 or 1115).

A related command must not be in progress.

Notes

None

Output

```
clr-disk-stats:loc=1113
```

```
    rlghncxa03w 01-03-01 14:14:05 EST  Rel 28.1.0
    Disk performance statistics cleared.
;
```

Related Commands

disp-disk-stats

copy-tbl

Copy Table

Use this command to copy a single table from one source to another. A table can be copied to any verifiable location in the system; however, the source and destination tables must have identical configurations (same number of entries, same entry size, both 1- dimensional and 2-dimensional).

Note: A table cannot be copied onto itself.

Parameters

dloc (mandatory)

Destination location. The location of the destination table.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

1114

TDM

1116

TDM

1113

Latched USB port

1115

Latched USB port

sloc (mandatory)

Source location. The location of the source table.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108,

3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

1114

TDM

1116

TDM

1113

Latched USB port

1115

Latched USB port

stbl (mandatory)

Source table. The identifying number of the source table.

Range:

0 - 1023

ddrv (optional)

Destination drive. The identification of the disk to which the table is copied.

Range:

fixed

The fixed disk

remove

The removable drive

usb

Argument to be used by Oracle personnel only.

Default:

fixed

dprtngrp (optional)

Disk partition group. The disk partition group of the destination table.

Range:

active

inactive

Default:

active

dtbl (optional)

Destination table. The identifying number of the destination table.

Range:

0 - 1023

Default:

The stbl parameter value

sdrv (optional)

Source drive. The identification of the disk from which the table is copied.

Range:

fixed

The fixed disk

remove

The removable drive

usb

Argument to be used by Oracle personnel only.

Default:

fixed

sprtngrp (optional)

Source partition group. The disk partition group of the source table.

Range:

active

inactive

Default:

active

Example

```
copy-tbl:stbl=25:dtbl=24:sloc=1114:dloc=1116:sdrv=fixed
```

Dependencies

Only one table copy command can be executed at a time.

The source and destination tables must exist and be compatible.

This command cannot be used to modify the security log.

The same value cannot be specified for the sloc and dloc or the stbl and dtbl parameters.

An E5-MCAP card must be installed before a value of usb can be specified for the ddrv or sdrv parameter.

If a value of *fixed* is specified for the sdrv or ddrv parameter, then a value of 1114 or 1116 must be specified for the sloc or dloc parameter.

Notes

None

Output

```
copy-tbl:stbl=25:dtbl=24:sloc=1114:dloc=1116:sdrv=fixed
```

```
    rlghncxa03w 01-03-04 16:11:53 EST  Rel 28.1.0
    Table copy command complete.
;
```

Related Commands

None.

dact-ee

Deactivate Eagle Eyes

Use this command to deactivate an Eagle Eyes Card and stop capturing traffic on it. The state of the card is changed from ACT (Active) to DACT (Deactivated).

Note: If the card boots, then the status of the card would be reset to DACT. This will clear the EE configuration from the card.

Parameters

loc (mandatory)

The Eagle Eyes card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
dact-ee:loc=1203
```

Dependencies

The card at the specified location must be equipped.

The card should be configured as an Eagle Eyes card.

Notes

The value specified for the loc parameter must refer to a card running one of the following GPLs, and the referenced card must be equipped:

- IPSG, IPLHC, IPGHC
- ATMHC
- SS7HC
- SIPHC
- DEIRHC
- ERTHC

Output

`dact-ee:loc=1101`

```
Command Accepted - Processing

tekelecstp 11-08-16 18:35:44 MST EAGLE 46.0.0
dact-ee:loc=1101
Command entered at terminal #1.
;


tekelecstp 11-08-16 18:35:44 MST UNKNOWN EAGLE 46.0.0
Deactivate EE message sent to card.
;

tekelecstp 11-08-16 18:35:44 MST EAGLE 46.0.0
Command Completed.
;
```

Related Commands

chg-ee-card, *rept-stat-ee*, *rtrv-ee-card*

dact-gedti Deactivate GEDTI Hub

Use this command to deactivate a GEDTI Hub. The state of the GEDTI Hub is changed from ACT (Active) to DACT (Deactivated).

Note: The specified card must be Active before the command can be executed. If the card boots, then the status of the GEDTI Hub will be reset to DACT.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

Example

```
dact-gedti:loc=1102
```

Dependencies

The value specified for the loc parameter must refer to an equipped card location.

A valid value must be specified for the loc parameter.

The card at the specified location must be configured as a GEDTI Hub.

Deactivating the state of a GEDTI Hub that is already deactivated has no effect.

Notes

None.

Output

```
dact-gedti:loc=1101
```

```
Command Accepted - Processing

tekelecstp 11-08-16 18:35:44 MST EAGLE 46.0.0
dact-gedti:loc=1101
Command entered at terminal #1.
;

tekelecstp 11-08-16 18:35:44 MST UNKNOWN EAGLE 46.0.0
Deactivate GEDTI Hub message sent to card.
;

tekelecstp 11-08-16 18:35:44 MST EAGLE 46.0.0
Command Completed.;
```

Related Commands

act-gedti, *chg-gedti-card*, *rept-stat-gedti*

dact-ip-lnk Deactivate Internet Protocol Link

Use this command to deactivate an IP link and put the link out of service. The state of the link is changed from IS-NR (In-Service-Normal), IS-ANR (In-Service-Abnormal), or OOS-MT (Out-Of-Service-Maintenance), to OOS-MT-DSBLD (Out-Of-Service-Maintenance-Disabled).

Note: The specified card must be Active before the command can be executed. If the card boots, then the status of the IP link will be reset.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1113, 1115

port (mandatory)

Ethernet interface Port ID.

Range:

a

IP Port A

b

IP Port B

fca

Fast Copy Port A

fcb

Fast Copy Port B

Example

```
dact-ip-lnk:loc=1102:port=a
dact-ip-lnk:loc=1203:port=fca
```

Dependencies

The value specified for the loc parameter must refer to one of the following cards, and the referenced card must be equipped:

- E5-ENET or E5-ENET-B card running the EROUTE, IPGWx, IPLIMx, IPSG, or STPLAN application
- IPSM card
- E5-SM4G or E5-SM8G-B card running the VSCCP application

- E5-OAM card running the OAMHC application
- E5-MCPM-B card

A valid value must be specified for the loc parameter.

The value specified for the port parameter must be supported by the card:

- port A-E5-OAM card running OAMHC application, IPSM card, E5-MCPM-B card, E5-ENET or E5-ENET-B card running the STPLAN application
- port A, B-E5-ENET or E5-ENET-B card running the EROUTE or IPLIMx application, E5-SM4G or E5-SM8G-B card running the VSCCP application
- port A, B, FCA, FCB- E5-ENET or E5-ENET-B card running the IPGWx or IPSG application

The card at the specified location must be configured.

The card in the specified location must be Active before this command can be executed.

2387 E2387 Cmd Rej: Card is not in service

Notes

The act-ip-lnk/dact-ip-lnk commands were created as debug means - aids to turn off or disable the IP interface to troubleshoot network problems, specifically to allow the operator to troubleshoot IP network flooding issues that can cause EAGLE cards to boot repeatedly while trying to come up. These commands should NOT be used for general maintenance actions since they have not been rigorously tested and their usage should be limited to situations like described above.

Output

`dact-ip-lnk:loc=1101:port=a`

```
    Command Accepted - Processing

    tekelecstp 11-08-16 18:35:44 MST  EAGLE 44.0.0
    dact-ip-lnk:loc=1101:port=a
    Command entered at terminal #1.
;

    tekelecstp 11-08-16 18:35:44 MST  UNKNOWN EAGLE 44.0.0
    Deactivate IP link message sent to card.
;

    tekelecstp 11-08-16 18:35:44 MST  EAGLE 44.0.0
    Command Completed.
;
```

Related Commands

rtrv-ip-lnk

dbg-ddb Debug Dynamic Database

Use this command to display the checksum, statistics, and wild write audit (WWA) updates of dynamic database (DDB) table entries, audit a specific table, and reset the DDB statistics on the cards.

Parameters

action (mandatory)

The action taken by the command.

Range:

stats

display dynamic database statistics

aud

audit a specific table

disp

display a table entry

wwa

display any entries updated by WWA task

rststat

reset following DDB audit statistics:

- Number of DDB updates
- Number of consecutive DDB update in progress
- Maximum DDB updates in 100 msec
- Idle period
- Maximum and minimum idle period

audtype (optional)

Audit type. This parameter specifies whether a unicast or multicast audit is performed.

Range:

mc

multicast

uc

unicast

Default:

mc

dpc (optional)

The destination point code value. The Route table entry corresponding to the DPC value is displayed.

Range:

*p-, 000-255, **

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p-

The asterisk value (*) is not valid for the *ni* subfield.

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpc/dpca/dpci/dpcn/dpcn24/dpcn16 (optional)

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255, none

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

Enter *none* to delete the point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (*members*) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, p-, ps-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*). The *prefix* subfield indicates a private point code (*prefix-msa-ssa-sp*).

Range:

p-, 000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—p

msa—000–255

ssa—000–255

sp—000–255

Default:

No change to current value.

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number sub number area main number area (un-sna-mna)*. The *prefix* subfield indicates a private point code (*prefix-un-sna-mna)*.

Range:

p--, 000--127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix--p

un---000---127

sna---000---15

mna---000---31

Default:

No change to the current value.

link (optional)

The entry in the Link table that corresponds to the specified link value.

Range:

a, b, a1 -a31, b1 - b31

loc (optional)

The location of the MTP card that is being debugged.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

lsn (optional)

Linkset name. The entry in the Linkset table that corresponds to the specified linkset name.

Range:

ayyyyyyyy

rloc (optional)

Reference card location. This parameter audits the table where the reference card is located.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

tbl (optional)

The table used as the source of the audit data.

Range:

lnk

Link table

ls

Linkset table

rte

Route table

tidx (optional)

Table index. This parameter displays the corresponding table entry.

Range:

0 - 16000

System Default:

0

Example

This command displays the 126th entry in the Link table.

```
dbg-ddb:loc=1105:tbl=lnk:action=disp:tidx=126
```

This command displays the entry in the Link table corresponding to link=a and rloc=1107.

```
dbg-ddb:loc=1105:tbl=lnk:action=disp:rloc=1107:link=a
```

This command audits the Link table in multicast mode.

```
dbg-ddb:loc=1105:tbl=lnk:action=aud:audtype=mc
```

This command audits the Link table in unicast mode.

```
dbg-ddb:loc=1105:tbl=lnk:action=aud:audtype=uc
```

This command audits the Link table at the card location 1105 using the reference card 1107.

```
dbg-ddb:loc=1105:tbl=lnk:action=aud:audtype=uc:rloc=1107
```

This command displays the statistics of a specified card.

```
dbg-ddb:loc=1201:action=stats
```

This command displays the WWA entries on a specified card.

```
dbg-ddb:action=wwa:loc=1201
```

This command resets the statistics of a specified card.

```
dbg-ddb:action=rststat:loc=2100
```

This command resets the statistics of all active MTP cards.

```
dbg-ddb:action=rststat
```

Dependencies

The dpc, tidx, lsn, and rloc parameters cannot be specified together in the command.

The dpc, tidx, lsn, and link parameters cannot be specified together in the command.

The action=disp and tbl=rte parameters must be specified before the dpc parameter can be specified.

The action=disp and tbl=ls parameters must be specified before the lsn parameter can be specified.

The action=disp and tbl=lnk parameters must be specified before the link parameter can be specified.

The action=disp parameter must be specifed before the tidx parameter can be specified.

The action= aud parameter must be specified before the audtype parameter can be specified.

The action=disp and tbl=lnk parameters or the action=aud and audtype=uc parameters must be specified before the rloc parameter can be specified.

If the action parameter has a value of *wwa*, *stats*, or *rststat*, then the loc parameter is the only other parameter that can be specified.

If the action=disp and tbl=lnk parameters are specified, then the rloc and link parameters must be specified together in the command.

The card location specified by the loc or rloc parameter must be equipped.

The value specified for the loc or rloc parameter must indicate an MTP card.

The status of the card at the location specified by the loc or rloc parameter must be active.

The linkset specified by the lsn parameter must already exist in the Linkset table.

The link specified by the link parameter must already be equipped.

The value specified for the dpc parameter must already exist in the Route table.

The value specified for the dpc parameter must be a full point code, network point code, or a cluster point code.

Values of 1113 - 1118 cannot be specified for the loc or rloc parameters.

If the action parameter has a value of *disp*, *aud*, *stats*, or *wwa*, then the loc parameter must be specified.

If the action=aud parameter and the rloc parameter are specified, then the audtype parameter must be specified.

If the action parameter has a value of *disp* or *aud*, then the tbl parameter must be specified.

The J7 support feature must be enabled before the opcn16/dpcn16 parameters can be specified.

Notes

For a multicast audit, the card that receives the message sends the audit request to all other MTP cards simultaneously. For a unicast audit, the card that receives the message sends the audit request to another MTP card, which sends the request to next MTP card, etc. This process continues until the last MTP card in the system receives the request.

A maximum of the last 10 entries of WWA updates are displayed.

Output

A maximum of 20 entries with mismatched card values can be displayed as necessary.

If mismatched card entries occur, the *SeqNo* field can be used to correlate the entries between two cards (e.g.*SeqNo: 1* of card 1 can be compared against *SeqNo: 1* of card 2.)

```
dbg-ddb:loc=1104:action=disp:tbl=ls:tidx=1
```

```
    tekelecstp 09-10-15 12:37:37 EST  EAGLE5 41.1.0
    dbg-ddb:loc=1104:action=disp:tbl=ls:tidx=1
    Command entered at terminal #4.
;

    tekelecstp 09-10-15 12:37:37 EST  EAGLE5 41.1.0
    User Message sent to location 1104.
;

    tekelecstp 09-10-15 12:37:37 EST  EAGLE5 41.1.0
    [SeqNo: 0] [1104] [Linkset:1] Chksum h'1624 at h'28e84a (138 bytes)
    Assign:1 Avail:0 APC:   001-001-002 ITUNVar:0
;
```

```
dbg-ddb:loc=1104:action=disp:tbl=lnk:tidx=1
```

```
    tekelecstp 09-10-15 12:37:37 GMT  EAGLE5 41.1.0
    dbg-ddb:loc=1104:action=disp:tbl=lnk:tidx=1
    Command entered at terminal #4.
;

    tekelecstp 09-10-15 12:37:37 GMT  EAGLE5 41.1.0
    User Message sent to location 1104.
;

    tekelecstp 09-10-15 12:37:37 GMT  EAGLE5 41.1.0
    [SeqNo: 0] [1104] [Link:x1] Chksum h'da8d at h'2877ce (14 bytes)
    PortId:h'1e6 (Card:1104 Link h'0)
    Slc:0 Stat:h'2 LsId:h'0 Class:0
```

```
    Status:Fail
;
```

```
dbg-ddb:loc=1104:action=aud:tbl=lnk:audtype=mc
```

```

    tekelecstp 09-10-15 13:40:38 GMT  EAGLE5 41.1.0
    dbg-ddb:loc=1104:action=aud:tbl=lnk:audtype=mc
    Command entered at terminal #4.
;

    tekelecstp 09-10-15 13:40:38 GMT  EAGLE5 41.1.0
    User Message sent to location 1104.
;

    tekelecstp 09-10-15 13:40:38 GMT  EAGLE5 41.1.0
    [1104] Bcast:Card->Sys (Tbl 0) MTPCards:h'2 Reply:h'2 Mismatch:h'0
;
```

```
dbg-ddb:loc=1104:action=aud:tbl=lnk:audtype=uc
```

```

    tekelecstp 09-10-15 16:37:11 GMT  EAGLE5 41.1.0
    dbg-ddb:loc=1104:action=aud:tbl=lnk:audtype=uc
    Command entered at terminal #4.
;

    tekelecstp 09-10-15 16:37:11 GMT  EAGLE5 41.1.0
    User Message sent to location 1104.
;

    tekelecstp 09-10-15 16:37:11 GMT  EAGLE5 41.1.0
    [1104]Card->System (Tbl:0) Successful System Audit Completed
;
```

This example shows the output when multiple mismatch entries occur between two cards:

```
dbg-ddb:loc=1205:rloc=1207:action=aud:tbl=rte:audtype=uc
```

```

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    dbg-ddb:loc=1205:rloc=1207:action=aud:tbl=rte:audtype=uc
    Command entered at terminal #4.
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    User Message sent to location 1205.
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    Card[1205]->card[1207] (Tbl:0) TblAuditDone:TotalMisses:h'2 FirstMiss:h'0
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    [SeqNo: 1] [1205] [Route:h'0] Chksum h'320b at h'8fc3b0 (75 bytes)
    PC: 001-001-001 LstRt:0 CmbRt:6 Dyn:h'1 TFC:0
    Xlst:0 MOBR:0 NAdj:1 3 3 3 3 3 NmTFR:0 PrevSt:1
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    [SeqNo: 1] [1205] nway: 0 cost_grp(0-5): c7 c6 c6 c6 c6 c6
    rte_used(0-5): c0 36 36 36 36 36
```

```
    curr_cost_grp: 0 prev_cost_grp 0
    SRT:h'88079c (28 bytes) AKT:h'8bb43c (12 bytes)
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    [SeqNo: 2] [1205] [Route:h'1] Chksum h'c96e at h'8fc3fb (75 bytes)
    PC: 001-001-002 LstRt:0 CmbRt:6 Dyn:h'1 TFC:0
    Xlst:0 MOBR:0 NAdj:1 3 3 3 3 3 NmTFR:0 PrevSt:1
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    [SeqNo: 2] [1205] nway: 0 cost_grp(0-5): c7 c6 c6 c6 c6 c6
    rte_used(0-5): c0 36 36 36 36 36
    curr_cost_grp: 0 prev_cost_grp 0
    SRT:h'8807b8 (28 bytes) AKT:h'8bb448 (12 bytes)
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    [SeqNo: 1] [1207] [Route:h'0] Chksum h'cecc at h'9688ea0 (243 bytes)
    PC: 001-001-001 LstRt:0 CmbRt:6 Dyn:h'1 TFC:0
    Xlst:0 MOBR:0 NAdj:1 3 3 3 3 3 NmTFR:0 PrevSt:1
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    [SeqNo: 1] [1207] nway: 0 cost_grp(0-5): c8 c6 c6 c6 c6 c6
    rte_used(0-5): c0 46 36 36 36 36
    curr_cost_grp: 0 prev_cost_grp 0
    SRT:h'95148e0 (28 bytes) AKT:h'9575980 (12 bytes)
;

    tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    [SeqNo: 2] [1207] [Route:h'1] Chksum h'662f at h'9688f93 (243 bytes)
    PC: 001-001-002 LstRt:0 CmbRt:6 Dyn:h'1 TFC:0
    Xlst:0 MOBR:0 NAdj:1 3 3 3 3 3 NmTFR:0 PrevSt:1
;

   tekelecstp 10-01-28 16:37:11 GMT  EAGLE5 42.0.0
    [SeqNo: 2] [1207] nway: 0 cost_grp(0-5): c8 c6 c6 c6 c6 c6
    rte_used(0-5): c0 46 36 36 36 36
    curr_cost_grp: 0 prev_cost_grp 0
    SRT:h'95148fc (28 bytes) AKT:h'957598c (12 bytes)
;
```

`dbg-ddb:action=wwa:loc=1301`

```
    tekelecstp 09-10-12 17:37:11 GMT  EAGLE5 41.1.0
    dbg-ddb:action=wwa:loc=1301
    Command entered at terminal #10.
;

    tekelecstp 09-10-12 17:37:11 GMT  EAGLE5 41.1.0
    User Message sent to location 1301.
;

    tekelecstp 09-10-12 17:37:11 GMT  EAGLE5 41.1.0
    DDB WWA REPORT (LOC = 1301)
            WILD WRITE AUDIT UPDATED (1) ENTRIES:
            TIME STAMP            TABLE      ENTRY_IDX  ORIG CHKSUM  UPD CHKSUM

        1.  09-10-12 17:35:02:586  RTE        0          H'41880000   H'00000000

;
```

```
dbg-ddb:action=stats:loc=1201
```

```
    tekelecstp 09-10-03 17:37:11 GMT  EAGLE5 41.1.0
    dbg-ddb:action=stats:loc=1201
    Command entered at terminal #10.
;

    tekelecstp 09-10-03 17:37:11 GMT  EAGLE5 41.1.0
    User Message sent to location 1201.
;

    tekelecstp 09-10-03 17:37:11 GMT  EAGLE5 41.1.0
    DDB STATISTICS
        LOC                                             : 1201
        CARD STATUS       (DDL)                         : [CROSSLOADED]
                          (DDB)                         : [INITIALIZED]
        IN UPDATE STATUS  (DDB CHECKSUM)                : [FALSE]
                          (TSRC)                        : [IDLE]
        SUCCESIVE TIMES CARD REPORTED (IN UPDATE)       : 0
        DDB UPDATES                                     : 2000
        MAXIMUM UPDATES PER 100ms                       : 900
        DDB IDLE PERIOD:                                : 03:12:30:20:50
        MAXIMUM IDLE PERIOD                        : 02:12:30:20:50
        MINIMUM IDLE PERIOD                        : 01:04:40:10:80
        NUMBER OF WWA UPDATED ENTRIES                   : 4
;
```

```
dbg-ddb:action=wwa:loc=1201
```

```
    tekelecstp 09-10-21 17:37:11 GMT  EAGLE5 41.1.0
    dbg-ddb:action=wwa:loc=1201
    Command entered at terminal #10.
;

    tekelecstp 09-10-21 17:37:11 GMT  EAGLE5 41.1.0
    User Message sent to location 1201.
;

    tekelecstp 09-10-21 17:37:11 GMT  EAGLE5 41.1.0
    DDB WWA REPORT (LOC = 1201)
            WILD WRITE AUDIT UPDATED (NO) ENTRIES:
;
```

Legend

- **WWA**—Wild Write Audit
- **DDB**—Dynamic Database
- **Time stamp**—Card time stamp when the checksum was detected and updated by wild write audit. The time stamp is in*YY-MM-DD hh:mm:ss:msec* format.
- **TABLE**—Table where the checksum is being performed
- **Entry Idx**—Index of entry that is updated by wild write audit
- **Orig Chksum**—Original Checksum
- **Upd Chksum**—Checksum after update by wild write audit
- **Idle Period**—Time elapsed, in milliseconds, since the last DDB update was received by this card. All idle periods are displayed in*dd:hh:mm:ss:msec* format.

- **Number of WWA Updated Entries**—Number of entries updated by the WWA

Related Commands

rept-stat-ddb

disp-bip

Display Board Identification PROM

Use this command to display the Board Identification PROM (BIP) hex and ASCII data for the specified card type and location. The PROM data consists of the board ID, part number, revision, date of manufacture, power, serial number, software match ID, and check sums.

Parameters

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110

type (optional)

The board type to be displayed.

Range:

mbd

Displays the main assembly.

Example

This example displays the BIP data for the main assembly of the specified card location.

```
disp-bip:loc=1105
```

Dependencies

The value of the loc parameter cannot specify the location of a fixed disk or removable drive.

Notes

None.

Output

This example displays the BIP data for the main assembly:

`disp-bip:loc=1105`

```
    tekelecstp 10-03-30 20:24:41 IST  EAGLE 42.0.0
    Board Identification PROM Dump  Location: 1105 - MDB  Packet: 1
    ------------------------------------------------------------------------------
    0000  42 49 44 30 31 2c 50 4e 38 37 30 2d 32 32 31 32  BID01,PN870-2212
    0010  2d 30 33 2e 45 2c 53 4d 45 47 2e 30 30 31 2c 44  -03.E,SMEG.001,D
    0020  53 32 30 30 38 2e 31 34 2e 43 2e 31 30 32 30 38  S2008.14.C.10208
    0030  31 34 37 30 39 39 2c 50 57 36 34 36 2c 43 53 32  147099,PW646,CS2
    0040  32 35 00 00 01 26 07 ff 01 00 26 00 80 14 21 ff  25...&....&...!.
    0050  ff ff 01 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
    0060  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
    0070  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
;

    tekelecstp 10-03-30 20:24:41 IST  EAGLE 42.0.0
    Board Identification PROM Dump  Location: 1105 - MDB  Packet: 2
    ------------------------------------------------------------------------------
    0000  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0010  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0020  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0030  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0040  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0050  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0060  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0070  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
;

    tekelecstp 10-03-30 20:24:41 IST  EAGLE 42.0.0
    Board Identification PROM Dump  Location: 1105 - MDB  Packet: 3
    ------------------------------------------------------------------------------
    0000  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0010  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0020  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0030  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0040  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0050  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0060  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0070  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
;

    tekelecstp 10-03-30 20:24:41 IST  EAGLE 42.0.0
    Board Identification PROM Dump  Location: 1105 - MDB  Packet: 4
    ------------------------------------------------------------------------------
    0000  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0010  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0020  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0030  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0040  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0050  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0060  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
    0070  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff  ................
;
```

Related Commands

chg-bip-fld , *chg-bip-rec* , *rtrv-bip*, *tst-bip*

disp-bp Display Breakpoint

Use this command to display currently active breakpoints in the communication and application processors.

Parameters

card (optional)

This parameter specifies the card location, in the form of *GPLID–Subsystem ID*.

Range: ***GPLID-Subsystem ID***

GPLID

atmhc, deirhc, erthc, glshc, hipr2, ipghc, iplhc, ipsg, ipshc, mcphc, oamhc, pktgen, sccphc, siphc, slanhc, ss7hc, utility

Subsystem ID

a, b, act, stb, all

The *oamhc* GPL can be specified with any of the subsystem IDs. For all other GPLs, only the *all* subsystem ID is valid.

imt (optional)

The IMT address of the card.

Range:

0 - 254

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110, 1113, 1115

proc (optional)

This parameter specifies the processor type.

Range:

appl

Application processor

com

Communication processor

Default:

appl

ueng (optional)

The microengine number.

This parameter is valid only on IXP-based cards. If this parameter is not specified for IXP-based cards, then the command is assumed to be intended for the ARM processor in the IXP chip.

Range:

0 - 5

Example

```
disp-bp:loc=1109:ueng=3
```

Dependencies

The loc, imt, or card parameter must be specified.

Only one of the loc, imt, and card parameters can be specified in the command.

The imt parameter allows this command to be entered for a card that has not been configured in the system.

The ueng parameter can be specified only for IXP-based cards.

The oamhc GPLID accepts all subsystem values; all other GPLIDs accept only the all subsystem value.

The card location specified by the loc parameter must be in the database.

Values of 1114, 1116, 1117, and 1118 cannot be specified for the loc parameter.

Notes

None

Output

These examples are for x86-based cards:

```
disp-bp:card=ss7ansi-all
```

```
rlghncxa03w 01-03-22 21:14:58 EST EAGLE5 31.3.0
SDS Installed Breakpoint Report from IMT Address H'00f4
Brkpoint-Addr Memory-Dump-Addr Condition-1 Condition-2 Repeat-Count
------------- ---------------- ----------- ----------- ------------
```

```
    H'003a-H'0001                 ANY         ANY              0

    rlghncxa03w 01-03-22 21:14:58 EST EAGLE5 31.3.0
    SDS Installed Breakpoint Report from IMT Address H'000a
    BP Address Memory-Dump Address       Conditions         Rpt Ct Ind
    ---------- ------------------------- ------------------ ------ ---
    H'0000a974 H'000c030c                1- ANY               3     1
       Code Breakpoint                   2- ANY
    H'0000a975                           1- ANY              PERM   0
       Data Write - WORD                 2- ANY
    H'0000a976                           1- ANY               15    0
       Any Access - DWORD                2- ANY
    H'0000a977                           1- ANY              PERM   0
       Data Read - BYTE                  2- ANY

    rlghncxa03w 01-03-22 21:14:58 EST EAGLE5 31.3.0
    80386/80486 Debug Registers in Use: DR0 DR2 DR3
;
```

`disp-bp:card=vsccp-all:`

```
    rlghncxa03w 01-03-22 21:14:58 EST EAGLE5 31.3.0
    SDS Installed Breakpoint Report from IMT Address H'0005
    BP Address Memory-Dump Address       Conditions        Rpt Ct Ind
    ---------- ------------------------- ----------------- ------ ---
    H'0000a974                           1- ANY            1       0
    Code Breakpoint                      2- ANY
;
```

These examples are for IXP-based cards:

`disp-bp:loc=1109`

```
    tekelecstp 05-01-10 13:58:45 GMT EAGLE5 33.0.0
    SDS Installed Breakpoint Report from IMT Address H'00ff

    BP Address Memory-Dump Address Conditions            Rep  Ind CPU
    ---------- ------------------- --------------------- ---- --- ------
    H'000401000 R11+H'0000ffff     1- R15 > H'ffffffff     2   0    ARM
       Any Access -                2- R0 <= H'0000ffff
       Data value: H'00000000 Data Mask: H'ffffffff
```

`disp-bp:loc=1109:ueng=3`

```
    tekelecstp 05-01-10 13:58:45 GMT EAGLE 33.0.0
    SDS Installed Breakpoint Report from IMT Address H'00ff

    BP Address Memory-Dump Address Conditions            Rep  Ind CPU
    ---------- ------------------- --------------------- ---- --- ------
    H'00235000 H'00020044          1- ANY                PERM 1   UENG 3
       CODESW Breakpoint           2- ANY                          CTX 2
;
```

Related Commands

dlt-bp , *ent-bp*

disp-disk-dir — Display Disk Directory

Use this command to display the DOS directory on the specified disk. This command can display the creation date for each file or for selected files and applies to fixed disks and removable drives.

Note: This command can be used to verify that the correct version of a file is on the disk.

Parameters

file (optional)

The name of the file to be displayed.

Range:

zzzzzzzzzzzz

1–12 ASCII characters

Default:

All files are displayed

loc (optional)

The card location in the system.

Range:

1114

TDM

1116

TDM

1117

Removable cartridge drive

1113

Latched USB port

1115

Latched USB port

prtngrp (optional)

Partition group. The disk partition group to be displayed.

Range:

active

inactive

Default:

active

src (optional)

Source. The identification of the disk containing the files to be displayed.

Range:

fixed

The fixed disk

remove

The removable drive in the latched USB port of the E5-MCAP

usb

The plug-in USB flash drive in the flush-mounted USB port of the E5-MCAP

Default:

The fixed disk

Example

```
disp-disk-dir:loc=1117:file="dms.cfg"
disp-disk-dir:src=remove:file="fta"
disp-disk-dir:src=remove:file="*.*"
```

Dependencies

Valid filenames must be in the format *filename.extension* with the following requirements:

- File name—1–8 ASCII Characters
- Extension—0–3 ASCII Characters

Wildcards (asterisks) are allowed when the wildcard pattern is enclosed in parentheses.

- *—Matches all characters in either filename or extension
- ?—Matches one character in either filename or extension
- file=″*.*″—Matches all files on disk
- file=″*.tbl″—Matches all files on disk with *.tbl* as the extension

An E5-MCAP card must be installed before the src=usb parameter can be specified.

The src parameter must be specified.

The 1113 and 1115 locations are used by E5-MCAP cards. The 1114 and 1116 locations are used by E5-TDM cards.

A removable drive must be inserted in the slot indicated by the value specified for the loc or src parameter.

The card specified by the loc parameter must be connected to at least one IMT bus.

Notes

None

Output

disp-disk-dir

```
    lnpstp 01-03-30 15:52:04 EST  Rel 28.1.0
    DISP-DISK-DIR, Loc=1116, Device = FIXED, Dir = :\
    Filename  Ext        Length   Last  Modified      Cluster           LBA
    DMS       CFG         16384   00-08-01 18:45           2           573
    :

    File(s) : 175   Bytes : 457956761
    Volume : FIXED DISK
    Bytes free : 73654887
    Disk Size (MB) : 2014
;
```

disp-disk-dir:loc=1117

```
    lnpstp 01-03-30 15:52:46 EST  Rel 28.1.0
```

disk-disk-dir:loc=1117:file="dms1024.cfg"

```
    DISP-DISK-DIR, Loc=1117, Device = REMOVE, Dir = :\
    Filename  Ext        Length   Last  Modified      Cluster           LBA
    DMS1024   CFG         16384   00-08-01 15:48           2           339
    :
    File(s) : 72   Bytes : 192883124
    Volume : SYSTEM DISK
    Bytes free : 956339788
    Disk Size (MB) : 1096
;
```

disp-disk-dir:file=ttserv.tbl

```
    lnpstp 01-03-30 15:53:09 EST  Rel 28.1.0
    DISP-DISK-DIR, Loc=1116, Device = FIXED, Dir = :\
    Filename  Ext        Length   Last  Modified      Cluster           LBA
    TTSERV    TBL          8192   00-08-01 18:45        2731         44237

    File(s) : 1   Bytes : 8192
    Volume : FIXED DISK
    Bytes free : 73654887
    Disk Size (MB): 2014
;
```

disp-disk-dir:loc=1116

```
    eaglestp 10-03-06 15:53:09 EST TTTT PPP  EAGLE 42.0.0
    DISP-DISK-DIR, Loc=1116, Device = FIXED, Dir = :\
```

```
    Filename  Ext        Length   Last  Modified      Cluster          LBA
    DMS       CFG         16384   08-07-97 11:00            2          573
    OAM       ELF       3145728   08-07-97 11:00            4          605
    TOAM      ELF       3145728   08-07-97 11:00          388         6749
    SS7       ELF       1048576   08-07-97 11:00          772        12893
    TSS7      ELF       1048576   08-07-97 11:00          900        14941
    CCS7ITU   ELF       1048576   08-07-97 11:00         1284        21085
    .
    .
    .
    LNP_LRN   BKP       3072096   08-07-97 11:00        38963       623949
    LNP_MR    BKP       1679392   08-07-97 11:00        39339       629965
    LNP_NPA   BKP       5120096   08-07-97 11:00        39545       633261
    LNP_4DIG  BKP     128000064   08-07-97 11:00        40171       643277
    ACG_MIC   BKP        187712   08-07-97 11:00        55797       893293
    LNP_CHCK  BKP        197378   08-07-97 11:00        55820       893661
    LNP_DBMM  BKP        801600   08-07-97 11:00        55845       894061
    TRBLTX    BKP         63980   08-07-97 11:00        55943       895629
    MTT       BKP        384000   08-07-97 11:00        55951       895757
    2201800   REL          2048   08-07-97 11:00        55998       896509

    File(s) : 175   Bytes : 457956761
    Volume : FIXED DISK
    Bytes free : 73654887
    Disk Size (MB) : 507
    Largest Free Space : 73654887
;
```

This example shows the output when an E5-MCAP card is used:

`disp-disk-dir:loc=1113:src=remove`

```
    e5oam 09-01-20 22:24:12 EST  EAGLE 40.1.0
    DISP-DISK-DIR  Loc=1113  Dev = REMOVE
    Filename  Ext            Length
    DMS1024   CFG             32768
    TATMANSI  ELF           3145728
    TATMHC    ELF           5242880
    TATMITU   ELF           3145728
    TBLBEPM   ELF           3145728
    TBLBIOS   ELF           3145728
    TBLBSMG   ELF           3145728
    TBLCPLD   ELF           3145728
    TBLDIAG   ELF           3145728
    TBLDIAG6  ELF           3145728
    ...
    SMEAS_ST  SYS             12228
    UIMLOG    SYS          11263947
    SYSREL    SYS               949
    MTT       BKP            384000
    TRBLTX    BKP             96000
    FEATCTRL  BKP            128000
    ASSYPWR   BKP              8016
    TS30100   REL              5120
    BLMCAP    TAR           13721600
    File(s) : 178    Bytes : 437596655    Disk Size (MB) : 1972;
```

Legend

- **Filename**—Name of the file in the directory

- **Ext**—Extension of the file name (for example, for the file MFC.BIN, MFC is the file name and BIN is the extension of the file name)
- **Length**—Amount of space, in bytes, the file occupies on the disk
- **Last Modified**—Date and time the file was changed
- **Cluster**—A 2-byte, 16-digit binary number that represents the first section of the disk occupied by the file
- **LBA**—Starting logical block address that corresponds to the cluster
- **File(s)**—Number of files on the disk that match the search criteria
- **Bytes**—Amount of space, in bytes, the displayed files occupy on the disk
- **Volume**—11-character name for the disk
- **Bytes free**—Number of bytes that are available on the disk for file storage
- **Disk Size**—Total capacity of the specified disk

Related Commands

act-gpl, *chg-db*, *chg-gpl*, *copy-gpl*, *copy-meas*, *init-sys*, *rept-stat-db*

disp-disk-stats

Display Disk Performance Statistics

Use this command to display the disk performance statistics.

Note: The OAMs maintain disk read/writer access times as well as per table and per application statistics on the number of disk accesses and cache accesses. Per application and per table statistics that have zero values are not displayed if an application ID or table ID is not specified; only nonzero statistics are displayed in the default report.

Parameters

loc (mandatory)

The card location in the system.

Range:

1113, 1115

applid (optional)

Application ID. The application IDs used to define tasks.

Range:

0 - 255

Default:

all

tblid (optional)

Table ID. The table IDs used to define tables.

Range:

0 - 1023

Default:

all

Example

```
disp-disk-stats:loc=1113:applid=29
disp-disk-stats:loc=1113:applid=93
disp-disk-stats:loc=1113
```

Dependencies

The specified card location must contain a card that is running an OAM (1113 or 1115).

GPSM-II and E5-MCAP cards cannot co-exist in the system.

Notes

None

Output

```
disp-disk-stats:loc=1113:applid=29
```

```
    rlghncxa03w 01-03-01 14:14:05 EST  Rel 28.1.0

    Disk Performance Statistics Report:

                 Cache Read     Disk Read    Cache Write   Disk Write
      Appl Id        Hits        Accesses       Hits       Accesses
    -----------   -----------   -----------   -----------   -----------
            29           113            23            25            40

Command Completed.
```

```
disp-disk-stats:loc=1113:applid=93
```

```
    tekelecstp 01-06-01 14:14:05 EST Rel 28.1.0

    Disk Performance Statistics Report:
                 Cache Read     Disk Read    Cache Write   Disk Write
      Appl Id        Hits        Accesses       Hits       Accesses
    -----------   -----------   -----------   -----------   -----------
            93             0             0             0             0

    Command Completed.
;
```

```
disp-disk-stat:loc=1113
```

```
    rlghncxa03w 01-03-01 14:14:05 EST  Rel 28.1.0
```

```
    Disk Performance Statistics Report:

                  Cache Read     Disk Read    Cache Write   Disk Write
      Appl Id         Hits       Accesses        Hits       Accesses
    -----------   -----------   -----------   -----------   -----------
           29           113            23            25            40
          120            12           223           225           361

                 Cache Read     Disk Read    Cache Write   Disk Write
      Table Id        Hits       Accesses        Hits       Accesses
    -----------   -----------   -----------   -----------   -----------
          185            12           223           225           361
          201           113            23            25            40

                Total Cache   Total Disk    Total Cache   Total Disk
                 Read Hits      Reads       Write Hits     Writes
                 -----------   -----------   -----------   -----------
                        125           246           250           401

                             Disk Access Times (microseconds)
                   Minimum       Maximum       Average     Access Type
                  -----------   -----------   -----------   -----------
                       1260         31121          6380          Read
                       1215         31090          6350         Write

Command Completed.
;
```

Related Commands

clr-disk-stats

disp-mem

Display Memory

Use this command to display memory in communication and application processors. This display is in byte format.

Parameters

addr (optional)

The address in the form of *segment–offset*.

Range:

segment-offset

segment— h'00-h'ffff

offset— h'00-h'ffff

bc (optional)

Byte count. The number of data bytes to display.

Range:

1 - 65535

Default:

96

card (optional)

Card location. The card location in the form of *GPLID–Subsystem ID*.

Range:

GPLID-Subsystem ID

GPLID— atmhc, deirhc, erthc, glshc, hipr2, ipghc, iplhc, ipsg, ipshc, mcphc, oamhc, pktgen, sccphc, siphc, slanhc, ss7hc, utility

Subsystem ID— a, b, act, stb, all

dformat (optional)

The memory dump format.

Range:

byte

word

dword

Default:

byte

imt (optional)

The IMT address.

Range:

0 - 254

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110, 1113, 1115

paddr (optional)

The physical offset of the memory address.

Range:

h'00–h'ffffffff

proc (optional)

The processor type.

Range:

appl

Application processor

com

Communication processor

Default:

appl

Example

```
disp-mem:loc=1204:paddr=h’103abc:bc=8:dformat=word
disp-mem:loc=1204:paddr=h’103abc:bc=8:dformat=dword
disp-mem:card=ss7ansi-all:addr=h'03a-h’001:bc=8
```

Dependencies

The loc, imt, or card parameter must be specified.

Only one of the loc, imt, and card parameters can be specified in the command.

The card location specified by the loc parameter must be in the database.

All of the subsystem values can be specified with the *oamhc* GPLID. The other GPLID values can be specified only with the *all* subsystem value.

Card locations 1114, 1116, 1117, and 1118 are not valid for memory commands.

The GPL specified in the card parameter must be supported.

The addr and paddr parameters cannot be specified together in the command.

Notes

The imt parameter allows this command to be entered for a card that has not been configured in the system.

Output

```
disp-mem:loc=1204:paddr=h’103abc:bc=8:dformat=word
```

```
    rlghncxa03w 01-03-22 21:13:50 EST Rel 28.1.0
    SDS Memory Dump from IMT Address H'000a
    Source-Address = H'00103abc     Length = 8 bytes
    0000 ffff 00ff 00ff 0000               ........
;
```

```
disp-mem:card=psm-a:addr=h'03a-h’001:bc=8
```

```
    rlghncxa03w 01-03-22 21:13:50 EST Rel 28.1.0
    SDS Memory Dump from IMT Address H'00f6
    Source-Address = H'003a0001      Length = 8 bytes
    0000 04 0d 3d 1c 04 0d 3d 1c             ..=...=.
;
```

Related Commands

set-mem

disp-trace

Display Trace

Use this command to display trace entries.

Parameters

traceid (optional)

Trace ID. The trace entry to be displayed.

Range:

1 - 10

Example

```
disp-trace
```

```
disp-trace:traceid=5
```

Dependencies

A valid value must be specified for the traceid parameter.

None

Output

```
disp-trace
```

```
    stdcfg2b 07-10-05 12:55:32 EST  EAGLE 37.5.0
    Trace Request 1:
    CARD=         SS7ANSI    OPC=          001-001-001
    TRACE DISPLAY COMPLETE.
;
```

Related Commands

dlt-trace , *ent-trace*

dlt-bp

Delete Breakpoint

Use this command to delete breakpoints in the communication or application processors.

Parameters

addr (optional)

The address in the form of *segment–offset*.

Range:

segment-offset

segment— h'00–h'ffff

offset— h'00–h'ffff

card (optional)

The card location in the form of *GPLID–Subsystem ID*.

Range:

GPLID-Substystem ID

GPLID— atmhc, deirhc, erthc, glshc, hipr2, ipghc, iplhc, ipsg, ipshc, mcphc, oamhc, pktgen, sccphc, siphc, slanhc, ss7hc, utility

Subsystem ID— a, b, act, stb, all

The OAMHC GPL can be specified with any of the subsystem IDs. For all other GPLs, only the *all* subsystem ID is valid.

imt (optional)

The IMT address of the card.

Range:

0 - 254

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110, 1113, 1115

paddr (optional)

The physical offset of the memory address.

Range:

h'00–h'ffffffff

proc (optional)

The processor type.

Range:

appl

Application processor

com

Communication processor

Default:

appl

ueng (optional)

The microengine number.

Note: This parameter is valid only on IXP-based cards. If this parameter is not specified for IXP-based cards, then the command is assumed to be intended for the ARM processor in the IXP chip.

Range:

0 - 5

Example

```
dlt-bp:loc=1209:ueng=2
dlt-bp:card=hipr2-all
dlt-bp:loc=6312
```

Dependencies

The loc, imt, or card parameter must be specified.

Only one of the loc, imt, and card parameters can be specified in the command.

The ueng parameter can be specified only for IXP-based cards.

The card location specified by the loc parameter must be in the database.

Values of 1114, 1116, 1117, and 1118 cannot be specified for the loc parameter.

All of the subsystem values can be specified with the *oamhc* GPLID. The other GPLID values can be specified only with the *all* subsystem value.

The addr and paddr parameters cannot be specified together in the command.

Notes

The imt parameter allows this command to be entered for a card that has not been configured in the system.

Output

`dlt-bp:card=oam-all:proc=com`

```
    Command Accepted - Processing

    tekelecstp 97-01-20 19:21:10 EST Rel 37.0.0
    dlt-bp:card=oam-all:proc=com
    Command entered at terminal #1.
;
```

Related Commands

disp-bp , *ent-bp*

dlt-ee-flt

Delete Eagle Eyes Filter

Use this command to delete an Eagle Eyes Filter from the Eagle Eyes Filter (EE FLT) table. The EE FLT entry consists of a Filter ID and Filter specific data. It can be used to delete a filter only when it is not associated with any card.

Parameters

fltid (mandatory)

Eagle Eyes Filter ID.

Range:

1-200

Example

`dlt-ee-flt:fltid=20`

Dependencies

The specified Filter ID must exist in the EE FLT table.

The Eagle Eyes Filter table must be available.

The specified filter should not be associated with any network card.

Notes

None.

Output

```
dlt-ee-flt:fltid=3
```

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
    EE FLT table is (2 of 200) 1% full
    DLT-EE-FLT: MASP A - COMPLTD
;
```

Related Commands

ent-ee-flt, *rtrv-ee-flt*

dlt-trace Delete Trace

Use this command to delete provisioned MSU tracing criteria from the database.

Parameters

traceid (optional)

Trace ID. Identifier of the trace entry to be deleted.

Range:

1 - 10

Example

```
dlt-trace:traceid=5
```

```
dlt-trace
```

Dependencies

Only values between 1 and 10 are valid for the traceid parameter.

None

Output

```
dlt-trace:traceid=1
```

```
    stdcfg2b 07-10-05 13:03:29 EST  EAGLE 37.5.0
    dlt-trace:traceid=1
    Command entered at terminal #4.

;
```

Related Commands

disp-trace , *ent-trace*

ent-bp

Enter Breakpoint

Use this command to add breakpoints in communications and application processors in the system.

Parameters

access (optional)

The access type, in the form of *access type-format*.

Use the data parameter to set the format on IXP-based cards.

Range:

access type-format

access type—r, w, rw (read, write, read-write)

format— byte, word, dword, any

Default:

For x86-based cards— *rw-byte*

For IXP-based cards— *rw-any*

addr (optional)

The memory location in the form of *segment–offset*.

Range:

segment-offset

segment—h'00–h'ffff

offset—h'00–h'ffff

bc (optional)

The number of data bytes to display.

For IXP-based cards, bc represents the number of bytes of memory. The number of bytes of stack to be displayed is 255 – bc. For example, if bc=128, then 128 bytes of memory and 127 bytes of stack are displayed. If bc=0, then 0 bytes of memory and 255

bytes of stack are displayed. The exception to this rule is that 1 byte of stack is never displayed.

Range:

0 - 255

For x86-based cards, the maximum number of bytes is 96.

For IXP-based cards, the maximum number of bytes is 255.

ca (optional)

Condition "a" in the form of *register–condition–integer*.

The value *register* is the CPU internal register.

The value *condition* is the comparison condition (equal, not equal, greater than, less than, greater than or equal, less than or equal).

The value *integer* is the value for comparison.

Range:

register-condition-integer

register— sp, bp, ds, ss, es, cs, fl, ax, ah, al, bx, bh, bl, cx, ch, cl, dx, dh, dl, di, si, ip, fs, gs, esi, edi, ebp, esp, eip, efl, eax, ebx, ecx, edx, lr, pc, r1-r15

condition—eq, neq, gt, lt, gte, lte

integer—h'00–h'ffffffff

card (optional)

The card location, in the form of *GPLID–Subsystem ID*.

Range:

GPLID-Subsystem ID

GPLID—atmhc, deirhc, erthc, glshc, hipr2, ipghc, iplhc, ipsg, ipshc, mcphc, oamhc, pktgen, sccphc, siphc, slanhc, ss7hc, utility

Subsystem ID— a, b, act, stb, all

The OAMHC GPL can be specified with any of the subsystem IDs.

For all other GPLs, only the *all* subsystem ID is valid.

cb (optional)

Condition b in the form of *register–condition–integer*.

The value *register* is the CPU internal register.

The value *condition* is the comparison condition (equal, not equal, greater than, less than, greater than or equal, less than or equal).

The value *integer* is the value for comparison.

Range:

register-condition-integer

register—sp, bp, ds, ss, es, cs, fl, ax, ah, al, bx, bh, bl, cx, ch, cl, dx, dh, dl, di, si, ip, fs, gs, esi, edi, ebp, esp, eip, efl, eax, ebx, ecx, edx, lr, pc, r0-r15

condition—eq, neq, gt, lt, gte, lte

integer—h'00–h'ffffffff

ctx (optional)

The bit-mapped microengine context mask.

Range:

1 - 15

da (optional)

The dump address, in the form of *segment–offset*.

Range:

segment-offset

segment—h'00–h'ffff

offset—h'00–h'ffff

data (optional)

This parameter instructs a data breakpoint to qualify on a match of the data.

Note: This parameter is valid only on IXP-based cards.

Range:

value-mask

value—0-0xFFFFFFFF

mask—0-0xFFFFFFFF

Default:

0

dformat (optional)

Memory dump format (byte, doubleword, word).

Range:

byte

dword

word

Default:

byte

dpaddr (optional)

Memory dump address (physical offset).

Range:

h'00–h'ffffffff

dr (optional)

The data register indirect memory dump, in the form *register-register-integer*.

The *register-register* value is the CPU internal register.

The *integer* value is the offset value.

Range:

register-register-integer

register—sp, bp, ss, ds, es, cs, fl, ax, ah, al, bx, bh, bl, cx, ch, cl, dx, dh, dl, di, si, ip, fs, gs, esi, edi, ebp, esp, eip, efl, eax, ebx, ecx, edx

register—sp, bp, ds, ss, es, cs, fl, ax, ah, al, bx, bh, bl, cx, ch, cl, dx, dh, dl, di, si, ip, fs, gs, esi, edi, ebp, esp, eip, efl, eax, ebx, ecx, edx

integer— h'00–h'ffffffff

drarm (optional)

ARM register indirect memory dump.

Range:

ARM register-integer

arm register- *r0-r15, sp, lr, pc*

mask- *0-65535*

The value *ARM register* is the CPU internal register.

The value *integer* is the offset value.

Default:

0

dur (optional)

Breakpoint duration.

Range:

temp

perm

Default:

temp

imt (optional)

IMT address of the card.

Range:

0 - 254

ind (optional)

Indirection count.

Range:

0 - 3

Default:

0

loc (optional)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110, 1113, 1115

paddr (optional)

The physical offset of the memory address.

Range:

h'00–h'ffffffff

proc (optional)

Processor type.

Range:

appl

Application processor

com

Communication processor

Default:

appl

rep (optional)

Repetitions for this breakpoint.

Range:

0 - 255

Default:

0

type (optional)

Breakpoint type in the form of processor type-breakpoint type

Range:

processor type-breakpoint type

processor type—p186, p286, p486, arm, ixp

breakpoint type—code, codehw, codesw, data

Default:

For x86-based cards—*p486-code*

For IXP-based cards—*arm-codesw*

ueng (optional)

Microengine number. This parameter is valid only on IXP-based cards.

Note: If this parameter is not specified for an IPX-based card, then the command is assumed to be intended for the ARM processor in the IXP chip.

Range:

0 - 5

Example

```
ent-bp:loc=1204:paddr=h’27c3c:type=p486-data:access=rw-word
ent-bp:loc=1109:paddr=h’401000:type=arm-codesw:access=rw-any:ca=r7-eq-0
ent-bp:loc=1209:paddr=h’402000:type=arm-data:access=w-any:data=h’1111-h’ff
ent-bp:loc=1309:paddr=h’403000:type=ixp-codesw:ueng=2:ctx=1
ent-bp:card=hipr2-all:paddr=h’404000:type=arm-codehw:drarm=r3-0:bc=64
ent-bp:loc=1113:addr=h'03a-0001
```

Dependencies

All of the subsystem values can be specified with the OAMHC GPLID. The other GPLID values can be specified only with the *all* subsystem value.

Values of 1114, 1116, 1117, and 1118 cannot be specified for the loc parameter.

The loc, imt, or card parameter must be specified.

Only one of the loc, imt, and card parameters can be specified in the command.

The dr parameter and the da parameter cannot be specified together in the command.

The dur=perm parameter and the rep parameter cannot be specified together in the command.

The dur=perm parameter cannot be specified when the value of the processor type portion of the type parameter is *p186* or *p286*.

When the da, dr, or drarm parameter is specified, the dpaddr parameter cannot be specified.

For the type parameter (which is in the form of *processor type-breakpoint type*), a breakpoint type of *data* cannot be specified in combination with a processor type of *P186, P286,* or *IXP*.

When the paddr parameter and the bc parameter are specified, either the dpaddr or dr parameter must be specified in the command.

The access parameter can be specified only when the type parameter value is *p486-data* or *arm-data*.

The bc parameter value cannot be greater than 96 for x86-based cards.

The ind parameter value cannot be greater than 3.

The specified card must be in use.

For 80286 processors, registers for 80386 processors cannot be specified.

For 80286 processors, integer values for registers and conditions must be less than 65535.

The ueng parameter is valid only on IXP-based cards (the value *ixp* is specified for the processor type portion of the type parameter).

The cts parameter is valid only on IXP-based cards (the value *ixp* is specified for the processor type portion of the type parameter).

The data parameter is valid only on IXP-based cards.

The data parameter is valid only when the value is *data* for the breakpoint type portion of the type parameter.

The register values *sp*, *lr*, *pc*, and *r0-r15* for the ca or cb parameters are valid only on IXP-based (ARM processor) cards.

The ca and cb parameters cannot be specified when the value *ixp* is specified for the processor type portion of the type parameter.

The drarm parameter can be specified only on IXP-based cards.

The drarm parameter can be specified only when the value *arm* is specified for the processor type portion of the type parameter.

The dr parameter cannot be specified for IXP-based cards.

The *data* and *codesw* values for the breakpoint type portion of the type parameter cannot be specified when the value *ixp* is specified for the processor type portion of the type parameter.

The *arm* and *ixp* values for the processor type portion of the type parameter are valid only on IXP-based cards.

The value *any* for the format portion of the access parameter can be specified only on IXP-based cards. The format value must be set to *any* on IXP-based cards.

When the value *ixp* is specified for the processor type portion of the type parameter, the ueng and cts parameters must be specified.

The addr parameter can be specified only when the proc=com parameter is specified for DS0 cards with PROM-based COM processors (such as TSMs).

When the ca, cb, and dr parameters are used with 80186 and 80286 processors, the register values *ip*, *fs*, *gs*, *esi*, *edi*, *ebp*, *esp*, *eip*, *efl*, *eax*, *ebx*, *ecx*, and *edx* cannot be specified. These registers can be used only with 80486 processors. The integer values for these parameters when used with 80186 and 80286 processors must be less than *h'ffff (65535)*.

The data value for the breakpoint type portion of the type parameter cannot be specified with the values *p186*, *p286*, and *ixp* for the processor type portion of the type parameter.

The da parameter cannot be specified for IXP-based cards.

An ARM register value must be specified for an IXP-based card with an ARM processor.

The addr or paddr parameter must be specified in the command. Both parameters cannot be specified in the command.

Notes

The imt parameter allows this command to be entered for a card that has not been configured in the system.

Output

```
ent-bp:loc=1113:addr=h'03a-0001
```

```
    rlghncxa03w 04-08-22 21:14:41 EST EAGLE 33.0.0
    SDS Response Code 22 from IMT Address H'00f6 - command complete.

    rlghncxa03w 04-08-22 21:14:41 EST EAGLE 33.0.0
    SDS Response from IMT Address H'000a - command complete.
;
```

```
ent-bp:loc=6205:paddr=h'03a002
```

```
    rlghncxa03w 12-05-22 21:14:41 EST EAGLE 45.0.0
    SDS Response Code 22 from IMT Address H'00fd - command complete.
;
```

Related Commands

disp-bp , *dlt-bp*

ent-ee-flt Enter Eagle Eyes Filter

Use this command to enter Eagle Eyes Filter data in the Eagle Eyes Filter (EE FLT) table. The EE FLT entry consists of a Filter ID and Filter specific data. After the FLT ID is provisioned, it can be used in the `dlt-ee-flt` and `chg-ee-card` commands.

Parameters

type (mandatory)

Eagle Eyes Filter Type.

Range:

inc

exl

appl (mandatory)

Card Application Type

Range:

atm

ip

e1t1

ipprot (optional)

Filter based on IP sub-protocol

Range:

sctp

tcp

udp

ipsrc (optional)

Filter based on IP source address

Range:

4 numbers separated by dots, with each number in the range of 0-255

ipdst (optional)

Filter based on IP destination address

Range:

4 numbers separated by dots, with each number in the range of 0-255

ssport (optional)

Filter based on SCTP source port

Range:

0-65535

sdport (optional)

Filter based on SCTP destination port.

Range:

0-65535

stype (optional)

Filter based on SCTP chunk type

Range:

abrt

data

err

hbak

htbt

inak

init

sack

sctppld (optional)

Filter based on SCTP data payload identifier.

Range:

diam
m2pa
m3ua
sua
unspec

sctpstr (optional)

Filter based on SCTP data stream identifier

Range:

0-65535

sscopsu (optional)

Filter based on SSCOP sub-protocol or SU type.

Range:

all
ctrl
data

mtp3si (optional)

Filter MTP3 user.

Range:

bicc
isup
sccp
snm
tup

port (optional)

Filter based on port.

Range:

a-b
a1-a31
b1-b31
all

sutype (optional)

Filter based on SU type.

Range:

allsu

lsu

msu

Example

```
ent-ee-flt:appl=ip:type=inc:ipprot=sctp:ssport=2048:stype=data:sctpstr=100
ent-ee-flt:appl=atm:type=exl:port=a:sscopsu=data:mtp3si=sccp
ent-ee-flt:appl=e1t1:type=exl:port=a1:sutype=msu:mtp3si=tup
```

Dependencies

If the appl=ip then ipprot, ipsrc or ipdst parameters must be specified.

If the ssport, sdport or stype parameters are specified, then the ipprot=sctp parameter must be specified.

At least one optional parameter (ipprot or port) must be specified.

If the sctppld parameter is specified, then the stype=data and ipprot=sctp parameters must be specified.

If the sctpstr parameter is specified, then the stype=data and ipprot=sctp parameters must be specified.

The Eagle Eyes Filter table cannot contain more than 200 entries.

The Eagle Eyes Filter table must be available.

If the appl=ip parameter is specified, then the appl=atm and appl=e1t1 parameters must not be specified.

If the appl=atm parameter is specified, then the appl=ip and appl=e1t1 parameters must not be specified.

If the appl=e1t1 parameter is specified, then the appl=atm and appl=ip parameters must not be specified.

If the appl=atm parameter is specified, then the port parameter can only be either a, b or a1.

If the appl=atm and port=a1 or port=all parameters are specified, then the 3 Links per E5-ATM feature must be on.

Notes

IP7 parameters:

- *ipprot, ipsrc, ipdst, ssport, sdport, style, sctppld, sctpstr*

ATM parameters:

- *sscopsu, mtp3si, port*

E1T1 parameters:

- *sutype, mtp3si, port*

Output

```
ent-ee-flt:appl=atm:type=inc:port=a:sscopsu=data
```

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
    EE FLT table is (1 of 200) 1% full
    ENT-EE-FLT: MASP A - COMPLTD
;
```

Related Commands

dlt-ee-flt, *rtrv-ee-flt*

ent-trace

Enter Trace

Use this debug command to trace MSUs sent to Service Module cards or to LIM cards running the SS7ANSI, CCS7ITU, VSCCP, ATMITU, ATMANSI, IPLIM, IPLIMI, SS7IPGW, IPGWI, or IPSG applications.

The EAGLE traps MSUs that meet the provisioned tracing criteria, and the MSU remains in the trapped state for the life span of that MSU. The life span varies depending on the type of MSU. For MTP-Routed or GTT MSUs, the life span lasts until the MSU travels out of the EAGLE or is discarded. For LNP MSUs, the life span lasts until the request is processed. The response is not part of the LNP MSU. Trapping a response requires the provisioning of another MSU trace.

This command uses different parameters depending on the card type sending the MSU as shown:

- Service Module— *error*, *gt*, *lrn*, *tn*, *ssp/sspa/sspi/sspn/sspn24/sspn16*, *dn*, *entityid*, *imei*, and *imsi*
- LIM card running ANSI applications— *error*, *ssp/sspa*, *opc/opca*, *dpc/dpca*, *tlnpisuptype*, and *gt*
- LIM card running ITU applications— *error*, *sspi/sspn/sspn24/sspn16*, *opci/opcn/opcn24/opcn16*, *dpci/dpcn/dpcn24/dpcn16*, and *gt*

The lrn, tn, dn, entityid, imsi, imei, and error parameters are mutually exclusive.

The following parameters can be used once in a single MSU trace request with ONE of the mutually exclusive parameters specified above: opc, dpc, ilsn, si, gt, ssp, h0h1, cpc, or cic/ecic.

The cic/ecic parameters can be used only for ISUP traffic. The ecic parameter must be specified with the cic parameter.

For all cards supported by this command, the error parameter can be provisioned as the only optional parameter or in addition to any other optional parameter to trace any messages that fail verification or processing. If the error parameter not specified, the default value is error=no.

Caution: If the system configuration approaches the maximum number of provisioned Service Module cards, then entering this command might cause an OAM to reset because of the amount of information that may be returned.

Parameters

card (mandatory)

The card location in the form of *APPL CLASS-Subsystem ID*.

Range:

APPL CLASS-Subsystem ID

APPL CLASS— atmansi, atmitu, ccs7itu, iplim, iplimi, ss7ansi, ss7ipgw, ipgwi, ipsg, vsccp

Subsystem ID— all

brief (optional)

This parameter specifies whether all information is provided for each MSU as it moves through the EAGLE.

Range:

no

All information, including data sections for the MSU, is displayed.

yes

The data sections for the MSU are not displayed.

cic (optional)

The beginning value for a CIC range.

Range:

0 - 16383

cpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym:

cpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

cpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

zone—0–7

area—000–255

id—0-7

The point code *0-000-0* is not a valid point code.

cpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnngc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnngc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc)*.

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

cpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

cpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

dn (optional)

Directory Number. This parameter is used for the ANSI41 AIQ, ATINP, G-Flex, G-Port, INP, PPSMS, or V-Flex features.

The *tn* parameter is used as the directory number for LNP.

Range:

5-15 digits

Valid digits are *0-9*, *a-f*, *A-F*.

dpc (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*)

Synonym:

dpca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

dpci (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, *0-255*

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

dpcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnn-gc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnn-gc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

dpcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

dpcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

ecic (optional)

The end value for a CIC range.

Range:

0 - 16383

entityid (optional)

The entity ID.

Range:

1-15 digits

Valid digits are *0-9, a-f, A-F*

error (optional)

This parameter specifies whether to perform a trace on any message verification error and message processing error

Range:

yes

no

Default:

no

gt (optional)

Global title. The CdPA global title digits.

Range:

1-21 digits

Valid digits are *0-9, a-f, A-F*

h0h1 (optional)

A combination of values contained in some MSUs. The *h0* value is the code for a message group, and the *h1* value is the code for a message within that group.

Range:

0 - 255

ilsn (optional)

The incoming linkset name.

Range:

ayyyyyyyyy

1 alphabetic character followed by up to 9 alphanumeric characters.

imei (optional)

The International Equipment Identifier.

Range:

Exactly 14 digits; valid digits are *0-9, a-f, A-F*

imsi (optional)

The International Mobile Station Identifier.

Range:

5-15 digits

Valid digits are *0-9*, *a-f*, *A-F*

loc (optional)

The card location of the card as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

lrn (optional)

The local routing number.

Range:

Exactly 14 digits: Valid digits are *0-9*.

mode (optional)

The type of output displayed.

Range:

brief

Abbreviated information is displayed when an MSU matches the request.

default

The default value of this parameter.

detail

Detailed information is displayed when an MSU matches the request.

debug

Complete information is displayed when an MSU matches the request.

opc (optional)

ANSI point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*). The *prefix* subfield indicates a private point code (*prefix-ni-nc-ncm*).

Synonym:

opca

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

opci (optional)

ITU international origination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code, private point code, or private and spare point code (*prefix-zone-area-id*).

Range:

s-, p-, ps-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-, p-, ps

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

opcn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the `chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnngc, m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn, prefix-nnnnngc, prefix-m1-m2-m3-m4, prefix-m1-m2-m3-m4-gc*).

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

opcn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

opcn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

un---000--127

sna--000---15

mna---000--31

rep (optional)

The number of MSUs to trap.

Range:

0 - 255

service (optional)

The service offered by the EAGLE.

Range:

gflex

gport

inpmr

inpq

smsmr

mnpsms

eir

idpr

idps

tif

tif2

tif3

tobr

aiq

si (optional)

Service indicator.

Range:

0 - 15

sls (optional)

Signaling link selector.

Range:

0 - 255

ssp (optional)

ANSI destination point code with subfields *network indicator-network cluster-network cluster member* (*ni-nc-ncm*).

Synonym

sspa

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

When `chg-sid:pctype=ansi` is specified, *ni = 000* is not valid.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is not valid if *ni = 001–005*.

When `chg-sid:pctype=ansi` is specified, *nc = 000* is valid if *ni = 006–255*.

The point code *000-000-000* is not a valid point code.

sspi (optional)

ITU international destination point code with subfields *zone-area-id*. The *prefix* subfield indicates a spare point code (*prefix-zone-area-id*).

Range:

s-, 0-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s

zone—0-7

area—000-255

id—0-7

The point code *0-000-0* is not a valid point code.

sspn (optional)

ITU national destination point code in the format of a 5-digit number (*nnnnn*); or 2, 3, or 4 numbers (members) separated by dashes (*m1-m2-m3-m4*) as defined by the

`chg-stpopts:npcfmti` flexible point code option. A group code must be specified when the ITUDUPPC feature is turned on (*nnnnngc*, *m1-m2-m3-m4-gc*). The *prefix* subfield indicates a spare point code (*prefix-nnnnn*, *prefix-nnnnngc*, *prefix-m1-m2-m3-m4*, *prefix-m1-m2-m3-m4-gc)*.

Range:

s-, 0-16383, aa-zz

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

prefix—s-

nnnnn—0-16383

gc—aa-zz

m1-m2-m3-m4—0-14 for each member; values must sum to *14*

sspn24 (optional)

24-bit ITU national destination point code with subfields *main signaling area-sub signaling area-signaling point* (*msa-ssa-sp*).

Range:

000-255

Specify a valid value for each subfield of the point code, and separate the subfields with a dash (-).

msa—000–255

ssa—000–255

sp—000–255

sspn16 (optional)

16-bit ITU national point code with subfields *unit number-sub number area-main number area* (*un-sna-mna*).

Range:

000---127

Specify a valid value for each subfield of the point code, and the separate the subfields with a dash (-).

un---000---127

sna---000---15

mna---000---31

tlnpisuptype (optional)

The ISUP message type.

Range:

0 - 255

tn (optional)

The directory number.

Range:

Exactly 10 digits. Valid digits are *0-9*

Example

```
ent-trace:opc=1-1-1:card=SS7ANSI-ALL:rep=2
ent-trace:tlnpisuptype=01:card=SS7ANSI-ALL
ent-trace:dn=12345:card=VSCCP-ALL
ent-trace:imsi=c122d:card=VSCCP-ALL
ent-trace:card=ccs7itu-all:dpc=2-7-5:error=no
ent-trace:card=vsccp-all:error=yes
ent-trace:card=ccs7itu-all:sspn24=10-11-12:opcn24=10-10-10:dpcn24=10-101-11
ent-trace:imei=123456789101234:card=VSCCP-ALL
ent-trace:entityid=c123:card=VSCCP-ALL
ent-trace:loc=1305:si=5:brief=yes
ent-trace:dn=98912345:loc=1105
ent-trace:card=ccs7itu-all:sspn16=121-10-12:opcn16=121-10-13:dpcn16=121-10-14
```

Dependencies

The card parameter or the loc parameter must be specified.

At least one optional parameter must be specified. The error parameter can be specified as the only optional parameter or with any of the other optional parameters in the command.

The gt, entityid, dn, imei, and imsi parameters cannot have a value of *none*.

A valid value must be specified for the card parameter.

The only qualifier allowed for the card parameter is *all*.

The gt, entityid, dn, imei, imsi, lrn, and tn parameters are invalid for LIM cards running the SS7ANSI, ATMANSI, IPLIM or SS7IPGW GPLs.

The opci/opcn/opcn24/opcn16, dpci/dpcn/dpcn24/dpcn16, and sspi/sspn/sspn24/sspn16 ITU point code parameters are invalid for LIM cards running the SS7ANSI, ATMANSI, IPLIM, or SS7IPGW GPLs.

The gt, entityid, dn, imei, imsi, lrn, tn, and tlnpisuptype parameters are invalid for LIM cards running the ATMITU or IPLIMI GPLs.

The opc/opca, dpc/dpca, and ssp/sspa ANSI point code parameters are invalid for LIM cards running the IPLIMI GPL.

The opc, dpc, and tlnpisuptype parameters cannot be specified for Service Module cards.

The G-Flex feature or the Equipment Identity Register feature must be turned on before the imsi parameter can be specified.

If the ITUDUPPC feature is turned on, the ITU national point code must be specified as a full point code.

The EIR feature must be turned on before the imei parameter can be specified.

The AINPQ, G-Flex, G-Port, IDP Relay, INP, PPSMS, or V-Flex feature must be turned on or the ANSI41 AIQ or ATINP feature must be enabled before the dn parameter can be specified.

The G-Flex, G-Port, INP, or V-Flex feature must be turned on or the ATINP, IDP Relay or any TIF feature must be enabled before the entityid parameter can be specified.

The loc and card parameters are mutually exclusive.

Only one of the lrn, tn, dn, entityid, imsi, imei, or error parameters can be specified in a single MSU trace request.

A maximum of 10 traces can be entered in the system at a time.

Values 1113 - 1118 cannot be specified for the loc parameter.

The J7 Support feature must be enabled before the sspn16/opcn16/dpcn16 parameters can be specified.

Output

This example shows the output for an MTP trace:

```
ent-trace:loc=1101:dpc=7-1-0
```

```
    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1101   RX - Link B0
    Trace Condition:
    LOC=           1101
    DPC=           007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 16

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1101   Use RTE:   007-001-000:H'0001
    Trace Condition:
    LOC=          1101
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 16
```

```
    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1101   Sending to 1103:B1
    Trace Condition:
    LOC=          1101
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 0b

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1103   MSU Received from 1101
    Trace Condition:
    LOC=          1101
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 0b

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1103   MSU sent to L2 - B1
    Trace Condition:
    LOC=          1101
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 0b

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;
```

This example shows the output for an SCCP trace:

`ent-trace:loc=1101:gt=9194605500`

```
    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1101   RX - Link B0
    Trace Condition:
```

```
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  90 Bytes
    MSU DATA SIZE =  82 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 01 01 65 01 02

    SCCP: 09 80 03 0e 13 0b 8b 8c 28 04 01 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1101   TVG: Sending to SCCP 1107
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  90 Bytes
    MSU DATA SIZE =  82 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 01 01 65 01 02

    SCCP: 09 80 03 0e 13 0b 8b 8c 28 04 01 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   MSU Received from 1101
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  90 Bytes
    MSU DATA SIZE =  82 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 01 01 65 01 02

    SCCP: 09 80 03 0e 13 0b 8b 8c 28 04 01 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
```

```
    MSU TRACE H'00e2:  Card=1107   SCCP: Before SS7 Trans Encod
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 01 01 65 01 02

    SCCP: 09 80 03 0e 13 0b 8b 8c 28 04 01 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   SCCP: After SS7 Trans Encode
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 02

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   Use RTE 007-001-000:H'0009
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 02

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
```

```
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   Sending to 1103:B1
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 01

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'0000:  Card=1103   MSU Received from 1107
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 01

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'0000:  Card=1103   MSU sent to L2 - B1
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  90 Bytes
    MSU DATA SIZE =  82 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 01

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
```

```
          04 05 06


    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00
    TRACE OUTPUT COMPLETE.
;
```

This example shows the output for a trace when truncated output is requested. Only the filters that are specified in the command are displayed.

`ent-trace:loc=1305:si=0:hoh1=20:sls=255:cpc=001-002-003:mode=debug:brief=yes`

```
    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
;
    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=1305
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: RX - Link A0

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=1305
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: TIF Stop Action: OK

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=1305
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: TVG: Sending to SCCP 1317

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
```

```
    MSU TRACE H'0081:  Card=1317
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: SCCP: MSU RX from 1305

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=1317
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: TIF Process Msg: Ruleset TIF1

    TRACE OUTPUT COMPLETE.
;
    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=1317
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: TIF: No Error CdPN:1111111119703819111100

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=1305
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: Use RTE (16) DPCa:   023-172-011, OPCa:   013-159-005

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=1305
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
```

```
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: Sending to 2311:B3

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=2311
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: MSU Received from 1305

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=2311
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: MSU sent to L2 - B3: DPCa=   023-172-011, OPCa=   013-159-005

    TRACE OUTPUT COMPLETE.
;

    tklc1071501 08-09-22 10:49:00 EST  EAGLE5 39.2.0
    MSU TRACE H'0081:  Card=2311
    Trace ID 1 Condition:
    LOC=          1305
    SI=           0
    H0H1=         20
    SLS=          255
    CPC=          001-002-003
    MODE=         DEBUG

    Info: Transmitted and ACK'd on B3

    TRACE OUTPUT COMPLETE.
;
```

This example shows the output for an MTP trace:

`ent-trace:loc=1101:dpcn16=7-1-0`

```
    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1101   RX - Link B0
    Trace Condition:
    LOC=           1101
```

```
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 16

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1101   Use RTE:   007-001-000:H'0001
    Trace Condition:
    LOC=          1101
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 16

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1101   Sending to 1103:B1
    Trace Condition:
    LOC=          1101
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 0b

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1103   MSU Received from 1101
    Trace Condition:
    LOC=          1101
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 0b

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;
```

```
    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e1:  Card=1103   MSU sent to L2 - B1
    Trace Condition:
    LOC=          1101
    DPC=          007-001-000

    MSU info:
    TOTAL MSU SIZE=  12 Bytes
    MSU DATA SIZE =  4 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  85 00 01 07 01 65 01 0b

    DATA: 00 00 09 00
    TRACE OUTPUT COMPLETE.
;
```

This example shows the output for an SCCP trace:

`ent-trace:loc=1101:gt=9194605500`

```
    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1101   RX - Link B0
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  90 Bytes
    MSU DATA SIZE =  82 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 01 01 65 01 02

    SCCP: 09 80 03 0e 13 0b 8b 8c 28 04 01 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1101   TVG: Sending to SCCP 1107
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  90 Bytes
    MSU DATA SIZE =  82 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 01 01 65 01 02

    SCCP: 09 80 03 0e 13 0b 8b 8c 28 04 01 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00
```

```
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   MSU Received from 1101
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  90 Bytes
    MSU DATA SIZE =  82 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 01 01 65 01 02

    SCCP: 09 80 03 0e 13 0b 8b 8c 28 04 01 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   SCCP: Before SS7 Trans Encod
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 01 01 65 01 02

    SCCP: 09 80 03 0e 13 0b 8b 8c 28 04 01 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   SCCP: After SS7 Trans Encode
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 02

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06
```

```
    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   Use RTE 007-001-000:H'0009
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 02

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'00e2:  Card=1107   Sending to 1103:B1
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 01

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'0000:  Card=1103   MSU Received from 1107
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  97 Bytes
    MSU DATA SIZE =  89 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
```

```
    MTP:  83 00 01 07 00 01 01 01

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06

    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00 02
          08 01 65 01 00 04
    TRACE OUTPUT COMPLETE.
;

    stdcfg1b 07-08-10 15:51:33 EST  EAGLE 37.5.0
    MSU TRACE H'0000:  Card=1103   MSU sent to L2 - B1
    Trace Condition:
    LOC=          1101
    GT=           9194605500

    MSU info:
    TOTAL MSU SIZE=  90 Bytes
    MSU DATA SIZE =  82 Bytes

          0  1  2  3  4  5  6  7  8  9  0  1  2  3  4  5  6  7  8  9
    MTP:  83 00 01 07 00 01 01 01

    SCCP: 09 80 03 0e 13 0b cb 10 00 01 07 0a 19 49 06 55 00 05 c3 0a
          04 05 06


    TCAP: 3a e2 38 c7 04 e5 04 61 80 e8 30 e9 2e cf 01 00 d0 02 83 01
          f2 25 aa 0b 84 09 01 00 11 0a 19 49 06 12 19 84 09 02 00 11
          0a 19 39 88 41 63 84 07 07 00 01 03 21 03 00 df 45 01 00
    TRACE OUTPUT COMPLETE.
;
```

Related Commands

None.

rept-stat-ee

Report Eagle Eyes Status

Use this command to generate the status report of Eagle Eyes on network cards.

Parameters

loc (optional)

Eagle Eyes Card location.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
rept-stat-ee
```

```
rept-stat-ee:loc=1102
```

Dependencies

The card location specified in the 'loc' parameter must be configured to use Eagle Eyes.

The shelf and card must be equipped.

The specified card location must not be a reserved card location.

Notes

This command can be canceled using the `F9` function key or the `canc-cmd` command. See `canc-cmd` for more information

Output

This example generates the Eagle Eyes status report for the specified Network Card.

```
rept-stat-ee:loc=1101
```

```
tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
LOC        STATE
---------------
1101       ACTIVE


Command Completed.
```

This example generates the Eagle Eyes status report for all the EE configured Network Cards.

```
rept-stat-ee
```

```
tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
LOC        STATE
---------------
1101       ACTIVE
1103       INACTIVE
Command Completed.
```

Related Commands

chg-ee-card, *dact-ee*, *rtrv-ee-card*

rept-stat-gedti

Report GEDTI Hub Status

Use this command to generate a report of the GEDTI Hub's status.

Parameters

loc (optional)

GEDTI Hub Card location.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
rept-stat-gedti
```

```
rept-stat-gedti:loc=1111
```

Dependencies

The value specified for the loc parameter must correspond to the location of an IPSM card which is configured as a GEDTI Hub.

Notes

This command can be canceled using the F9 function key or the canc-cmd command. See `canc-cmd` for more information.

Output

This example generates the report of all the IPSM cards configured as GEDTI Hubs.

```
rept-stat-gedti
```

```
tekelecstp 08-01-29 10:41:52 EST  EAGLE 46.0.0

LOC       PORT      STATE
------------------------------------------------------------------------
1101      4567      ACTIVE

SID   SOCK FD   APPL CARD   APPL SUBSYS   APPL ID   PC STATE   APPL STATE
------------------------------------------------------------------------
0    -1         0           0             0         0          0
1    -1         0           0             0         0          0
2    -1         0           0             0         0          0
3    -1         0           0             0         0          0
4    -1         0           0             0         0          0
5    -1         0           0             0         0          0
```

```
    6    -1         0           0             0         0          0
    7    -1         0           0             0         0          0

    LOC       PORT      STATE
    ------------------------------------------------------------------------
    1112      4568      INACTIVE

    SID   SOCK FD   APPL CARD   APPL SUBSYS   APPL ID   PC STATE   APPL STATE
    ------------------------------------------------------------------------
    0     0          0          0             0         0          0

    Command Completed.
```

This example generates the report of the specified IPSM card configured as a GEDTI Hub.

`rept-stat-gedti:loc=1101`

```
tekelecstp 08-01-29 10:41:54 EST  EAGLE 46.0.0

    LOC       PORT      STATE
    ------------------------------------------------------------------------
    1101      4567      ACTIVE

    SID   SOCK FD   APPL CARD   APPL SUBSYS   APPL ID   PC STATE   APPL STATE
    ------------------------------------------------------------------------
    0    -1         0           0             0         0          0
    1    -1         0           0             0         0          0
    2    -1         0           0             0         0          0
    3    -1         0           0             0         0          0
    4    -1         0           0             0         0          0
    5    -1         0           0             0         0          0
    6    -1         0           0             0         0          0
    7    -1         0           0             0         0          0
    Command Completed.
```

Related Commands

act-gedti, *chg-gedti-card*, *dact-gedti*

rtrv-ee-card

Retrieve Eagle Eyes Card

Use this command to display Eagle Eyes Card Configuration data from the Eagle Eyes Card (EE CARD) table. The EE CARD entry consists of a Card Loc and Eagle Eyes Card specific data.

Parameters

loc (optional)

Eagle Eyes Card location.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 -

4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

Example

```
rtrv-ee-card
```

```
rtrv-ee-card:loc=1102
```

Dependencies

The EE CARD table must be available.

The card location specified in the 'loc' parameter must be configured to use Eagle Eyes.

The Eagle Eyes Filter table must be available.

Notes

None.

Output

This example displays the Eagle Eyes parameters for all the EE configured network cards.

```
rtrv-ee-card
```

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
    LOC  THR   SECLIM  PKTLIM   KBLIM
    ----------------------------------
    1101 10000 5644800 10000000 4000000
    1201 1000  464400  NONE     2000000


    EE CARD table is (2 of 254) 1% full

    RTRV-EE-CARD: MASP A - COMPLTD
;
```

This example displays the Eagle Eyes parameters for the specified EE configured network card.

```
rtrv-ee-card:loc=1201
```

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0

    EE OAM Card Configuration
    -----------------------------------------
    LOC  THR   SECLIM   PKTLIM   KBLIM   PORT
    -----------------------------------------

    1201 1000  2000     2000     3000    -

    ATM FILTERS
```

```
    ----------------------------
    ID  TYPE PORT SSCOPSU MTP3SI
    ----------------------------
    71   INC a    ctrl    -
    13   INC a     -      -
    5    EXC b     -      -

    EE CARD table is (2 of 254) 1% full

    RTRV-EE-CARD: MASP A - COMPLTD
;
```

Legend

- **LOC**--- Card location as stenciled on the shelf of the system.
- **THR**--- The sending rate of the Eagle Eyes throttle task in IMT packets per second.
- **SECLIM**--- The limit on the amount of time to perform the trace, in seconds.
- **PKTLIM**--- The limit on the number of Ethernet frames to send.
- **KBLIM**--- The file size limit of the capture file created, in kilobytes.
- **PORT**--- Port being filtered.
- **ID**--- Eagle Eyes Filter ID.
- **TYPE**--- Eagle Eyes Filter Type.
- **SSCOPSU**--- SSCOP sub-protocol or SU type filter.
- **MTP3SI**--- MTP3 user filter.

Related Commands

chg-ee-card, *dact-ee*, *rept-stat-ee*

rtrv-ee-flt

Retrieve Eagle Eyes Filter

Use this command to retrieve Eagle Eyes Filter data from the Eagle Eyes Filter (EE FLT) table. The EE-FLT entry consists of a Filter ID and Filter specific data. It can be used to obtain the Filter ID of the filter to be associated to a card using the CHG-EE-CARD command.

Parameters

appl (optional)

Card Application Type

Range:

ATM

IP

E1T1

fltid (optional)

Eagle Eyes Filter ID

Range:

1-200

Example

```
rtrv-ee-flt:appl=ip
```

```
rtrv-ee-flt:fltid=16
```

Dependencies

The Eagle Eyes Filter table must be available.

The specified Filter ID must exist in the EE FLT table.

The Filter ID and APPL are mutually exclusive parameters.

Notes

None.

Output

This example displays the Filter parameters for the specified Filter ID.

```
rtrv-ee-flt:fltid=85
```

```
tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
    EE OAM Filter Configuration
    IP FILTERS
    ------------------------------------------------------------------------
    ID  TYPE IP   IP              IP              SCTP  SCTP  SCTP  SCTP  SCTP
             PROT SRC             DST             SRC   DST   TYPE  DATA  DATA
                  ADDR            ADDR            PORT  PORT        PLD   STR
    ------------------------------------------------------------------------
    85  INC sctp  -               -               -     -     data  sua   -
    EE Filter table is (83 of 200) 42% full.

;
Command Executed
```

This example displays the Filter parameters for the ATM Application Type.

```
rtrv-ee-flt:appl=atm
```

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
    EE OAM Filter Configuration
    ATM FILTERS
    ----------------------------
    ID  TYPE PORT SSCOPSU MTP3SI
    ----------------------------
    5    EXC b     -      -
    13   INC a     -      -
    67   INC a     -      -
```

```
    68   INC a1    -      -
    71   INC a    ctrl    -
    77   INC all   -      -

    EE Filter table is (83 of 200) 42% full.
;
Command Executed
```

This example displays the Filter parameters for the IP Application Type.

`rtrv-ee-flt:appl=ip`

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
    EE OAM Filter Configuration
    IP FILTERS

------------------------------------------------------------------------------

    ID  TYPE IP   IP              IP              SCTP  SCTP  SCTP  SCTP  SCTP
             PROT SRC             DST             SRC   DST   TYPE  DATA  DATA
                  ADDR            ADDR            PORT  PORT        PLD   STR

------------------------------------------------------------------------------

    3    INC tcp   -               -               -     -     -    -     -
    8    EXC  -    -              3.3.3.3          -     -     -    -     -
    9    EXC  -    -              5.5.50.5         -     -     -    -     -
    18   INC sctp 10.248.13.9      -              1234   -     -    -     -
    19   INC sctp 10.248.13.9      -               -    1234   -    -     -
    32   INC sctp 10.248.13.9      -              1234   -    data m2pa   -
    34   INC sctp 111.248.131.119 111.111.111.111 1234  2345  data m2pa   -
    37   EXC sctp 111.248.131.119 111.111.111.111 1234  2345  data m2pa   -
    38   EXC sctp 111.248.131.119 111.111.111.111 1234  2345  data  -     -
    46   EXC sctp 10.248.13.9      -              1234   -    data m2pa   -
    50   EXC sctp 10.248.13.9      -              1234   -    data m2pa   -
    85   INC sctp  -               -               -     -    data sua    -

    EE Filter table is (83 of 200) 42% full.

;
Command Executed
```

This example displays the Filter parameters for the E1T1 Application Type.

`rtrv-ee-flt:appl=e1t1`

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
    EE OAM Filter Configuration
    E1T1 FILTERS
    ----------------------------
    ID  TYPE PORT SUTYPE  MTP3SI
    ----------------------------
    6    INC a21   -      -
    7    INC a22   -      -
    12   INC a     -      -
    69   INC a31   -      -
    70   INC b31   -      -
    72   INC a    lsu     -
    EE Filter table is (83 of 200) 42% full.
```

```
;
Command Executed
```

This example displays the Filter parameters for all the configured Filters.

`rtrv-ee-flt`

```
    tekelecstp 10-03-08 14:43:31 EST  EAGLE 46.0.0
    EE Filter Configuration
    IP Filters
    ID  TYPE IP   IP              IP              SS    SD    STYPE SCTP  SCTP

              PROT SRC             DST             PORT  PORT        PLD   STR
                   ADDR            ADDR

-------------------------------------------------------------------------------

    1   INC  SCTP 10.248.13.10    10.25.80.191    65535 10000 DATA  M2PA  65535

    47  EXC  SCTP 101.248.131.191 102.251.118.111 65432 10245 HTBT  -     -
    ATM Filters
    ID  TYPE  PORT SSCOPSU MTP3SI
    ----------------------------
    100 INC   A    DATA    SCCP
    105 EXC   B    CTRL    -
    E1T1 Filters
    ID  TYPE  PORT SUTYPE  MTP3SI
    ----------------------------
    2   INC   A1   MSU     SCCP
    EE FLT table is (5 of 200) 2% full
;
Command Executed
```

Related Commands

dlt-ee-flt, *ent-ee-flt*

rtrv-upgrade-config

Retrieve Upgrade Configuration

Use this command to retrieve provisioned data used by the upgrade software during an upgrade of an in-service EAGLE from a source release to the target release.

Parameters

display (optional)

Display Indicator. This parameter indicates what type of output is to be displayed.

Range:

tblcnv

Displays a list of DMS tables that will be converted during the next upgrade. These tables are selected for conversion using the `chg-upgrade-config` command.

prtnstat

This parameter is not implemented at this time.

all

Display all upgrade configuration data.

Default:

all

Example

Display a list of DMS tables that will be converted during the next upgrade.

```
rtrv-upgrade-config:display=tblcnv
```

```
rtrv-upgrade-config
```

Dependencies

None

Output

```
rtrv-upgrade-config:display=tblcnv
```

```
    rlghncxa03w  07-03-13  08:15:45 EST  EAGLE 37.5.0
    The following tables will be converted:
         FEAT_CTRL Table, ID=327
    Command Completed.
;
```

```
rtrv-upgrade-config
```

```
    rlghncxa03w  10-02-13  08:15:45 EST  EAGLE 42.0.0
    Software Access Key entered on system: VBJYAPDPBTEJB
    Configured Upgrade Threshold Type: GROUP
    Command Completed.
;
```

Related Commands

act-upgrade , *chg-upgrade-config*

send-msg Send Message

Use this command to manually simulate a system generated message from a user terminal. The parameters (not entered by the user) are defaulted to:

- Origination subsystem = *cam_active*
- Destination subsystem = *orig application ID=appl_ID_ui*
- Violation= *no report*

- Bus = *imt choice*
- Message length = *computed*

Parameters

da (mandatory)

The destination application ID.

Range:

0 - 255

ds (mandatory)

The destination subsystem.

Range:

0 - 255

f (mandatory)

The function ID.

Range:

0 - 255

loc (mandatory)

The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1113, 1115, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118

alt (optional)

This parameter specifies whether to use the alternate bus bit.

Range:

on

off

Default:

on

bus (optional)

The IMT bus.

Range:

a

b

Default:

a

d0 (optional)

The application data.

Range:

0 - 255

d1 (optional)

The application data.

Range:

0 - 255

d2 (optional)

The application data.

Range:

0 - 255

d3 (optional)

The application data.

Range:

0 - 255

d4 (optional)

The application data.

Range:

0 - 255

d5 (optional)

The application data.

Range:

0 - 255

d6 (optional)

The application data.

Range:

0 - 255

d7 (optional)

The application data.

Range:

0 - 255

d8 (optional)

The application data.

Range:

0 - 255

d9 (optional)

The application data.

Range:

0 - 255

len (optional)

The message length in bytes.

Range:

0 - 65535

Default:

Calculated

oa (optional)

The originating application ID.

Range:

0 - 255

Default:

2

os (optional)

The originating subsystem.

Range:

0 - 255

Default:

0

si (optional)

This parameter allows the service ID field in the violation indicator to be set.

Range:

0 - 31

Default:

0

sut (optional)

The signal unit type.

Range:

0 - 9

Default:

2

Example

```
send-msg:loc=1113:os=2:oa=h'28:ds=2:da=h'28:f=7
send-msg:loc=1113:ds=2:oa=h'17:da=h'30:f=11
send-msg:loc=1116:ds=2:oa=h'17::da=h'30:f=12
send-msg:loc=1101:ds=1:da=65:f=27:d0=78:si=3
send-msg:loc=6212:ds=2:oa=h'17:da=h'30:f=11
send-msg:loc=6312:ds=1:da=64:f=171
```

Dependencies

The value of the da parameter must be valid.

The destination location must be equipped to receive messages.

Card locations *xy*09 and *xy*10 cannot be used with bus *b* and bus *a*, respectively.

The value of the ds parameter must be valid.

Notes

The bus and sut parameters must be used when sending a message to a MUX card.

If the bus parameter is not specified with a MUX card location on imt B (such as *xy***10**), the bus *b* value is used instead of the bus *a* value.

Output

`send-msg:loc=1113:os=2:oa=h'28:ds=2:da=h'28:f=7`

```
rlghncxa03w 01-03-13 15:01:02 EST
0061.0019    CARD 1113 PSM    ADMIN   PSM became active
;
```

`send-msg:loc=1113:ds=2:oa=h'17:da=h'30:f=11`

```
rlghncxa03w 01-03-13 15:02:34 EST
System Buffer sent has following attributes :
    Msg Length = H'0006
    Dest Card = H'00f4
    Orig Subsys = H'0002        Dest Subsys = H'0002
    Orig Appl ID = H'0017       Dest Appl ID = H'0030
    Func ID = H'000b            Bus/Alt/SUT = H’000b
```

```
          Violation Ind = H’0000
User Message sent to location 1113.
;
```

```
send-msg:sut=7:loc=1110:ds=0:da=h'40:f=h'a3:d0=0:bus=b
```

```
    tekelecstp 06-01-11 11:39:15 EST  EAGLE 35.1.0
        System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00ff
        Orig Subsys = H'0001            Dest Subsys = H'0000
        Orig Appl ID = H'0030           Dest Appl ID = H'0040
        Func ID = H'00a3                Bus/Ret/Sut = H'0087
        Violation Ind = H'0000
        User Message sent to location 1110.
        ;
```

```
send-msg:loc=1101:ds=1:da=65:f=27:d0=78:si=3
```

```
    slanmfc 11-03-18 05:12:51 EST  EAGLE 44.0.0
    System Buffer sent has following attributes :
        Msg Length = H'001c
        Dest Card = H'00f0
        Orig Subsys = H'0001            Dest Subsys = H'0001
        Orig Appl ID = H'0030           Dest Appl ID = H'0041
        Func ID = H'001b                Bus/Ret/Sut = H'0002
        Violation Ind = H'0018
    User Message sent to location 1101.
;
```

```
send-msg:loc=6212:ds=2:oa=h'17:da=h'30:f=11
```

```
    tekelecstp 12-05-11 11:39:15 EST  EAGLE 45.0.0
    System Buffer sent has following attributes :
        Msg Length = H'0006
        Dest Card = H'00f4
        Orig Subsys = H'0002        Dest Subsys = H'0002
        Orig Appl ID = H'0017       Dest Appl ID = H'0030
        Func ID = H'000b            Bus/Alt/SUT = H’000b
        Violation Ind = H’0000
    User Message sent to location 6212.
;
```

Related Commands

None.

set-mem — Set Memory

Use this command to set values in memory in the communication and application processors. If a card is reloaded, these memory changes are lost.

Parameters

addr (optional)

The address, in the form of *segment–offset*.

Range:

segment-offset

segment—h'00–h'ffff

offset—h'00–h'ffff

byte (optional)

The byte value to write to the specified memory location(s).

Range:

0–h'00–h'ff

card (optional)

The card location, in the form of *GPLID–Subsystem ID*.

Range:

GPLID–Subsystem ID

GPLID— atmhc, deirhc, erthc, glshc, hipr2, ipghc, iplhc, ipsg, ipshc, mcphc, oamhc, pktgen, sccphc, siphc, slanhc, ss7hc, utility

Subsystem ID— a, b, act, stb, all

The OAMHC GPL can be specified with any of the subsystem IDs.

For all other GPLs, only the *all* subsystem ID is valid.

dword (optional)

A double word value to write to the specified memory location(s).

Range:

0–h'00–h'ffffffff

fill (optional)

The number of times that the value is to be written to successive addresses.

Range:

0 - 65535

Default:

1

imt (optional)

The IMT address.

Range:

0 - 254

loc (optional)

Location. The card location as stenciled on the shelf of the system.

Range:

1101 - 1108, 1111 - 1112, 1201 - 1208, 1211 - 1218, 1301 - 1308, 1311 - 1318, 2101 - 2108, 2111 - 2118, 2201 - 2208, 2211 - 2218, 2301 - 2308, 2311 - 2318, 3101 - 3108, 3111 - 3118, 3201 - 3208, 3211 - 3218, 3301 - 3308, 3311 - 3318, 4101 - 4108, 4111 - 4118, 4201 - 4208, 4211 - 4218, 4301 - 4308, 4311 - 4318, 5101 - 5108, 5111 - 5118, 5201 - 5208, 5211 - 5218, 5301 - 5308, 5311 - 5318, 6101 - 6108, 6111 - 6118, 1109, 1110, 1209, 1210, 1309, 1310, 2109, 2110, 2209, 2210, 2309, 2310, 3109, 3110, 3209, 3210, 3309, 3310, 4109, 4110, 4209, 4210, 4309, 4310, 5109, 5110, 5209, 5210, 5309, 5310, 6109, 6110, 1113, 1115

mask (optional)

The mask that selects the bits that are to be included in the operation (op).

Range:

0-0xFFFFFFFF

Default:

0xFFFFFFFF

op (optional)

Operation. The operation performed in order to arrive at the final value in the memory location.

Range:

replace

and

or

x

Default:

replace

paddr (optional)

The physical offset of the memory address.

Range:

h'00–h'ffffffff

proc (optional)

The processor type.

Range:

appl

Application processor

com

Communication processor

Default:

appl

word (optional)

A word value to write to the specified memory location(s).

Range:

h'00–h'ffff

Example

```
set-mem:loc=1109:paddr=h’201000:byte=0:fill=1024
set-mem:card=hipr2-all:paddr=h’202000:word=h’2a:op=and:mask=h’fff
```

Dependencies

The loc, imt, or card parameter must be specified.

Only one of the loc, imt, and card parameters can be specified in the command.

The card location specified by the loc parameter must be in the database.

All of the subsystem values can be specified with the OAMHC GPLID. The other GPLID values can be specified only with the *all* subsystem value.

Values of 1114, 1116, 1117, and 1118 cannot be specified for the loc parameter.

The byte, word, or dword parameter must be specified.

Only one of the byte, word, and dword parameters can be specified in the command.

The paddr parameter cannot be specified for an SS7 LIM card.

Memory Type of FWORD is NOT supported at this time.

The addr and paddr parameters cannot be specified together in the command.

The value specified for the fill parameter cannot exceed 65535.

Notes

The imt parameter allows this command to be entered for a card that has not been configured in the system.

Output

```
set-mem:loc=6205:paddr=h'0345fe:byte=2

    rlghncxa03w 12-05-22 21:14:03 EST Rel 45.0.0
    SDS Response Code 22 from IMT Address H'00fd - command complete.
;
```

Related Commands

disp-mem

Chapter 6

Pass-Through Commands

This chapter introduces the pass-through commands and describes the command conventions. The pass-through commands are listed in alphabetical order.

Command Conventions

Pass-through commands are passed through the OAM and sent to individual cards for processing.

An example of a pass command is:

```
pass:loc=1201:cmd="connmgr -c"
```

The cmd parameter contains the pass-through command (`connmgr -c`) within the double quotes.

Pass-through commands consist of two types of tokens: command name and command options. Tokens are whitespace-delimited and null-terminated. The generalized format of a pass-through command is:

command_name option1 option2....option n-1.... option n

In the example, the *command_name* is *connmgr* and the option is *-c*.

Options and option parameters are made up of a specific character string or a variable. The variable is to be replaced with a value selected from a range of values. Option variables and option parameter variables are underlined. For example, the `arp` command option *-d* has the parameter variable IPaddress. Specify the IP address as in the command `arp -d 192.9.200.44`. Do not enter the underlined text; enter a value instead.

Help information for each pass-through command can be obtained by using the option -h on any command.

arp

Address Resolution Protocol

This command is used to display and modify the internet to ethernet address translation tables used by the address resolution protocol.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the arp command option *-d* has the parameter *IP address*. The IP address must be specified for which an ARP entry will be deleted, as in the command `arp` *-d 192.9.200.44*. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

-a

This option displays all entries in the ARP table.

-d *IP address*

This option deletes an ARP entry for the specified IP address.

The IP address is a TCP/IP address expressed in standard "dot notation." IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.9.200.44*, where *192.9.200* is the network number and *44* is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

-f

This option flushes all entries from the ARP table.

-h

This option displays help (usage) information for the command.

-s *IP addressMAC address*

This option creates an ARP entry for the specified IP address and ethernet address.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

The IP address is a TCP/IP address expressed in standard "dot notation." IP addresses consist of the system's network number and the machine's unique host number. For example, *192.9.200.44*, where *192.9.200* is the network number and *44* is the machine's host number.

Range:

6 hexadecimal numbers separated by colons; each number in the range *0 - FF*.

The MAC (media access control) address is an ethernet address with the format *x:x:x:x:x:x*, where *x* is a hexadecimal integer from *0* to *FF*. For example, *08:00:20:1b:0f:f2*.

Example

```
arp -a
arp -s 192.9.200.44 08:00:20:1b:0f:f2
arp -d 192.9.200.44
arp -f
```

Dependencies

Only one of the options can be specified at a time.

The `arp` command with no options displays all of the current ARP cache entries.

Notes

The `arp` command is executed through the `pass` command.

Output

```
pass:loc=1105:cmd="arp" or
pass:loc=1105:cmd="arp -h"
```

```
    Command Accepted - Processing
```

```
    rlghncxa03w 04-07-27 08:10:00 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="arp"
    Command entered at terminal #1.
    ;

    rlghncxa03w 04-07-27 08:10:00 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:10:00 EST  EAGLE5 31.6.0

    Usage: arp [-a] [-d ipaddr] [-f] [-h] [-s ipaddr enetaddr]

    Options:
        -a        Display All entries in ARP table
        -d        Delete specified entry (ipaddr) from ARP table
        -f        Flush all entries from ARP table
        -h        Displays this message
        -s        Set ARP table entry to associate ipaddr with enetaddr
        enetaddr  x:x:x:x:x:x
        ipaddr    d.d.d.d
;
    rlghncxa03w 04-07-27 08:10:01 EST  EAGLE5 31.6.0

    ARP command complete
;
```

pass:loc=1105:cmd="arp -s 192.168.100.234 11:22:33:44:55:66"

```
Command Accepted - Processing

    rlghncxa03w 04-07-27 08:11:08 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="arp -s 192.168.100.234 11:22:33:44:55:66"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:11:08 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:11:08 EST  EAGLE5 31.6.0

    ARP: 192.168.100.234 (11:22:33:44:55:66) added
;
    rlghncxa03w 04-07-27 08:11:09 EST  EAGLE5 31.6.0

    ARP command complete
;
```

pass:loc=1105:cmd="arp -a"

```
Command Accepted - Processing

    rlghncxa03w 04-07-27 08:11:18 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="arp -a"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:11:18 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    RLGHNCXA03WRLGHNCXA03W 04-07-27 08:11:18 EST  EAGLE5 31.6.0
```

```
    LINK LEVEL ARP TABLE
    destination      gateway           flags  Refcnt  Use          Interface
    -------------------------------------------------------------------------
    192.168.55.250   00:e0:16:9b:0d:86    405    1       0            seeq1
    192.168.100.234  11:22:33:44:55:66    c05    0       0            seeq0

    -------------------------------------------------------------------------
;
    rlghncxa03w 04-07-27 08:11:19 EST  EAGLE5 31.6.0
    ARP command complete
;
```

```
pass:loc=1105:cmd="arp -f"
```

```

Command Accepted - Processing

    rlghncxa03w 04-07-27 08:11:38 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="arp -f"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:11:38 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:11:38 EST  EAGLE5 31.6.0
    ARP: ARP table flushed
;
    rlghncxa03w 04-07-27 08:11:38 EST  EAGLE5 31.6.0

    ARP command complete
;
```

```
pass:loc=1105:cmd="arp -d 192.111.111.222"
```

```

E3780 Cmd Rej: Syntax Error Found

    rlghncxa03w 04-07-27 08:26:37 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="arp -d 192.111.111.222"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:26:37 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:26:37 EST  EAGLE5 31.6.0
    ARP: entry not deleted
;
    rlghncxa03w 04-07-27 08:26:37 EST  EAGLE5 31.6.0

    ARP command complete
;
```

Related Commands

None.

aslog SCTP Application Server Log

This command is used to display the state changes for a specified Application Server (AS).

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `aslog` command has the parameter *asname*. The Application Server name must be specified for which the log will be displayed, as in the command `aslog as1`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

asname

This option specifies the Association Server name for the display.

-h

This option displays help (usage) information for the command.

Example

```
aslog as1
```

Dependencies

None

Notes

None

Output

```
pass:loc=1105:cmd="aslog as1"
```

```
Command Accepted - Processing

    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="aslog as1"
    Command entered at terminal #3.
;
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0
    ASLOG command in progress
;
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0

    ASLOG: AS history log

    ASLOG: AS state history log

    Date      Time          AS Event
    ---------------------------------------------
    65-05-31  22:27:29.075   Transition to AS-Down
    65-05-31  22:27:29.080   Transition to AS-Active Override
```

```
    65-05-31  22:38:24.050   Transition to AS-Active Override

    ASLOG command complete
;
```

Related Commands

None.

assocrtt — SCTP Association Round Trip Time

This command is used to display the SCTP round trip times for a specified association. Minimum, maximum, and average times are kept for each open association. The Retransmission Mode (RFC or LIN) and the configured Minimum and Maximum Retransmission Timeout limits are also displayed.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `assocrtt` command has the parameter *asname*. The association name must be specified for which the information will be displayed, as in the command `assocrtt c7000`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

aname

This option specifies the association name for the display.

-r

This option resets all statistics for the specified association name.

Example

```
assocrtt c7000
```

```
assocrtt c7000 -r
```

Dependencies

None

Notes

This command does not indicate whether or not the socket is congested.

Output

`pass:loc=1105:cmd="assocrtt"` or

```
pass:loc=1105:cmd=”assocrtt –h”
```

```
    Command entered at terminal #1.
;
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0

    Usage: ASOCRTT sockname [-r] [-h]
    Options:
        -r        Resets rtt data for specified association
        -h        Displays this message
;
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0
    ASsocrtt command complete
;
```

```
pass:loc=1105:cmd="assocrtt c7000"
```

```
    Command Accepted - Processing
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="assocrtt c7000"
    Command entered at terminal #1.
;
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 00-01-27 08:10:00 EST  EAGLE5 31.6.0
    ASSOCRTT: Association round trip time report (in milliseconds)

    Retransmission Configuration
       Retransmission Mode             : LIN
       Minimum RTO   : 120
       Maximum RTO   : 800

    Traffic Round-Trip Times

       Minimum round-trip time          : 5
       Maximum round-trip time          : 120
       Weighted Average round-trip time : 10
       Last recorded round-trip time    : 10
;
    Measured Congested Traffic Round-Trip Times

       Minimum round-trip time          : 0
       Maximum round-trip time          : 0
       Weighted Average round-trip time : 0
       Last recorded round-trip time    : 0
;
    rlghncxa03w 00-01-27 08:10:01 EST  EAGLE5 31.6.0
    ASSOCRTT command complete
;
```

```
pass:loc=1105:cmd="assocrtt c7000 -r"
```

```
    Command entered at terminal #1.
;
    rlghncxa03w 00-01-27 08:10:01 EST  EAGLE5 31.6.0
```

```
    PASS: Command sent to card
;
    rlghncxa03w 00-01-27 08:10:01 EST  EAGLE5 31.6.0

    ASSocrtt: Association round-trip time report (in milliseconds)

    Retransmission Configuration
       Retransmission Mode             : RFC
       Minimum RTO   : 120
       Maximum RTO   : 800

    Traffic Round-Trip Times

       Minimum round-trip time          : 5
       Maximum round-trip time          : 120
       Weighted Average round-trip time : 10
       Last recorded round-trip time    : 10

    Measured Congested Traffic Round-Trip Times

       Minimum round-trip time          : 0
       Maximum round-trip time          : 0
       Weighted Average round-trip time : 0
       Last recorded round-trip time    : 0
;
    rlghncxa03w 00-01-27 08:10:01 EST  EAGLE5 31.6.0
    ASsocrtt command complete
;
```

Related Commands

None.

connmgr

Connection Manager

This command is used to generate reports about the status of the connection manager.

Options

-d

This option displays a connection manager data summary. For IPSG cards, this report contains summary information and does not contain information for individual signaling links.

-h

This option displays help (usage) information for the command.

-i

This option displays SCTP instance and association data.

-l

This option displays the connection manager event log.

-n

This option displays the SCTP notification log.

-r

This option resets the connection manager event log.

Example

```
connmgr -r
connmgr -c
connmgr -s
```

Dependencies

Only one of the options can be specified at a time.

If no options are specified, usage information is displayed.

Notes

The `connmgr` command is executed through the `pass` command.

Output

```
pass:loc=1107:cmd="connmgr" or
pass:loc=1304:cmd="connmgr -h"
```

```
Command Accepted - Processing

    rlghncxa03w 08-01-21 15:29:46 EST  EAGLE5 38.0.0
    pass:loc=1304:cmd="connmgr -h"
    Command entered at terminal #1.
;
    rlghncxa03w 08-01-21 15:29:46 EST  EAGLE5 38.0.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-02 15:29:46 EST  EAGLE5 31.6.0
    Usage: CONNMGR [-d] [-h] [-i] [-l] [-n] [-r]
    Options:
        -d    Display connection manager data summary
        -h    Displays this message
        -i    Displays instance data
        -l    Display the connection manager event log
        -n    Display the SCTP notification log
        -r    Reset the connection manager event log
;
```

```
pass:loc=1107:cmd="connmgr -d"
```

The Connection Manager Data Summary displays all provisioned signaling link ports.

In this example, signaling link port (slk) B is valid only for IPLIMx cards:

```
Command Accepted - Processing

    rlghncxa03w 04-07-02 15:37:12 EST  EAGLE5 31.6.0
    pass:loc=1107:cmd="connmgr -d"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-02 15:37:12 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-02 15:37:12 EST  EAGLE5 31.6.0
    CONNMGR: command being processed
;
    rlghncxa03w 04-07-02 15:37:12 EST  EAGLE5 31.6.0
    CONNMGR: Connection Manager Data Summary
    slk  link state  srv  cli  opn sock  inst  opn assoc
    ---  ----------  ---  ---  --------  ----  ---------
     A   active       1    0         1     0          0
     B   active       0    0         0     1          1

    CONNMGR command complete
;
```

In this example, a summary data report is requested for an IPSG card:

`pass:loc=1304:cmd="connmgr -d"`

```
Command Accepted - Processing

    eagle10110 08-01-15 16:09:24 EST  EAGLE 38.0.0
    pass:loc=1304:cmd="connmgr -d"
    Command entered at terminal #3.
;

    eagle10110 08-01-15 16:09:24 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    eagle10110 08-01-15 16:09:24 EST  EAGLE 38.0.0
    CONNMGR: Connection Manager Data Summary

       num_instances:                     1
       num_assocs:                        1
       num_established_assocs:            0
       num_cli_assocs:                    0
       num_established_cli_assocs:        0
       num_assocs_with_tx_data:           0
       num_full_assocs:                   0
       num_assoc_with_rcv_data:           0
       num_times_tx_q_full:               0
       num_assoc_down_notif:              0
       num_assoc_aborted_notif:           0
       num_assoc_restart_notif:           0
       num_intf_up_notif:                 0
       num_intf_down_notif:               0
       num_hb_resp_notif:                 0
       num_dg_fail_notif:                 0
       num_rd_errors:                     0
       num_wt_errors:                     0
       num_wt_shutdown:                   0
       num_wt_empty:                      0
```

```
    CONNMGR: command complete

;

    eagle10110 08-01-15 16:09:24 EST  EAGLE 38.0.0

;
```

pass:loc=1301:cmd="connmgr -i"

```
Command Accepted - Processing

    eagle10213 04-07-22 08:49:37 GMT EAGLE5 31.6.0
    pass:loc=1301:cmd="connmgr -i"
    Command entered at terminal #4.
;

    eagle10213 04-07-22 08:49:37 GMT EAGLE5 31.6.0
    PASS: Command sent to card
;

    eagle10213 04-07-22 08:49:37 GMT EAGLE5 31.6.0

    CONNMGR command being processed

;

    eagle10213 04-07-22 08:49:37 GMT EAGLE5 31.6.0
    CONNMGR: Connection Manager Instance Data
    inst id   lport   cfg  est  tot grntd  tot rfsd
    --------  ------  ---  ---  ---------  ---------
    021B7880    1301    2    2          0          0

    CONNMGR command complete
;
```

pass:loc=1107:cmd="connmgr -l"

```
Command Accepted - Processing

    rlghncxa03w 04-07-02 15:35:28 EST  EAGLE5 31.6.0
    pass:loc=1107:cmd="connmgr -l"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-02 15:35:28 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-02 15:35:28 EST  EAGLE5 31.6.0
    CONNMGR: command being processed
;
    rlghncxa03w 04-07-02 15:35:28 EST  EAGLE5 31.6.0
    CONNMGR: Connection Manager Event Log
    04-07-03 13:17:40.730 conn-rcvd   5005 from 192.168.100.174:5005
    04-07-03 13:17:40.735 conn-rfsd   lnk-not-actv  5005 192.168.100.174
    04-07-03 13:17:40.850 conn-rcvd   5006 from 192.168.100.174:5006
    04-07-03 13:17:40.855 conn-rfsd   lnk-not-actv  5006 192.168.100.174
    04-07-03 13:17:40.910 conn-rcvd   5002 from 192.168.100.174:5002
    04-07-03 13:17:40.915 conn-rfsd   lnk-not-actv  5002 192.168.100.174
    04-07-03 13:17:40.950 conn-rcvd   5004 from 192.168.100.174:5004
```

```
    04-07-03 13:17:40.955 conn-rfsd   lnk-not-actv  5004 192.168.100.174

    CONNMGR command complete
;
```

```
pass:loc=1103:cmd="connmgr -l"
```

```

Command Accepted - Processing

    rlghncxa03w 04-07-02 15:35:28 EST  EAGLE5 31.6.0
    pass:loc=1103:cmd="connmgr -l"
    Command entered at terminal #4.
;
    rlghncxa03w 04-07-02 15:35:28 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-02 15:35:28 EST  EAGLE5 31.6.0
    CONNMGR: command being processed
;
    rlghncxa03w 04-07-02 15:35:28 EST  EAGLE5 31.6.0
    CONNMGR: Connection Manager Event Log
    00-01-13 13:17:40.170 sock-add   ipl1103
    00-01-13 13:17:40.885 lnk-act    Port A
    00-01-13 13:17:40.080 conn-made  ipl1101

    CONNMGR command complete
;
```

This example shows output when a remote host mismatch occurs:

```
pass:loc=1107:cmd="connmgr -l"
```

```
    Command Accepted - Processing

    eagle10110 09-05-15 16:09:24 EST  EAGLE 41.0.0
    pass:loc=1304:cmd="connmgr -l"
    Command entered at terminal #3.
;

    eagle10110 09-05-15 16:09:24 EST  EAGLE 41.0.0
    PASS: Command sent to card
;

    eagle10110 09-05-15 16:09:24 EST  EAGLE 41.0.0
        CONNMGR: Connection Manager Event Log


    07-05-03 13:17:40.730 conn-rcvd   5005 from 192.168.100.174:5005
    07-05-03 13:17:40.735 conn-rfsd   lnk-not-actv  5005 192.168.100.174
    07-05-03 13:17:40.950 conn-rcvd   5004 from 192.168.100.174:5004
    07-05-03 13:17:40.955 conn-rfsd   host-unreslvd 5004 192.168.100.174
    07-05-03 13:17:40.960 conn-rcvd   5003 from 192.168.100.174:5003
    07-05-03 13:17:40.965 conn-rfsd   host-mismatch 5003 192.168.100.174

    CONNMGR: command complete
```

Event descriptions for `connmgr -l`

- lnk-act-The signaling link (slk) was activated.
- lnk-deact-The signaling link (SLK) was deactivated.
- adptr-cls-An association was closed.

- admin-open-An association was opened via admin and available for connection.
- admin-cls-An association was closed via admin and not available for connection.
- conn-rcvd-A connection request has been received from a client.
- conn-rfsd-Connection request was refused by the server.
- conn-grnt-Connection was granted by the server.
- conn-fail-Connection request made by the client has failed.
- conn-made-A connection has been made between the client and server.
- pause-rcv-A connection received a pause event.
- resume-rcv-A connection received a resume event.
- conn-cngsd-An association has become congested.
- conn-uncng-An association is no longer congested.
- host-unreslvd-A remote host is unresolved.
- undef-evnt-An undefined event has come in.

Event reasons for `connmgr -l`

- lnk-not-actv-The SLK (signaling link) is not active.
- no-sock-avail-No association is available.
- unknown-sock-Unknown association.
- addr-in-use-Address is in use.
- net-unreach-The network is unreachable.
- net-reset-Network dropped connection on reset.
- sw-abort-Software caused connection abort.
- conn-reset-The connection was reset by the peer.
- no-buffers-No buffer space available.
- is-connected-Association is already connected.
- not-connected-Association not connected.
- shutdown-Can't send after association shutdown.
- too-many-refs-Too many references : can't splice.
- timed-out-Connection timed out.
- refused-connection refused.
- net-down-The network is down.
- txt-busy-Text file is busy.
- loop-Too many levels of symbolic links.
- host-unreachb-Host unreachable.
- not-blk-Block device required.
- host-down-Host is down.
- host-unreslvd-Host is unresolved.
- host-mismatch-Remote Host validation rule fails.
- undef-reason-Undefined reason.

```
pass:loc=1301:cmd="connmgr -n"
```

```
Command Accepted - Processing

    eagle10213 04-07-22 08:50:04 GMT EAGLE5 31.6.0
    pass:loc=1301:cmd="connmgr -n"
    Command entered at terminal #4.
;
```

```
    eagle10213 04-07-22 08:50:04 GMT EAGLE5 31.6.0
    PASS: Command sent to card
;

    eagle10213 04-07-22 08:50:04 GMT EAGLE5 31.6.0

    CONNMGR command being processed

;

    eagle10213 04-07-22 08:50:04 GMT EAGLE5 31.6.0
    CONNMGR: Connection Manager SCTP Notification Log
    04-07-21 18:06:34.860 assoc-up   ipl1301a from 192.168.110.17:1301
    04-07-21 18:06:49.620 assoc-up   ipl1301b from 192.168.110.18:1303
    04-07-21 18:07:54.185 assoc-down ipl1301b from 192.168.110.18:1303
    04-07-21 18:09:21.990 assoc-up   ipl1301b from 192.168.110.18:1303

    CONNMGR command complete
;
```

Notification descriptions for `connmgr -n`

- init-recvd-An INIT chunk was received to start an association.
- assoc-up-An association is up.
- assoc-down-An association is taken out of service.
- intf-down-Interface on an association is down and out of consideration for selection.
- intf-up-Interface on an association is up and now back in consideration for selection.
- dg-fail-The given datagram can not be delivered to the peer.
- sdata-err-A datagram was sent on a non-open stream.
- assoc-abrt-An association has been taken down ungracefully.
- peer-strm-Peer opened stream notification.
- strm-ok-Notification that the stream opened ok.
- assoc-rst-A Notification was received that an association was restarted.
- hb-resp-A response to a heartbeat request.
- data-msg-A DATA message has arrived. An SCTP packet includes user data encapsulated within SCTP DATA chunks.
- host-mismatch-Remote Host validation rule fails.
- host-unreslvd-Host is unresolved.
- rem-unreslvd-Remote host is unresolved.
- invalid-Invalid/Unknown event.

`pass:loc=1107:cmd="connmgr -r"`

```
Command Accepted - Processing

    rlghncxa03w 04-07-02 15:36:18 EST  EAGLE5 31.6.0
    pass:loc=1107:cmd="connmgr -r"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-02 15:36:18 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-02 15:36:18 EST  EAGLE5 31.6.0
```

```
    CONNMGR: command being processed
;
    rlghncxa03w 04-07-02 15:36:18 EST  EAGLE5 31.6.0
    CONNMGR command complete
;
```

pass:loc=1107:cmd="connmgr -s"

```
Command Accepted - Processing

    rlghncxa03w 04-07-02 15:39:54 EST  EAGLE5 31.6.0
    pass:loc=1107:cmd="connmgr -s"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-02 15:39:54 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-02 15:40:02 EST  EAGLE5 31.6.0
    CONNMGR: command being processed
;
    rlghncxa03w 04-07-02 15:40:03 EST  EAGLE5 31.6.0
    CONNMGR: Connection Manager Server Data
    task_id  server state lport cfg opn cn_grntd cn_rfsd
    -------- ------------ ----- --- --- -------- --------
    0114FEE8 listening     5001   1   1        2      546
    0114ED40 listening     5002   1   1        2      434
    0114DB98 listening     5003   1   1        2      539
    0114C9F0 listening     5004   1   1        2      542
    0114B848 listening     5005   1   1        2      539
    0114A6A0 listening     5006   1   1        2      549
    011494F8 listening     5007   1   0        0      548
    01148350 listening     5008   1   1        2      560
    011471A8 listening     5009   1   1        2      523
    01146000 listening     5010   1   1        2      532
    01144E58 listening     5011   1   1        2      534
    01143CB0 listening     5012   1   1        2      481
    01142B08 listening     5013   1   1        2      474
    01141960 listening     5014   1   1        2      521
    011407B8 listening     5015   1   0        2      515
    0113F610 listening     5016   5   0       14     2741
    0113E468 listening     5017   5   0       11     2723

    CONNMGR command complete
;
```

pass:loc=1103:cmd="connmgr -s"

```
Command Accepted - Processing

    rlghncxa03w 04-07-02 15:39:54 EST  EAGLE5 31.6.0
    pass:loc=1103:cmd="connmgr -s"
    Command entered at terminal #4.
;
    rlghncxa03w 04-07-02 15:39:54 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-02 15:40:02 EST  EAGLE5 31.6.0
    CONNMGR: command being processed
;
    rlghncxa03w 04-07-02 15:40:03 EST  EAGLE5 31.6.0
```

```
    CONNMGR: Connection Manager Server Data
    task_id  server state slk lport cfg opn cn_grntd cn_rfsd
    -------- ------------ --- ----- --- --- -------- --------

    CONNMGR command complete
;
```

Related Commands

None.

ftptest

FTP Test

Use this command to send a test file to a configured FTP server that is used for the Measurements Platform feature

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `ftptest` command option -a has the parameter *appl*. The FTP registered application to be tested can be specified, as in the command `ftptest -a meas`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

-h

This option provides help information for the command.

-a *appl*

This option specifies the FTP registered application to be tested.

Range:

meas

The Measurements Platform application

Example

```
ftptest
ftptest -h
ftptest -a meas
```

Dependencies

None

Notes

The `ftptest` command is executed through the `pass` command.

The specified card location must have an IP port configured to an FTP server using the `ent-ftp-serv` command, and the card must have its IP port configured using the `chg-ip-lnk` command.

Output

`pass:loc=1105:cmd="ftptest-h"`

or

`pass:loc=1105:cmd="ftptest"`

```
Command Accepted - Processing

    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    pass:loc=1215:cmd="ftptest -h"
    Command entered at terminal #3.
;

    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

    Usage: ftptest -a appl [-h]

    Options:
        -a appl   FTP client application name
        -h        Displays this message

;

    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

    FTPTEST: Command Complete

;
```

`pass:loc=1105:cmd="ftptest -a meas"`

```
    PASS: Command sent to card
;

    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

    FTPTEST: Command In Progress

;

    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    FTP Interface Test
       Test Results: PASS
       Server IP:    10.25.61.71
       FTP Error:    0
       File Error:   0
       Segment:      190004a2
       Diag Msg:

    FTPTEST: Command Complete
```

```
;
```

This example shows the output if the wrong password is specified in the `ent-ftp-serv` command for the application specified in the `ftptest` command:

```
pass:loc=1215:cmd="ftptest -a meas"
```

```
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

    FTPTEST: Command In Progress

;
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    FTP Interface Test
       Test Results: FAIL
       Server IP:    0.0.0.0
       FTP Error:    530
       Segment:      190004dd
       Diag Msg:     Server Connection Error

    FTPTEST: Command Complete

;
```

Related Commands

None.

linkinfo

Link State and Event Log

This command is used to display the state of a signaling link and to retrieve/clear a specified event log for a signaling link. The signaling link is any valid signaling link provisioned for the card. For IPLIMx cards, the *a*, *a1*, *a2*, *a3*, *b*, *b1*, *b2*, or *b3* signaling links are supported. For IPSG cards, the *a:a15 - b:b15* signaling links are supported.

For the E5-E1T1 cards, the a:a15 - b:b15 signaling links are supported. For HC-MIM and E5-E1T1-B cards, the a:a31 - b:b31 signaling links are supported. For E5-ATM/E5-ATM-B cards, the a, a1, b links are supported. E5-E1T1/E5-E1T1-B and E5-ATM-E5-ATM-B cards only support the -c option, the output will display the buffer information and congestion levels information.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `linkinfo` command option -i has the parameter *event*. The event to be included in the report can be specified, as in the command `linkinfo a -a -i m2pa`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

Note: For E5-E1T1/E5-E1T1-B and E5-ATM/E5-ATM-B cards, `-c` and `-h` are the only valid options.

-h

This option provides help information for the command.

port

This option specifies the signaling link port.

Range:

a, b, a1, b1, a2, b2, a3, b3

-a

This option displays the adapter layer interface (ALI) log for the specified signaling link. For M3UA associations the link -a option is used to display the UA event log. This command logs information on an association basis. The **link** parameter is used to obtain this report on IPSG instead of the association name. This information is currently provided by the ualog command on IPGWx cards.

-c

This option displays congestion tuning parameters for M3UA and M2PA links. The report is enhanced to include card level congestion thresholds and the high-water mark for IPSG cards.

This option also displays congestion levels for E5-E1T1/E5-E1T1-B and E5-ATM/E5-ATM-B cards.

-i *event*

This option includes (does not filter) a link event in the log. For IPSG cards, this option may be used to include or exclude events for the ali and link logs. Valid events for the ALI event log are *ua* and *service*.

Range:

ali, all, data, l2l3, l3l2, m2pa, state, ua, service

all-include all events

-l

This option displays the IPLIM ALI event log for the specified signaling link

-m

This option displays acknowledgment times on an M2PA connection (minimum, maximum, weighted average, last recorded). For IPSG cards, this measurement is supported for only IPSG-M2PA links.

-r

This option resets (clears) the event log for the specified signaling link. This option is valid only with the -a option or -l option.

-s

This option displays the state information for the specified signaling link. For the IPSG cards, this option is enhanced to display M3UA signaling link status.

-v

This option displays the link event filter configuration.

-x *event*

This option excludes (filters) a link event in the log. For IPSG cards, this option may be used to include or exclude events for the ali and link logs. Valid events for the ALI event log are *ua* and *service*.

Range:

ali, all, data, l2l3, l3l2, m2pa, state, ua, service

all-exclude all events

Example

Provide help information for the command.

```
pass:loc=1301:cmd="linkinfo -h"
```

Set the filter to include ua events in the ua log report.

```
pass:loc=1304:cmd="linkinfo a -i ua"
```

Set the filter to include service events in the ua log report.

```
pass:loc=1304:cmd="linkinfo a -i service"
```

Display the ua log report for signaling link a.

```
pass:loc=1304:cmd="linkinfo a -a"
```

Display the ALI event log for signaling link *a1*.

```
pass:loc=1301:cmd="linkinfo a1 -a"
```

Display the IPLIM application event log for signaling link *a1*.

```
pass:loc=1301:cmd="linkinfo a1 -l"
```

Reset/clear the link event log for signaling link *a1*.

```
pass:loc=1301:cmd="linkinfo a1 -l -r"
```

Clear the ua log report for signaling link *a*.

```
pass:loc=1304:cmd="linkinfo a -a -r"
```

Display the state information for signaling link *a1*.

```
pass:loc=1301:cmd="linkinfo a1 -s"
```

Display acknowledgement times for an M2PA connection on signaling link *b1*.

```
pass:loc=3315:cmd="linkinfo b1 -m"
```

Display congestion tuning information for an IPSG-M3UA signaling link and Display congestion levels and buffer information for signaling links on E5-E1T1/E5-E1T1-B and E5-ATM /E5-ATM-B cards.

```
pass:loc=1301:cmd="linkinfo a -c "
```

Dependencies

None

Notes

None

Output

This example shows the output for the help command on IPSG cards:

`pass:loc=1301:cmd="linkinfo" or`

`pass:loc=1301:cmd="linkinfo -h"`

```
    rlghncxa03w 08-07-29 11:31:09 EST  EAGLE5 38.0.0

    PASS: Command sent to card
;

    rlghncxa03w 08-07-29 11:31:09 EST  EAGLE5 38.0.0

    Usage: LINKINFO port [-a [-r]] [-h] [-l [-r]]
               [-m [-r]] [-s] [-v] [-x event]
    Options:
        link      Signaling link port: a, b, a1, b1, a2, b2, a3, b3
        -a        Display the ALI event log for a signaling link
        -c        Display Congestion Tuning Information for a signaling link
        -h        Displays this message
        -i event  Include (do not filter) a link event type in the log
        -l        Displays the event log for a signaling link
        -m        Display Link Measurements
        -r        Resets the specified event log for a signaling link
        -s        Displays the state information for a signaling link
        -v        View the link event filter configuration
        -x event  Exclude (filter) a link event type from the log

    Valid 'event' for link event log is ali, all, data, 1213, 1312, m2pa, state


;

   rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

   LINKINFO command complete

;
```

This example shows the output for the help command on E5-E1T1 /E5-E1T1-B and E5-ATM/E5-ATM-B cards:

`pass:loc=1101:cmd="linkinfo"` or

`pass:loc=1101:cmd="linkinfo -h"`

```
    tekelecstp 02-01-25 05:31:18 MST  46.0.0-65.11.0
    PASS: Command sent to card
;

Command Accepted - Processing
```

```
tekelecstp 02-01-25 05:31:19 MST  46.0.0-65.11.0
LINKINFO: command complete

;

Command Executed
tekelecstp 02-01-25 05:31:18 MST  46.0.0-65.11.0
Usage: LINKINFO link [-c ]
    Options:
        link      Signaling link: a, b, a1..a31, b1..b31
        -c        Display Congestion Tuning Information,RTB,TB and L3-L2 buffer
 counts for a signaling link

;
```

This example shows the adapter layer interface (ALI) event log for signaling link A1 and association IPL1301a provisioned with signaling link A1:

`pass:loc=1301:cmd="linkinfo a1 -a"`

```
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

    LINKINFO command being processed

;
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    IPLIM Adapter Layer Events for Port a1:
    04-07-29 10:23:48.525 IP_CONN_OPENED
    04-07-29 10:36:09.465 IP_CONN_CONNECTED
    04-07-29 10:36:09.465 IP_CONN_ALLOWED

    end of report

;
```

This example shows the IPLIM ALI event log for signaling link A1 and the association IPL1301a provisioned with signaling link A1:

`pass:loc=1301:cmd="linkinfo a1 -l"`

```
   rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
   rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

    LINKINFO command being processed

;
   rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    IPLIM Adapter Layer Events for Port a1:
    04-07-29 10:36:40.240 IP_CONN_ALLOWED
    04-07-29 10:36:40.240 IP_CONN_OPENED
    04-07-29 10:36:40.240 LINK_STATE_OOS
```

```
    04-07-29 10:36:50.935 L3_L2_START
    04-07-29 10:37:18.890 IP_CONN_CONNECTED
    04-07-29 10:37:18.900 LINK_STATE_AIP
    04-07-29 10:37:18.900 M2PA_LSA_RCVD
    04-07-29 10:37:18.915 LINK_STATE_PROVING
    04-07-29 10:37:18.915 M2PA_LSPN_RCVD
    04-07-29 10:37:19.453 M2PA_T4_EXPD
    04-07-29 10:37:20.565 M2PA_LSPN_RCVD
    04-07-29 10:37:21.785 M2PA_T4_EXPD
    04-07-29 10:37:22.565 M2PA_LSPN_RCVD
    04-07-29 10:37:23.785 M2PA_T4_EXPD
    04-07-29 10:37:24.565 M2PA_LSPN_RCVD
    04-07-29 10:37:25.785 M2PA_T4_EXPD
    04-07-29 10:37:26.385 M2PA_LSPN_RCVD
    04-07-29 10:37:27.576 M2PA_T2_EXPD
    04-07-29 10:37:27.585 LINK_STATE_READY
    04-07-29 10:37:30.123 M2PA_LSR_RCVD
    04-07-29 10:36:32.095 LINK_STATE_INS

    end of report

;
```

This example resets/clears the link event log for signaling link A1:

```
pass:loc=1301:cmd="linkinfo a1 -l -r"
```

```
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

    LINKINFO command being processed

;

    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    LINKINFO command complete

;
```

This example shows acknowledgment times for an IPLIMx M2PA connection on signaling link B1:

```
pass:loc=1301:cmd="linkinfo b1 -m"
```

```
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0

    LINKINFO: Command In Progress

;
    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
    IPLIMx M2PA Measurements Information for Port B1


    Measured M2PA Traffic Acknowledgement Times
```

```
        Minimum acknowledge time         : 14
        Maximum acknowledge time         : 35
        Weighted Average acknowledge time: 17
        Last recorded acknowledge time   : 20

    end of report

;

    rlghncxa03w 04-07-29 11:31:09 EST  EAGLE5 31.6.0
;
```

This example shows state information for signaling link A1:

```
pass:loc=1301:cmd="linkinfo a1 -s"
```

```
   rlghncxa03w 03-07-29 11:31:09 EST  EAGLE5 30.0.0
    PASS: Command sent to card
;
    rlghncxa03w 03-07-29 11:31:09 EST  EAGLE5 30.0.0

    LINKINFO command being processed

;

    rlghncxa03w 03-07-29 11:31:09 EST  EAGLE5 30.0.0
    SLK      LINKINFO STATE
    1301,A1  OOS      CONNECTING


    end of report
;
    rlghncxa03w 03-07-29 11:31:09 EST  EAGLE5 30.0.0
    LINKINFO command complete

;
```

Output for IPSG Card

This example shows the signaling link event log for an IPSG-M3UA link:

```
pass:loc=1304:cmd="linkinfo a -l"
```

```
    Command Accepted - Processing

    eagle10110 08-01-16 16:52:59 EST  EAGLE 38.0.0
    pass:loc=1304:cmd="linkinfo a  -l"
    Command entered at terminal #3.
;

    eagle10110 08-01-16 16:52:59 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    eagle10110 08-01-16 16:52:59 EST  EAGLE 38.0.0

    IP7 Layer 2 Link Events for Link A

    08-01-16 15:03:37.080 LINK_STATE_INHIBITED
    08-01-16 15:05:23.510 L3_L2_EMERGENCY_CEASE
    08-01-16 15:05:23.510 L3_L2_START
```

```
    08-01-16 15:05:23.510 LINK_STATE_NOT_ALIGNED
    08-01-16 15:53:02.660 ASP_UP
    08-01-16 15:53:02.660 LINK_STATE_ALIGNED_READY
    08-01-16 16:19:45.755 ASP_ACTIVE
    08-01-16 16:19:45.755 LINK_STATE_INS
    08-01-16 16:19:45.755 L2_L3_IN_SERVICE
    08-01-16 16:19:45.780 L3_L2_LINKSET_ALLOWED


    end of report

;
```

This example shows the signaling link event for an IPSG-M2PA link:

```
pass:loc=1314:cmd="linkinfo b2 -l"
```

```
    eagle10110 08-01-16 16:46:05 EST  EAGLE 38.0.0

    IP7 Layer 2 Link Events for Link B2

    08-01-16 16:45:26.050 L3_L2_START
    08-01-16 16:45:26.050 L2_L3_OUT_OF_SERVICE
    08-01-16 16:45:26.060 RETRIEVAL_COMPLETE
    08-01-16 16:45:26.860 L3_L2_EMERGENCY
    08-01-16 16:45:26.860 L3_L2_START
    08-01-16 16:45:26.860 L2_L3_OUT_OF_SERVICE
    08-01-16 16:45:26.870 RETRIEVAL_COMPLETE
    08-01-16 16:45:27.215 IP_CONN_OPENED
    08-01-16 16:45:27.215 LINK_STATE_CONNECTING
    08-01-16 16:45:27.215 IP_CONN_ALLOWED
    08-01-16 16:45:27.225 IP_CONN_CONNECTED
    08-01-16 16:45:27.225 M2PA_LSO_TRANSMITTED
    08-01-16 16:45:27.225 LINK_STATE_CONNECTED
    08-01-16 16:45:27.230 M2PA_LSO_RECEIVED
    08-01-16 16:45:27.670 L3_L2_EMERGENCY
    08-01-16 16:45:27.670 L3_L2_START
    08-01-16 16:45:27.670 M2PA_LSA_TRANSMITTED
    08-01-16 16:45:27.670 LINK_STATE_NOT_ALIGNED
    08-01-16 16:45:27.680 M2PA_LSA_RECEIVED
    08-01-16 16:45:27.680 M2PA_LSPE_TRANSMITTED
    08-01-16 16:45:27.680 LINK_STATE_ALIGNED
    08-01-16 16:45:27.685 M2PA_LSPE_RECEIVED
    08-01-16 16:45:27.685 LINK_STATE_PROVING
    08-01-16 16:45:27.890 M2PA_T16_EXPIRED
    08-01-16 16:45:28.085 M2PA_T16_EXPIRED
    08-01-16 16:45:28.185 M2PA_T4_EXPIRED
    08-01-16 16:45:28.185 M2PA_LSR_TRANSMITTED
    08-01-16 16:45:28.185 LINK_STATE_ALIGNED_READY
    08-01-16 16:45:28.195 M2PA_LSR_RECEIVED
    08-01-16 16:45:28.195 L2_L3_IN_SERVICE
    08-01-16 16:45:28.195 M2PA_LSR_TRANSMITTED
    08-01-16 16:45:28.195 LINK_STATE_INS
    08-01-16 16:45:28.200 M2PA_LSR_RECEIVED


    end of report

;

    eagle10110 08-01-16 16:46:05 EST  EAGLE 38.0.0
```

```
    LINKINFO: Command Complete
;
```

This example shows sets the filter to include UA events in the UA log report for signaling link A:

```
pass:loc=1304:cmd="linkinfo a -i ua"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    Link event type (ua) is logged for link A

    end of report

;
```

This example sets the filter to include service events in the UA log report for signaling link A:

```
pass:loc=1304:cmd="linkinfo a -i service"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    Link event type (service) is logged for link A

    end of report

;
```

This example shows the UA log report for signaling link A:

```
pass:loc=1304:cmd="linkinfo a -a"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0


    Adapter Layer Events for Link A

    UALOG:  UA event history log
            UA Version: 01
            ASP ID: undefined
            User Adapter Implemented: M3UA RFC
            Current settings: -i service ua

    Date      Time           Event
    ------------------------------------------------
    08-01-16  15:51:45.890   IP Conn Established
    08-01-16  15:51:45.890   Transition to SERVER_DOWN
                             (RC=0000000004)
    08-01-16  15:53:02.660   ASPUP PDU Received (ASP ID=undefined)
    08-01-16  15:53:02.660   Transition to SERVER_INACTIVE
                             (RC=0000000004)
    08-01-16  15:53:02.660   ASP to SLK Up
    08-01-16  15:53:02.660   Link Activated
    08-01-16  15:53:02.660   ASPUPACK PDU Transmitted
    08-01-16  15:53:02.660   AS INACTIVE NTFY PDU Transmitted (RC=0000000004)
    08-01-16  16:19:45.755   ASPACTIVE PDU Received (RC=none)
    08-01-16  16:19:45.755   ASPACTIVEACK PDU Transmitted (RC=0000000004)
    08-01-16  16:19:45.755   Transition to SERVER_ACTIVE    LOADSHARE
                             (RC=0000000004)
    08-01-16  16:19:45.755   ASP to SLK Active
    08-01-16  16:19:45.780   AS Active
    08-01-16  16:19:45.780   AS ACTIVE NTFY PDU Transmitted (RC=0000000004)
```

```
    end of report

;
```

This example clears the UA log report for signaling link A:

```
pass:loc=1304:cmd="linkinfo a -a -r"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    LINKINFO: Command Complete

;
```

This example shows link measurement information for an IPSG-M2PA signaling link:

```
pass:loc=1301:cmd="linkinfo b2 -m "
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE5 38.0.0
    M2PA Measurements Information for Link B2


    Measured M2PA Traffic Acknowledgement Times

        Minimum acknowledge time         : 16
        Maximum acknowledge time         : 44
        Weighted Average acknowledge time: 16
        Last recorded acknowledge time   : 16


    end of report

;
```

This example shows state information for an IPSG-M3UA signaling link:

```
pass:loc=1301:cmd="linkinfo a -s "
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    IP7 Layer 2 Link State Information for Link A

    LINK_STATE_ALIGNED            ASP_STATE_SERVER_DOWN


    end of report

;
```

This example shows state information for an IPSG-M2PA signaling link:

```
pass:loc=1314:cmd="linkinfo b2 -s"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    IP7 Layer 2 Link State Information for Link B2

    LINK_STATE_INS                IP_CONN_STATE_ESTABLISHED
```

```
    end of report

;
```

This example shows congestion tuning information for an IPSG-M3UA signaling link:

```
pass:loc=1301:cmd="linkinfo a -c "
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    Congestion Tuning Information for Link A

    High-Water Mark             : 0

    High-Water Mark Date & Time : 00-00-00 00:00:00.000


    HMCG SLK Congestion Threshold Values

        Danger of Congestion Onset : 240
        Abatement Level-1          : 241
        Onset Level-1              : 480
        Abatement Level-2          : 481
        Discard Level-1            : 600
        Onset Level-2              : 605
        Abatement Level-3          : 606
        Discard Level-2            : 720
        Onset Level-3              : 725
        Discard Level-3            : 840
        Maximum Buffers for L2     : 960


    HMCG Card-Level Congestion Threshold Values

        Danger of Congestion Onset : 2500
        Abatement Level-1          : 2501
        Onset Level-1              : 5000
        Abatement Level-2          : 5001
        Discard Level-1            : 7601
        Onset Level-2              : 6251
        Abatement Level-3          : 6252
        Discard Level-2            : 7601
        Onset Level-3              : 7501
        Discard Level-3            : 7601
        Maximum Buffers for L2     : 10000
        High Water Mark            : 0


    end of report

;

    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    LINKINFO: Command Complete

;
```

This example shows congestion tuning information for an IPSG-M2PA signaling link:

```
pass:loc=1301:cmd="linkinfo b2 -c "
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
       Congestion Tuning Information for Link B2


    RETX Queue Depth threshold : 240

    High-Water Mark            : 0

    High-Water Mark Date & Time : 00-00-00 00:00:00.000


    HMCG SLK Congestion Threshold Values

        Danger of Congestion Onset : 120
        Abatement Level-1          : 121
        Onset Level-1              : 240
        Abatement Level-2          : 241
        Discard Level-1            : 300
        Onset Level-2              : 305
        Abatement Level-3          : 306
        Discard Level-2            : 360
        Onset Level-3              : 365
        Discard Level-3            : 420
        Maximum Buffers for L2     : 480


    HMCG Card-Level Congestion Threshold Values

        Danger of Congestion Onset : 2500
        Abatement Level-1          : 2501
        Onset Level-1              : 5000
        Abatement Level-2          : 5001
        Discard Level-1            : 7601
        Onset Level-2              : 6251
        Abatement Level-3          : 6252
        Discard Level-2            : 7601
        Onset Level-3              : 7501
        Discard Level-3            : 7601
        Maximum Buffers for L2     : 10000
        High Water Mark            : 2


    end of report

;

    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0


    LINKINFO: Command Complete

;
```

This example shows congestion levels for signaling links on E5-E1T1/E5-E1T1-B and E5-ATM/E5-ATM-B cards:

For SS7HC:

```
Command Executed
    tekelecstp 02-01-24 00:38:06 MST  46.0.0-65.11.0
```

```
    Congestion Tuning Information for Link A
    HMCG SLK Congestion Threshold Values
        Danger of Congestion Onset : 59
        Abatement Level-1          : 60
        Onset Level-1              : 80
        Discard Level-1            : 99
        Abatement Level-2          : 81
        Onset Level-2              : 101
        Discard Level-2            : 109
        Abatement Level-3          : 102
        Onset Level-3              : 111
        Discard Level-3            : 120
        Maximum Buffers for L2     : 130

    TB count                   : 0

    RTB count                  : 0

    L3 L2 MSU count            : 0
;
    tekelecstp 02-01-24 00:38:06 MST  46.0.0-65.11.0
    LINKINFO: Command Complete
```

For ATMHC:

```
Command Executed
    tekelecstp 02-01-24 00:36:45 MST  46.0.0-65.11.0
    Congestion Tuning Information for Link A
    HMCG SLK Congestion Threshold Values
        Danger of Congestion Onset : 885
        Abatement Level-1          : 900
        Onset Level-1              : 1200
        Discard Level-1            : 1800
        Abatement Level-2          : 1215
        Onset Level-2              : 1515
        Discard Level-2            : 1800
        Abatement Level-3          : 1530
        Onset Level-3              : 1665
        Discard Level-3            : 1800
        Maximum Buffers for L2     : 1950

    TB count                   : 0

    RTB count                  : 10

    L3 L2 MSU count            : 0
;
    tekelecstp 02-01-24 00:36:45 MST  46.0.0-65.11.0
    LINKINFO: Command Complete
```

This example shows state information when graceful shutdown has occurred:

```
pass:loc=1305:cmd="linkinfo -a a"
```

```
    rlghncxa03w 09-04-29 11:31:09 EST  EAGLE 41.0.0

    Adapter Layer Events for Link A

    UALOG:  UA event history log
            UA Version: 01
            ASP ID: undefined
```

```
          User Adapter Implemented: M3UA RFC
          Current settings: -i ua
                            -x service

    Date      Time           Event
    ------------------------------------------------
    08-10-08  09:29:15.705   Management IP Conn Close
    08-10-08  09:29:15.705   Transition to SERVER_SHUTDOWN
                             (RC=0000000002)
    08-10-08  09:29:15.705   ASP to SLK Down
    08-10-08  09:29:15.705   Link Not Aligned
    08-10-08  09:29:15.705   UA Graceful Shutdown
    08-10-08  09:29:15.710   UA Shutdown Complete
    08-10-08  09:29:15.710   Transition to IDLE
                             (RC=0000000002)

    end of report
```

Related Commands

None.

msucount — Message Signaling Unit (MSU) Count

This command is used to report the count of SS7 MSUs and bytes that pass through links, routing keys, and IP connections. These counts can be reported and reset at the same time to get accurate counts for longer periods of time. In addition to MSUs transmitted and received, the command also reports statistics on packets related to MTP Primitives and on discarded transmit and receive data.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `msucount` command option -l has the parameter*port*. The link for which counts will be displayed can be specified, as in the command `msucount -l a1`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

-a

This option is used to display IP connection statistics for a specific association. When -a *aname* is specified on the same line as -k *rtkey*, the output is assumed to be routing key output. When -a *aname* is specified on the command line without -k *rtkey*, association statistics output is generated.

For IPSG cards, this option is enhanced to include receive and transmit counts for M3UA SSNMs (DAUD messages and M3UA SSNM PDUs) and replicated M3UA PDUs.

-b

This option is used to display signaling link bytes statistics. The signaling link bytes report displays data for measurements on a per-signaling-link basis for both the transmit and receive directions. The report can display link statistics for a specified signaling link number. If a link is not specified, the report displays link statistics for signaling link A for IPGWx cards and for all equipped signaling links for IPLIMx and IPSG cards. If a signaling link is valid for the card and application type, but is unequipped, then the report displays all zeros.

-h

This option is used to provide help information for the command.

-f

This option is used to display a full report (IPGWx application only).

-k rtkey

This option is used to specify the routing key for which the counts will be displayed. The routing key is specified as a single parameter with up to five colon-separated fields. The subsystem is not specified when SI is not equal to *3*.

This option is not supported for the IPSG cards.

The -p modifier can be specified to identify the point code type of the routing key that follows the -k option in the command.

The -p modifier is not supported for IPLIMx and IPSG cards.

The *rtkey* variable is optional when used with -t *default*, and mandatory for all other cases.

The following formats are valid for the routing key that follows the -k option in the command:

- n-c-m:s:n-For DPC, SI, SSN type routing keys. The network, cluster and member (*n-c-m*) are in the range *0-255*. The service indicator (*s*) is *3* or *sccp*. The subsystem (*n*) is in the range *0-255*.
- n-c-m:s-For DPC, SI, type routing keys. The network, cluster and member (*n-c-m*) are in the range *0-255*. The service indicator (*s*) is in the range *0-2*, *4*, or *6-15*. There is no subsystem. As a default, counts for all routing keys within the option combination are displayed.
- n-c-m:s:no-co-mo:cs:ce-For DPC, SI, CIC type routing keys. The DPC network, cluster and member (*n-c-m*) are in the range *0-255*. The service indicator (*s*) is *5* or *isup*. There is no subsystem. The OPC network, cluster and member (*no-co-mo*) are in the range *0-255*. The starting circuit identification code (*cs*) and ending circuit identification code (*ce*) are in the range *0* to *16363*.

-l

For IPSG cards, this option displays the link report for all equipped signaling links on the card.

-l *link*

This option is used to display counts for links. The link report optionally allows display of link statistics for a specified port.

The link report contains data, per link, for MSUs (tx/rcv), MSU bytes (tx/rcv), MGMT msgs (tx/rcv), and discarded data (tx/rcv).

For the IPSG card, the M2PA link report is the same as the IPLIMx M2PA report. The M3UA link report contains an additional detail line for non-discard pegs for SS7 SNM and Replicated M3UA PDU counts.

Range:

a, b, a1, b1, a2, b2, a3, b3a:a15-b:b15

If a port is not specified, `msucount` displays link statistics for port *a* for IPGWx links, and port *a* and port *b* for IPLIMx links.

The `msucount` link statistics report contains all zeros for a port that is valid for the card and application type but is unequipped.

The range *a:a15-b:b15* is valid for IPSG cards.

-l

link -f

This option displays the full link report. For IPSG-M2PA links, this option displays the same report as the -l <link> option. For IPSG-M3UA links the report includes the data from the -l <link> report and includes an additional detail line displaying tx/rx discards counts and discard data.

-p point code type

This option modifier can be specified along with the -k option to identify the point code type (ANSI, ITU international, ITU-national, 24-bit ITU national, 16-bit ITU national, ITU international spare, and ITU national spare) in the routing key that follows the -k option in the command.

Range:

ansi, *itui*, *itun*, *itun24*, *itun16*, *ituis*, *ituns*

-r

This option is used with other options to reset counts at the same time of reporting them.

-*t* keytype

This option is used to display the routing key type (IPGWx only).

-*x*

The routing context is an index that uniquely defines a routing key associated with an SUA or M3UA AS. For the IPSG card, the option displays a link report for all signaling links on the card that are members of the linkset that contains the specified routing context value (equivalent to the **msucount -l** report. The -x option is used as an alternative to the -k option to identify the routing key by specifying its routing context in the command line.

Note: The -x rc option can only be used to specify routing keys containing M3UA/SUA associations.

Example

Link counts only. Displays brief count for signaling link a for IPGWx. Displays counts for all equipped signaling links for IPLIMx.

```
msucount -l
```

Link counts only, for signaling link port *a1*.

```
msucount -l a1
```

Full/detail report for signaling link *a* for IPGWx.

```
msucount -l -f
```

Counts for the specified association only.

```
msucount -a association name
```

Counts for first matching routing key

```
msucount -k 10-10-10:3:16
```

Counts for the routing key report using the routing context.

```
msucount -x 5
```

Counts for first matching routing key and an associated association.

```
msucount -a association name -k rtkey
```

Counts for the default routing key

```
msucount -k -t default
```

Counts for a matching partial routing key.

```
msucount -k 3-3-3 -t partial
```

Counts for counts for link only. Displays brief report for signaling link a for IPGWx. Displays counts for all equipped signaling links for IPLIMx.

```
msucount
```

Resets the signaling link count measurements.

```
msucount -r
```

Brief version of help text.

```
msucount -h
```

Full version of help text.

```
msucount -h full
```

Counts for link and first matching routing key

```
msucount -b
```

Byte report for signaling link A for IPGWx cards. Byte report for all equipped signaling links for IPLIMx cards.

```
msucount -b -link
```

Byte report for specified signaling link.

```
msucount -l -k 10-10-10:3:16
```

Use with other parameters to display and reset counts. Valid with the above combinations.

```
msucount -l -r
```

```
msucount -r
```

```
msucount -x 5 -r
```

Examples showing the correct syntax to specify partial or default keys, or to specify a key by routing context:

```
pass:loc=1105:cmd="msucount -k 5-5-1:5:6-6-6 -t partial
```

```
pass:loc=1105:cmd="msucount -k 5-5-1:5 -t partial"
```

```
pass:loc=1105:cmd="msucount -p ITUI -t partial -k 1-235-1"
```

```
pass:loc=1105:cmd="msucount -p ITUN -t partial -k 2351"
```

```
pass:loc=1105:cmd="msucount -p ITUN -t partial -k 2351-gr
```

```
pass:loc=1105:cmd="msucount -t partial -k :2 "
```

```
pass:loc=1105:cmd="msucount -k -t default"
```

```
pass:loc=1105:cmd="msucount -p ITUN24 -t partial -k 10-235-1"
pass:loc=1105:cmd="msucount -p ITUN24 -t partial -k 10-235-1"
pass:loc=1105:cmd="msucount -p ITUN16 -t partial -k 1-2-1"
```

Examples of other valid routing key inputs:

```
pass:loc=1105:cmd="msucount -r -k 5-5-6:5:5-5-7:1:1000"
pass:loc=1105:cmd="msucount -r -p ITUI -k 5-5-6:4:5-5-7:1:1000"
pass:loc=1105:cmd="msucount -k 5-5-1:3:5 -a assoc1"
pass:loc=1105:cmd="msucount -r -p ITUN24 -k 15-105-16:5:15-105-17:1:1000"
```

Dependencies

At least one option must be specified.

Notes

The `msucount` command is executed through the `pass` command.

Combinations of the -l, -a, -k, -t, -x and -b options provide count information based on the entered combination.

If no parameters are specified, then the -l brief report is output.

Multiple reports are not supported with the IP Signaling Serviceability feature.

For the SS7IPGW and IPGWI GPLs, 4 types of reports can be generated: the link report, the routing key report, the IP connection statistics report, and the signaling link bytes report. For the IPLIM/IPLIMI card, the routing key report is not supported.

The 4 reports are:

1. The link report (-l option) contains statistics per link about MSUs (transmit/receive), MSU bytes (transmit/receive), MGMT messages (transmit/receive), and discarded data (transmit/receive).
2. The routing key report (-k option) contains statistics for a specific routing key about MSUs (transmit), MSU bytes (transmit), and discards on the transmit path for the routing key.

   A list of one or more IP connections associated with the routing key, with the MSU and MSU bytes counts for each connection, is also displayed. If -aaname is in the same input command with -krtkey, only the connection association data for the specified connection is displayed. If -a aname is not specified with -k rtkey, all connection associations are listed. If -x rc is specified, only the connection association data for the specified routing context is displayed.

   The -p (point code type) modifier option can be used with the -k option to specify the point code type of the routing key that follows the -k option in the command.

   For the -k options, the routing key must be an exact match of a routing key that exists in the static Routing Key table.

3. The IP connection statistic report (-a aname option) contains statistics for a specified IP connection about MSUs (transmit/receive), MSU bytes (transmit/receive), and discarded data (transmit/receive).

When the -a aname option is specified in the command with the -k option, the output type is assumed to be routing key output.

When the -a aname option is specified in the command without the -k option, association statistics output is generated.

4. The signaling link bytes report (-b option) provides the following information for both IPGWx and IPLIMx cards: bytes/sec for the last second, average MSU size during the last second, and maximum one-second average MSU size since card load time or reset. For the IPLIMx cards, the report also provides the following information: sum of bytes/sec for the last second for all signaling link, average MSU size for last second for all signaling links, maximum average MSU size since load time or reset for all signaling links, and maximum MSU size since load time or reset for all signaling links.

The link report, routing key report, and IP connection statistics report (IPGWx only) can display individual transmit MSUs that were discarded at layer 2. The first 32 bytes of the MSU transmit data that is discarded is stored beginning at the SIO bytes. If the MSU is not 32 bytes long, the remaining bytes are set to 0.

The signaling link bytes report optionally allows display of link statistics for a specified signaling link number. If a link is not specified for the bytes report, the *msucount* command displays link statistics for signaling link A for IPGWx cards and for all equipped signaling links for IPLIMx cards.

The signaling link bytes report contains all zeros for a signaling link that is valid for the card and application type but that is unequipped.

The link and IP connection statistics reports can display individual receive packets that were discarded at layer 2. If the storage space is larger than the service data, the extra bytes are set to 0.

The reset option (-r) resets the specified measurements. This option can be added to any command.

Output

In these examples, the hexadecimal output for discarded *transmit* data represents data stored beginning at the SIO bytes through the first 32 bytes of the MSU. If the MSU was less than 32 bytes, the remaining bytes are represented by zeros.

Stored *receive* data takes the following format:

- Bytes 13-x = Service data. If the storage space is greater than the size of the service data, the remaining bytes are zeroed.

Output Specific to SS7IPGW and IPGWI

Either brief or full help reports can be displayed. A full help report is generated by adding the full (-f) option to the command line.

This example shows a brief help report:

```
pass:loc=1105:cmd="msucount -h"
```

```
    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0

    Usage: msucount [ [-l [link]] | [-b [link]] ] |
                    [ [-a aname] ] |
                    [ [-x rc] | [-k [rtkey] [-p pctype] [-t keytype]] ]
```

```
                  [-f] [-r] [-h [full]]

    Options: -l  display signaling link report
             -b  display signaling link bytes report
             -a  display association report
             -x  routing key report using routing context
             -k  routing key report using MTP3 parameters
                 rtkey :: ([dpc][:si][:opc | :ssn][:cics][:cice])
             -p  pctype :: (ANSI, ITUI, ITUN, ITUN24, ITUN16, ITUIS, ITUNS)
             -t  routing key type
                 keytype :: (<full>, partial, default)
             -f  display full report
             -r  resets the specified counts
             -h  display command help (brief or full)

    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0
    MSUCOUNT command complete

;
```

This example shows a full help report:

```
pass:loc=1105:cmd="msucount -h full"
```

```
    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0

    Usage: msucount [ [-l [link]] | [-b [link]] ] |
                    [ [-a aname] ] |
                    [ [-x rc] | [-k [rtkey] [-p pctype] [-t keytype]] ]
                    [-f] [-r] [-h [full]]

    Options: -l  display signaling link report
             -b  display signaling link bytes report
             -a  display association report
             -x  routing key report using routing context
             -k  routing key report using MTP3 parameters
                 rtkey :: ([dpc][:si][:opc | :ssn][:cics][:cice])
             -p  pctype :: (ANSI, ITUI, ITUN, ITUN24, ITUN16, ITUIS, ITUNS)
             -t  routing key type
                 keytype :: (<full>, partial, default)
             -f  display full report
             -r  resets the specified counts
             -h  display command help (brief or full)


    -k option details:

        Use the -p option along with -k to specify the SS7 network
        domain and point code format for the network. The SS7IPGW
        default pctype is ANSI. The IPGWI default pctype is ITUI.

            Network  PC Format Notes
            -------  --------- ---------------------------------------
            ANSI     N-C-M
            ITUN     N         Non-Spare ITU National, no group code
            ITUN     N-GC      Non-Spare ITU National with group code
            ITUI     Z-A-I     Non-Spare ITU International
            ITUN24   N-C-M     Non-Spare ITU National, 24-bits
            ITUN16   U-S-M     Non-Spare ITU National, 16-bits
            ITUNS    N         Spare ITU National, no group code
            ITUNS    N-GC      Spare ITU National with group code
            ITUIS    Z-A-I     Spare ITU International
```

```
        Use the -t option along with -k to specify certain MTP3 and
        user part MSU fields as wildcards for the routing key.

        SS7 Traffic Partition              RTKEY Parameter Example
        --------------------------------  --------------------------
        Any User Part to DPC 1-1-1         -k 1-1-1    -t partial
        SCCP to DPC 1-1-1                  -k 1-1-1:3  -t partial
        ISUP to DPC 1-1-1                  -k 1-1-1:5  -t partial
        TUP to DPC 1-1-1                   -k 1-1-1:4  -t partial
        QBICC to DPC 1-1-1                 -k 1-1-1:13 -t partial
        SI [0-2,6-12,14,15] to DPC 1-1-1   -k 1-1-1:SI
        SCCP SSN 5 to DPC 1-1-1            -k 1-1-1:3:5
        ISUP to DPC 1-1-1 from OPC 2-2-2   -k 1-1-1:5:2-2-2  -t partial
        TUP to DPC 1-1-1 from OPC 2-2-2    -k 1-1-1:4:2-2-2  -t partial
        QBICC to DPC 1-1-1 from OPC 2-2-2  -k 1-1-1:13:2-2-2 -t partial
        ISUP CIC 1 to 1-1-1 from 2-2-2     -k 1-1-1:5:2-2-2:1
        TUP CIC 1 to 1-1-1 from 2-2-2      -k 1-1-1:4:2-2-2:1
        QBICC CIC 1 to 1-1-1 from 2-2-2    -k 1-1-1:13:2-2-2:1
        ISUP CIC 0-5 to 1-1-1 from 2-2-2   -k 1-1-1:5:2-2-2:0:5
        TUP CIC 0-5 to 1-1-1 from 2-2-2    -k 1-1-1:4:2-2-2:0:5
        QBICC CIC 0-5 to 1-1-1 from 2-2-2  -k 1-1-1:13:2-2-2:0:5
        Default Routing Key                -k                 -t default

    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0
    MSUCOUNT command complete
```

A brief version for the link measurement report can be specified for IPGWx. If no parameters are specified for a link measurements report, then a brief report is displayed. The brief report does not display the transmit/receive discard counts.

This example shows a brief link measurements report:

```
pass:loc=1305:cmd="msucount"
```

or

```
pass:loc=1305:cmd="msucount -l"
```

```
    tekelecstp 10-08-17 11:50:34 EST  EAGLE 42.0.0

    MSUCOUNT: MSU Count Report

    --------------------------
    Link Measurements (Link A)
    --------------------------

    Transmit Counts                     Receive Counts
    ---------------------------------   ----------------------------
    rate   msus        bytes            rate   msus        bytes
    -----  ----------  ---------------  -----  ----------  ----------
    2000   4294967295  4294967295       2000   4294967295  4294967295


    MTP Primitive (MTPP) counts         Reroute Counts
    ---------------------------------   --------------------
    sent pdus   rcvd pdus   dscrd pdus  sent msus   rcvd msus
    ----------  ----------  ----------  ----------  ----------
    4294967295  4294967295  4294967295  4294967295  4294967295


    MSUCOUNT: command complete
;
```

This example shows a full link measurements report:

```
pass:loc=1305:cmd="msucount -f"
```

or

```
pass:loc=1305:cmd="msucount -l -f"
```

```
tekelecstp 10-08-17 11:50:34 EST  EAGLE 42.0.0


 MSUCOUNT: MSU Count Report

 -------------------------
 Link Measurements (Link A)
 -------------------------

Transmit Counts                     Receive Counts
---------------------------------   ----------------------------
rate   msus        bytes            rate   msus        bytes
-----  ----------  ---------------  -----  ----------  ----------
2000   4294967295  4294967295       2000   4294967295  4294967295


MTP Primitive (MTPP) Counts         Reroute Counts
---------------------------------   ----------------------------
sent pdus   rcvd pdus   dscrd pdus  sent msus   rcvd msus
----------  ----------  ----------  ----------  -----------------
4294967295  4294967295  4294967295  4294967295  4294967295


Transmit Discard Counts             Receive Discard Counts
---------------------------------   -------------------------------

reason                 count        reason                 count
---------------------- -----------  ---------------------- ----------
no ss7 rtbl entry      4294967295   link state             4294967295
no ss7 rtkey           4294967295   sccp msg type          4294967295
no conn avail to pc    4294967295   sccp class             4294967295
no conn avail to rtkey 4294967295   sccp called party      4294967295
congested connection   4294967295   sccp calling party     4294967295
sccp msg type          4294967295   isup sio               4294967295
sccp class             4294967295   normalization error    4294967295
circular rte           4294967295   error in XSRV packet   4294967295
normalization error    4294967295   M3UA PDU error         4294967295
invalid traffic type   4294967295   SUA PDU error          4294967295
M3UA conversion error  4294967295   invalid rcontext       4294967295
SUA conversion error   4294967295   management blocking    4294967295
AS-Pending overflow    4294967295   lrg MSU not supported  4294967295
AS timer Tr expiry     4294967295
reroute failure        4294967295
unexpected for APC     4294967295
lrg MSU not supported  4294967295


Stored Transmit Discard Data
-----------------------------------------------
83 01 05 05 0a 01 03 bf 09 80 03 08 0d 05 c3 07
01 05 05 05 c3 07 0a 01 03 08 e2 06 c7 04 13 10


Stored Receive Discard Data
-----------------------------------------------
53 41 53 49 73 63 63 70 1a 00 09 01 03 08 0d 05
```

```
    c3 05 0a 01 03 05 c3 05 01 05 05 08 e2 06 c7 04

    MSUCOUNT: command complete
    ;
```

This example shows an output report when all counts are zero:

```
pass:loc=1305:cmd="msucount -f"
```

or

```
pass:loc=1305:cmd="msucount -l -f"
```

```
    MSUCOUNT: MSU Count Report
    --------------------------
    Link Measurements (Link A)
    --------------------------

    Transmit Counts                      Receive Counts
    ---------------------------------    -----------------------------
    rate   msus        bytes             rate   msus        bytes
    -----  ----------  ---------------   -----  ----------  ----------
    00000  00000       00000             00000  00000       00000


    MTP Primitive (MTPP) Counts          Reroute Counts
    ---------------------------------    -----------------------------
    sent pdus   rcvd pdus   dscrd pdus   sent msus   rcvd msus
    ----------  ----------  ----------   ----------  -----------------
    00000       00000       00000        00000       00000


    Transmit Discard Counts              Receive Discard Counts
    ---------------------------------    --------------------------------
    reason                 count         reason                  count
    ---------------------- -----------   ---------------------- ----------
    no transmit discard counts           no receive discard counts


    Stored Transmit Discard Data
    ------------------------------------------------
    no stored transmit discard data


    Stored Receive Discard Data
    ------------------------------------------------
    no stored receive discard data

    MSUCOUNT: command complete
```

Routing Key Report Output Examples

The routing key report contains data about MSUs (tx), MSU bytes (tx), and discards on the transmit path for the routing key. A list of one or more connections associated with the routing key, with the MSU and MSU bytes counts for each connection, is also presented. If -a aname is in the same input command with -k rtkey, only the connection association data for the specified connection is displayed. If -a aname is not specified with -k rtkey, all connection associations are listed. If -x rc is specified, only the connection association data for the specified routing context is displayed.

Note: For IPGWx, -k rtkey is optional when used with -t default, and mandatory for all other cases.

The report output itself does not display the routing key that was entered, other than an exact copy of the command line being generated as part of the output.

Partial routing keys (where some fields in the MSU are ignored with respect to finding a routing key to use for the MSU) and default keys can be specified in the command. The output does not change for these key types; the only difference is the routing key syntax (-p) that must be processed as part of identifying the partial and default keys. (See the Example section of this command description for syntax examples).

This example shows a routing key report for an ANSI routing key that specifies the Routing Key table:

```
pass:loc=1105:cmd="msucount -k 5-5-1:3: -t partial"
```

```
    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0

    MSUCOUNT: MSU Count Report

    ------------------------------------------------
    Routing Key Measurements for Static Routing Key
    ------------------------------------------------

    Transmit Counts
    --------------------
    tx bytes                                4294967295
    tx msus                                 4294967295

    Transmit Discard Counts
    -----------------------
    sccp msg type                           4294967295
    sccp class                              4294967295
    normalization error                     4294967295
    invalid traffic type                    4294967295

    Associated IP Connection                tx bytes        tx msus
    ----------------------------            --------        --------
    c7000                                   4294967295      4294967295
    c7050                                   4294967295      4294967295
    c7052                                   4294967295      4294967295
    c7054                                   4294967295      4294967295

    Stored Transmit Discard Data
    ----------------------------
    83 01 05 05 0a 01 03 94 09 01 03 08 0d 05 c3 05
    01 05 05 05 c3 05 0a 01 03 08 e2 06 c7 04 28 10


    MSUCOUNT: command complete

;
```

This example shows an ITU-I routing key report (only 1 specific association is displayed):

```
pass:loc=1105:cmd="msucount -p ITUI -k 5-5-1:3:5 -a c7000"
```

```
    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0

    MSUCOUNT: MSU Count Report

    ------------------------------------------------
    Routing Key Measurements for Static Routing Key
```

```
    ------------------------------------------------

    Transmit Counts
    --------------------
    tx bytes:                               4294967295
    tx msus:                                4294967295

    Transmit Discard Counts
    -----------------------
    sccp msg type                           4294967295
    sccp class                              4294967295
    normalization error                     4294967295
    invalid traffic type                    4294967295

    Associated IP Connection                tx bytes        tx msus
    ----------------------------            --------        --------
    c7000                                   4294967295      4294967295

    Stored Transmit Discard Data
    ------------------------------------------------
    83 01 05 05 0a 01 03 94 09 01 03 08 0d 05 c3 05
    01 05 05 05 c3 05 0a 01 03 08 e2 06 c7 04 28 10


    MSUCOUNT: command complete
;
```

This example shows a routing key report when the routing context =5 (because a table is not specified, the key is searched for in the Static table):

```
pass:loc=1105:cmd="msucount -x 5"
```

```
    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0

    MSUCOUNT: MSU Count Report

    ------------------------------------------------
    Routing Key Measurements for Static Routing Key
    ------------------------------------------------

    Transmit Counts
    --------------------
    tx bytes                                4294967295
    tx msus                                 4294967295

    Transmit Discard Counts
    -----------------------
    sccp msg type                           4294967295
    sccp class                              4294967295
    normalization error                     4294967295
    invalid traffic type                    4294967295

    Associated IP Connection                tx bytes        tx msus
    ----------------------------            --------        --------
    c7000                                   4294967295      4294967295
    c7050                                   4294967295      4294967295
    c7052                                   4294967295      4294967295
    c7054                                   4294967295      4294967295

    Stored Transmit Discard Data
    ------------------------------------------------
    83 01 05 05 0a 01 03 94 09 01 03 08 0d 05 c3 05
    01 05 05 05 c3 05 0a 01 03 08 e2 06 c7 04 28 10
```

```
    MSUCOUNT: command complete
```

IP Connection Report

This example shows an IP Connection report for an association:

```
pass:loc=1105:cmd="msucount -a c7050"
```

```
    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0

    MSUCOUNT: MSU Count Report
    --------------------------
    IP Connection Measurements
    --------------------------

    Receive Counts                    Transmit Counts
    -------------------------------   ----------------------------
    msus            bytes             msus             bytes
    ----------      ----------------  ----------       ----------
    4294967295      4294967295        4294967295       4294967295

    Receive Discard Counts            Transmit Discard Counts
    -------------------------------   --------------------------------

    reason                count       reason                  count
    --------------------- ---------   ---------------------- ----------
    link state            4294967295  sccp msg type          4294967295
    sccp msg type         4294967295  sccp class             4294967295
    sccp class            4294967295  normalization error    4294967295
    sccp called party     4294967295  invalid traffic type   4294967295
    sccp calling party    4294967295  M3UA conversion error  4294967295
    isup sio              4294967295  SUA conversion error   4294967295
    normalization error   4294967295  management blocking    4294967295
    error in XSRV packet  4294967295  transmit queue full    4294967295
    M3UA PDU error        4294967295
    SUA PDU error         4294967295
    invalid rcontext      4294967295

    Stored Transmit Discard Data
    ----------------------------
    no stored transmit discard data

    Stored Receive Discard Data
    ---------------------------
    53 41 53 49 69 73 6f 74 11 00 87 0a 01 03 01 05
    05 00 01 02 03 04 05 06 07 08 09 00 00 00 00 00

    MSUCOUNT: command complete

;
```

The transmit queue full reason under Transmit Discard Counts section of this report refers to the count of the messages which are discarded due to connection manager transmit queue full. This count is incremented only for M3UA messages which are discardable.

Signaling Link Bytes Report

This example shows a signaling link bytes report for an IPGWx card:

```
pass:loc=1305:cmd=msucount -b"
```

or

```
pass:loc=1305:cmd=msucount -b a
```

```
    MSUCOUNT: MSU Count Report

    -------------------------------
    Link Byte Measurements (Link A)
    -------------------------------

    SLK Transmit counts               SLK Receive counts
    --------------------------------  --------------------------------
    bytes/     avg    max      max    bytes/     avg    max      max
    sec        msu    avg msu  msu    sec        msu    avg msu  msu
    ---------  -----  -------  -----  ---------  -----  -------  -----
    444400     2020   2020     2020   444400     2020   2020     2020


    MSUCOUNT: command complete
```

Output Specific to IPLIM and IPLIMI

Note: The routing key report is not supported for IPLIMx applications. The -k, -t, -p, -x options are not supported because the IPLIMx card does not use routing keys.

Note: The IPLIMx reports include all equipped signaling links instead of just ports A and B. These reports include the transmit/receive counts alongside each other for the link case.

This example shows help for using the command:

```
pass:loc=1103:cmd="msucount -h" or
```

```
pass:loc=1103:cmd="msucount"
```

```
    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0

    Usage: msucount [ [-l [link]] | [-b [link]] ] |
                    [ [-a aname] ]
                    [-r] [-h]

    Options: -l  display signaling link report
             -b  display signaling link bytes report
             -a  display association report
             -r  resets the specified counts
             -h  display command help

    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0
    MSUCOUNT command complete

;
```

This example shows a link report for an IPLIMx card with 2 M2PA links.

The report does not contain MTPP or RKRP MGMT statistics, because those capabilities are not supported on the IPLIMx applications. The report also does not contain tx/rcv discard data, because

there are no discards performed at layer 2 of the IPLIMx applications. The IPLIMx card can also contain 2 links per card; the output contains link data for each link.

```
pass:loc=1301:cmd="msucount"
```

or

```
pass:loc=1301:cmd="msucount -l"
```

```
    MSUCOUNT: Command In Progress

    ;
    MSUCOUNT: MSU Count Report

    SLK Transmit counts                  SLK Receive counts
    ---------------------------------    ----------------------------
    slk  rate   msus        bytes        rate   msus        bytes
    ---  -----  ----------  ----------   -----  ----------  ----------
    A    2000   4294967295  4294967295   2000   4294967295  4294967295
    B    2000   4294967295  4294967295   2000   4294967295  4294967295
    A1   2000   4294967295  4294967295   2000   4294967295  4294967295
    B1   2000   4294967295  4294967295   2000   4294967295  4294967295
    A2   0000   0000000000  0000000000   0000   0000000000  0000000000

    MSUCOUNT: command complete
```

This example shows signaling link A1 on an IPLIMx card:

```
pass:loc=1103:cmd="msucount -l a1"
```

```
    MSUCOUNT: MSU Count Report

    SLK Transmit counts                  SLK Receive counts
    ---------------------------------    ----------------------------
    slk  rate   msus        bytes        rate   msus        bytes
    ---  -----  ----------  ----------   -----  ----------  ----------
    A1   2000   4294967295  4294967295   2000   4294967295  4294967295
    ;
    MSUCOUNT: command complete
```

This example shows an IP connection statistics report. The IPLIMx IP connection report does not contain tx/rcv discard data, because there are no discards performed at layer 2 of the IPLIMx applications.

```
pass:loc=1105:cmd="msucount -a c7050"
```

```
    tekelecstp 10-09-10 11:50:34 EST  EAGLE 43.0.0

    MSUCOUNT: MSU Count Report
    --------------------------
    IP Connection Measurements
    --------------------------

    Transmit Counts                   Receive Counts
    --------------------------------  ----------------------------
    msus            bytes             msus             bytes
    ----------      ----------------  ----------       ----------
    4294967295      4294967295        4294967295       4294967295

     MSUCOUNT: command complete

;
```

Signaling Link Bytes Report

This example shows a signaling link bytes report for an IPLIMx card:

```
pass:loc=1303:cmd="msucount -b"
```

```
MSUCOUNT: SLK Bytes Report

SLK Transmit                        SLK Receive
-------------------------------   -------------------------------
                      max                                 max
                 avg  avg   max                      avg  avg  max
slk   bytes/sec msu  msu   msu     slk   bytes/sec msu  msu  msu
----- --------- ---- ----- ----    ----- --------- ---- ---- ----
A     35000     140  273   273     A     35000     140  273  273
B     35000     140  273   273     B     35000     140  273  273
A1    35000     140  578   578     A1    35000     140  578  578
B1    35000     140  273   273     B1    35000     140  273  273
A2    35000     140  140   140     A2    35000     140  140  140
B2    35000     140  169   169     B2    35000     140  169  169
A3    35000     2048 2048  2048    A3    35000     2048 2048 2048
B3    35000     140  166   166     B3    35000     140  166  166
----- --------- ---- ----- ----    ----- --------- ---- ---- ----
      280000    140  2048  2048          280000    140  2048 2048

MSUCOUNT: command complete
```

This example shows a signaling link bytes report for a specified link on an IPLIMx card:

```
pass:loc=1303:cmd="msucount -b a"
```

```
MSUCOUNT: SLK Bytes Report

SLK Transmit                        SLK Receive
-------------------------------   -------------------------------
                      max                                 max
                 avg  avg   max                      avg  avg  max
slk   bytes/sec msu  msu   msu     slk   bytes/sec msu  msu  msu
----- --------- ---- ----- ----    ----- --------- ---- ---- ----
A     35000     140  273   273     A     35000     140  273  273

MSUCOUNT: command complete
```

Enhanced Reset Option

The reset option resets the specified measurements without displaying `msucount` output. The default is to reset the link measurements report.

This example shows resetting link measurements:

```
pass:loc=1305:cmd="msucount -l -r"
```

or

```
pass:loc=1305:cmd="msucount -r"
```

```
eagle10212 06-06-01 08:50:47 EST  EAGLE 35.0.0

MSUCOUNT: MSU Count Report
```

```
    Link measurements have been reset.

    MSUCOUNT: command complete
```

This example shows resetting Routing Key measurements:

```
pass:loc=1305:cmd="msucount -x -5 -r"
```

```
    eagle10212 06-01-05 08:50:47 EST  EAGLE 35.0.0

    MSUCOUNT: MSU Count Report

    Routing Key measurements have been reset.

    MSUCOUNT: command complete
```

Output specific to IPSG Cards

The option to display a full help report is not supported for IPSG cards.

```
pass:loc=1304:cmd="msucount -h
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    Usage: msucount [ [-l [link]] | [-b [link]] | [-l link -f] ] |
                    [ [-a aname] ]
                    [ [-x rc] ]
                    [-r] [-h]

    Options: -l  display signaling link report
             -b  display signaling link bytes report
             -a  display association report
             -x  display routing context report
             -f  display full report
             -r  resets the specified counts
             -h  display command help

;

    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    MSUCOUNT: command complete
```

For link reports on IPSG signaling links, if a specific link is not requested, then counts for all equipped signaling links on the card are displayed. The report includes counts for up to 32 links per card. The -l <link> report adds counts for *Replicated M3UA PDU sent*, *Replicated M3UA PDU rcvd*, and *SS7 SNM Counts sent* for M3UA links.

This example shows a brief measurements report:

```
pass:loc=1303:cmd="msucount -l"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
    pass:loc=1303:cmd="msucount -l"

    MSUCOUNT: MSU Count Report

    SLK Transmit counts                 SLK Receive counts
```

```
    ---------------------------------   -----------------------------
    slk  rate   msus        bytes       rate   msus        bytes
    ---  -----  ----------  ----------  -----  ----------  ----------
    A    0      3           72          0      0           0
    B    0      62          1916        0      62          1916
    A1   0      2           48          0      0           0
    A2   0      1           24          0      0           0
    A3   0      0           0           0      0           0
    A4   0      0           0           0      0           0

    ---------------------------------   -----------------------------
         0      68          2060        0      62          1916
    ---------------------------------   -----------------------------


    MSUCOUNT: command complete
```

This example shows a measurement report for an IPSG-M3UA signaling link:

`pass:loc=1303:cmd="msucount -l a"`

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
    MSUCOUNT: MSU Count Report

    SLK Transmit counts                 SLK Receive counts
    ---------------------------------   -----------------------------
    slk  rate   msus        bytes       rate   msus        bytes
    ---  -----  ----------  ----------  -----  ----------  ----------
    A    0      3           72          0      0           0


    Replicated M3UA PDU counts          SS7 SNM counts
    --------------------------          ---------------
    sent        rcvd                    sent
    ----------  ----------              ----------
    0           0                       3
```

This example shows a measurement report for an IPSG-M2PA signaling link:

`pass:loc=1303:cmd="msucount -l b"`

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
    MSUCOUNT: MSU Count Report

    SLK Transmit counts                 SLK Receive counts
    ---------------------------------   -----------------------------
    slk  rate   msus        bytes       rate   msus        bytes
    ---  -----  ----------  ----------  -----  ----------  ----------
    B    0      62          1916        0      62          1916


    MSUCOUNT: command complete
```

The `msucount -l <link> -f` report displays the same information as the brief report (`msucount -l <link>`) for IPSG-M2PA links. For IPSG-M3UA links, the `msucount -l <link> -f` report displays both the information from the brief report and the *discarded tx due to M3UA Conversion Error*, *discarded rcv due to M3UA PDU Error*, *discarded rcv due to Management Blocking*, and *discarded rcv due to Lrg BICC not supported* discard counts.

This example shows a full report for an IPSG-M3UA signaling link when discard counts are not received:

```
pass:loc=1303:cmd=msucount -l a -f
```

```
rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
MSUCOUNT: MSU Count Report


SLK Transmit counts                 SLK Receive counts
---------------------------------   -----------------------------
slk  rate   msus        bytes       rate   msus        bytes
---  -----  ----------  ----------  -----  ----------  ----------
A    0      3           72          0      0           0


Replicated M3UA PDU counts          SS7 SNM counts
--------------------------          --------------
sent        rcvd                    sent
----------  ----------              ----------
0           0                       3


Transmit Discard Counts             Receive Discard Counts
---------------------------------   ---------------------------------
reason                 count        reason                 count
---------------------- ----------   ---------------------- ----------
M3UA conversion error  2            no receive discard counts


Stored Transmit Discard Data
-----------------------------------------------
b0 04 04 04 00 d4 01 1b 61 00 00 bb a9 02 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

b0 04 04 04 00 d4 01 16 61 00 00 27 b8 02 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00



Stored Receive Discard Data
-----------------------------------------------
no stored receive discard data



MSUCOUNT: command complete
```

This example shows a full report for an IPSG-M3UA signaling link when discard counts are received:

```
pass:loc=1304:cmd="msucount -l a -f"
```

```
Command Accepted - Processing

rlghncxa03w 10-03-09 11:31:09 EST  EAGLE 42.0.0

MSUCOUNT: MSU Count Report



SLK Transmit counts                 SLK Receive counts
---------------------------------   -----------------------------
slk  rate   msus        bytes       rate   msus        bytes
---  -----  ----------  ----------  -----  ----------  ----------
A    0      58          3380        0      5           292
```

```
    Replicated M3UA PDU counts           SS7 SNM counts
    -------------------------            ---------------
    sent        rcvd                     sent
    ----------  ----------               ----------
    1           1                        13


    Transmit Discard Counts              Receive Discard Counts
    ---------------------------------    ---------------------------------
    reason                 count         reason                 count
    ---------------------- -----------   ---------------------- ----------
    M3UA conversion error  3             M3UA PDU Error         1
                                         management blocking    1
                                         lrg MSU not supported  1


    Stored Transmit Discard Data
    ---------------------------------------------
    b0 04 04 04 00 6e 01 18 51 01 00 0f 49 02 00 00
    00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

    80 04 04 04 00 d2 01 00 23 05 05 05 02 1f 61 02
    00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

    80 04 04 04 00 d2 01 00 13 20 19 02 00 00 00 00
    00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00



    Stored Receive Discard Data
    ---------------------------------------------
    01 00 04 01 00 00 00 18 00 0b 00 08 02 00 00 00
    00 06 00 08 00 00 00 04 00 00 00 00 00 00 00 00

    01 00 01 01 00 00 00 3c 00 06 00 08 00 00 00 04
    02 10 00 2b 00 04 04 04 00 05 05 05 0d 02 00 96

    01 00 00 10 00 00 00 1c 00 0c 00 08 00 00 00 06
    00 07 00 0c 01 00 02 02 00 00 00 18 00 00 00 00

    MSUCOUNT: command complete

;
```

This example shows a link report for an IPSG-M2PA signaling link:

```
pass:loc=1303:cmd="msucount -l b"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
    MSUCOUNT: MSU Count Report

    SLK Transmit counts                  SLK Receive counts
    ---------------------------------    ----------------------------
    slk  rate   msus        bytes        rate   msus        bytes
    ---  -----  ----------  ----------   -----  ----------  ----------
    B    0      62          1916         0      62          1916


    MSUCOUNT: command complete
```

This example shows a full link report for an IPSG-M3UA link where discard counts are not received:

```
pass:loc=1303:cmd=msucount -l a -f
```

```
rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
MSUCOUNT: MSU Count Report


SLK Transmit counts                 SLK Receive counts
---------------------------------   -----------------------------
slk  rate   msus        bytes       rate   msus        bytes
---  -----  ----------  ----------  -----  ----------  ----------
A    0      3           72          0      0           0


Replicated M3UA PDU counts          SS7 SNM counts
--------------------------          --------------
sent        rcvd                    sent
----------  ----------              ----------
0           0                       3


Transmit Discard Counts             Receive Discard Counts
---------------------------------   ---------------------------------
reason                 count        reason                 count
---------------------- ----------   ---------------------- ----------
M3UA conversion error  2            no receive discard counts


Stored Transmit Discard Data
-----------------------------------------------
b0 04 04 04 00 d4 01 1b 61 00 00 bb a9 02 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

b0 04 04 04 00 d4 01 16 61 00 00 27 b8 02 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00



Stored Receive Discard Data
-----------------------------------------------
no stored receive discard data



MSUCOUNT: command complete
```

This example shows a full link report that contains discard counts for an IPSG-M3UA link:

```
pass:loc=1304:cmd="msucount -l a -f"
```

```
Command Accepted - Processing

rlghncxa03w 10-03-09 11:31:09 EST  EAGLE 42.0.0

MSUCOUNT: MSU Count Report



SLK Transmit counts                 SLK Receive counts
---------------------------------   -----------------------------
slk  rate   msus        bytes       rate   msus        bytes
---  -----  ----------  ----------  -----  ----------  ----------
A    0      58          3380        0      5           292
```

```
    Replicated M3UA PDU counts           SS7 SNM counts
    -------------------------            ---------------
    sent        rcvd                     sent
    ----------  ----------               ----------
    1           1                        13


    Transmit Discard Counts              Receive Discard Counts
    ---------------------------------    ---------------------------------
    reason                 count         reason                 count
    ---------------------- -----------   ---------------------- ----------
    M3UA conversion error  3             M3UA PDU Error         1
                                         management blocking    1
                                         lrg MSU not supported  1


    Stored Transmit Discard Data
    ---------------------------------------------
    b0 04 04 04 00 6e 01 18 51 01 00 0f 49 02 00 00
    00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

    80 04 04 04 00 d2 01 00 23 05 05 05 02 1f 61 02
    00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

    80 04 04 04 00 d2 01 00 13 20 19 02 00 00 00 00
    00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00



    Stored Receive Discard Data
    ---------------------------------------------
    01 00 04 01 00 00 00 18 00 0b 00 08 02 00 00 00
    00 06 00 08 00 00 00 04 00 00 00 00 00 00 00 00

    01 00 01 01 00 00 00 3c 00 06 00 08 00 00 00 04
    02 10 00 2b 00 04 04 04 00 05 05 05 0d 02 00 96

    01 00 00 10 00 00 00 1c 00 0c 00 08 00 00 00 06
    00 07 00 0c 01 00 02 02 00 00 00 18 00 00 00 00

    MSUCOUNT: command complete

;
```

Signaling Link Bytes Report

The IPSG signaling link bytes report is the same as the IPLIMx link bytes report.

This example shows a signaling link bytes report for an IPSG card:

```
pass:loc=1303:cmd="msucount -b"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
    MSUCOUNT: MSU Count Report


    SLK Transmit counts                      SLK Receive counts
    -----------------------------------  --------------------------------
           bytes/     avg    max      max    bytes/     avg    max      max
```

```
slk    sec        msu    avg msu  msu    sec        msu    avg msu  msu
-----  ---------  -----  -------  -----  ---------  -----  -------  -----
A      0          0      24       24     0          0      0        0
B      62         31     31       31     62         31     31       31
A1     0          0      24       24     0          0      0        0
A2     0          0      24       24     0          0      0        0
A3     0          0      0        0      0          0      0        0
A4     0          0      0        0      0          0      0        0

--------------------------------------  --------------------------------
       62         31     31       31     62         31     31       31
--------------------------------------  --------------------------------
```

This example shows the B link report:

`pass:loc=1305:cmd="msucount -b a"`

```
rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
MSUCOUNT: MSU Count Report

SLK Transmit counts                    SLK Receive counts
--------------------------------------  --------------------------------
       bytes/     avg    max      max    bytes/     avg    max      max
slk    sec        msu    avg msu  msu    sec        msu    avg msu  msu
-----  ---------  -----  -------  -----  ---------  -----  -------  -----
A      0          0      24       24     0          0      0        0

--------------------------------------  --------------------------------
       0          0      24       24     0          0      0        0
--------------------------------------  --------------------------------


MSUCOUNT: MSU Count Report
```

Routing Context Report

The `msucount -x <routing context>` report for an IPSG card displays the equivalent of the `msucount -l` report for all signaling links on the card that are members of the linkset containing the specified routing context.

This example shows a routing context report:

`pass:loc=1303:cmd="msucount -x 74565"`

```
rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0
MSUCOUNT: MSU Count Report


-----------------------------------------------
Routing Context Measurements
-----------------------------------------------

SLK Transmit counts                  SLK Receive counts
---------------------------------   ----------------------------
slk  rate   msus        bytes       rate   msus        bytes
---  -----  ----------  ----------  -----  ----------  ----------
A    0      3           72          0      0           0

---------------------------------   ----------------------------
```

```
         0      3           72           0      0           0
    --------------------------------   ----------------------------


    MSUCOUNT: command complete

;
```

IP Connection Report

The IP connection statistic report for an IPSG card contains data regarding MSUs (tx/rcv), MSU bytes (tx/rcv), and discarded data (tx/rcv) for a specific socket or an association. The `-a <aname>` report for M3UA links adds the *Replicated M3UA PDU sent*, *Replicated M3UA PDU rcvd*, *SS7 SNM sent*, *Discarded rcv due to SS7 SNM not supported*, and *Discarded rcv due to no SS7 SNM capacity*.

The existing *Discarded rcv due to M3UA PDU error* and *Invalid rcontext counts* are also supported.

This example shows an aname report:

`pass:loc=1303:cmd="msucount -a a1303a"`

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0


    MSUCOUNT: MSU Count Report


    ---------------------------
    IP Association Measurements
    ---------------------------


    Transmit PDUs                       Receive PDUs
    ---------------------------------   ----------------------------
    pdus            bytes               pdus            bytes
    ----------      ------------------  ----------      ----------
    3               72                  0               0


    SS7 SNM counts
    ----------------------
    sent        rcvd
    ----------  ----------
    0           0


    Receive Discard Counts
    ---------------------------------
    reason                 count
    ---------------------- -----------
    M3UA PDU error         3


    Stored Receive Discard Data
    -----------------------------------------------
    01 00 00 00 00 00 00 1c 00 0c 00 08 00 00 00 06
    00 07 00 0c 01 00 02 02 00 00 00 18 00 00 00 00

    01 00 00 00 00 00 00 1c 00 0c 00 08 00 00 00 06
```

```
    00 07 00 0c 01 00 02 02 00 00 00 18 00 00 00 00

    01 00 00 00 00 00 00 1c 00 0c 00 08 00 00 00 06
    00 07 00 0c 01 00 02 02 00 00 00 18 00 00 00 00




    MSUCOUNT: command complete
;
```

```
pass:loc=1304:cmd="msucount -a a1304m3ua1"
```

```
Command Accepted - Processing

    rlghncxa03w 08-01-29 11:31:09 EST EAGLE 38.0.0

    MSUCOUNT: MSU Count Report


    ---------------------------
    IP Association Measurements
    ---------------------------


    Transmit PDUs                       Receive PDUs
    ----------------------------------  ------------------------------
    pdus            bytes               pdus            bytes
    ----------      -----------------   ----------      ----------
    58              3380                5               292


    SS7 SNM counts
    ----------------------
    sent        rcvd
    ----------  ----------
    8           7


    Receive Discard Counts
    ---------------------------------
    reason                 count
    ---------------------- -----------
    SS7 SNM not supported  1
    SS7 SNM no capacity    1
    M3UA PDU error         13
    invalid rcontext       5


    Stored Receive Discard Data
    -----------------------------------------------
    01 00 01 01 00 00 00 3c 00 06 00 08 00 00 00 01
    02 10 00 2b 00 04 04 04 00 05 05 05 05 00 00 9a

    01 00 03 01 00 00 00 08 00 00 00 00 00 00 00 00
    00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

    01 00 01 01 00 00 00 3c 00 06 00 08 00 00 00 04
    02 10 00 2b 00 04 04 04 00 05 05 05 85 02 00 9a

    01 00 01 01 00 00 00 3c 00 06 00 08 00 00 00 04
    02 10 00 2b 00 04 04 04 00 05 05 05 85 02 00 9a
```

```
    01 00 04 01 00 00 00 18 00 0b 00 08 02 00 00 00
    00 06 00 08 00 00 00 04 00 00 00 00 00 00 00 00

    01 00 01 01 00 00 00 3c 00 06 00 08 00 00 00 04
    02 10 00 2b 00 04 04 04 00 05 05 05 85 02 00 9a

    01 00 01 01 00 00 00 3c 00 06 00 08 00 00 00 04
    02 10 00 2b 00 04 04 04 00 05 05 05 85 02 00 9a

    01 00 01 01 00 00 0a fc 00 06 00 08 00 00 00 0a
    02 10 0a eb 00 04 32 01 00 04 32 01 0d 02 00 99

    01 00 01 01 00 00 00 08 00 00 00 00 00 00 00 00
    00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

    01 00 07 01 00 00 00 70 00 06 00 08 00 00 00 02
    01 15 00 08 00 00 00 80 01 02 00 18 00 02 00 03




    MSUCOUNT: command complete

;
```

Output Specific to High-Speed Link (HSL) cards (SS7HC and ATMHC - non-IP7 GPLs)

Note: The -a, -x, -k, -p, and -t options are not supported for HSL cards.

Note: The option to display a full help report is not supported for HSL cards.

`pass:loc=1103:cmd="msucount -h"`

```
    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0

    Usage: msucount  [[-l [link]] | [-f]|
                     [-r] [-h]]

    Options:  -l display signaling link report
              -f display full report
              -r resets the specified counts
              -h display command help
              -l link r resets the counts for specified link


    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT command complete
```

Link Reports

The link report contains the statistics of the equipped links (TDM/ATM) on the SS7HC/ATMHC cards collected on a per link basis.

An SS7HC/ATMHC generic link report is reported if the MSUCOUNT command is entered without any parameters. The output contains data regarding MSU bytes (tx/rcv), %bandwidth used (tx/rcv),

MSUs (tx/rcv) collected during the last full second per link. Total MSU counts (tx/rcv) per link since the card load time or the last reset are also displayed.

`pass:loc=1301:cmd="msucount"`

```
    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT: Command In Progress

;
    MSUCOUNT: MSU Count Report


    SLK     Last Transmit Counts/Total MSUs    Last Receive Counts/Total MSUs
    ---     -------------------------------  -------------------------------

    slk     bytes   %bw      msus total msus   bytes   %bw     msus  total msus

    ---     ------- ----    ----  ----------   ------- ----    ----  ----------

    A         51200  20%     700  1234567890     26700  10%     400  1234567890

    B        256000 100%    5000  1234567890    256000 100%    5000  1234567890

    ---     ------- ----    ----  ----------   ------- ----    ----  ----------

    TOTAL    307200         5700  2469135780    282700         5400  2469135780


    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT: command complete

;
```

The full link report includes the generic information, the maximum amount seen for each MSU, and the percent bandwidth tracked for the full one second period since the card load time or the last reset.

`pass:loc=1301:comd="msucount -f"`

```
    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT: Command In Progress

;
    MSUCOUNT: MSU Count Report


    SLK   Last Second/MAX Transmit Counts    Last Second/MAX Receive Counts
    ---   -------------------------------- --------------------------------

    slk   bytes   %bw  %max  msus       mmax bytes   %bw  %max  msus       mmax

    ---   ------- ---- ----  ----       ---- ------- ---- ----  ----       ----

    A       51200  20%  40%   700       1385   26700  10%  20%   400        730

    B      256000 100% 100%  5000       5000  256000 100% 100%  5000       5000

    ---   ------- ---- ----  ----       ---- ------- ---- ----  ----       ----

    TOTAL  307200            5700             282700            5400


    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT: command complete
```

```
;
```

If the -l *slk* option is specified, then the statistics for the specified link is shown (if the link is equipped).

On cards running SS7HC GPL, in addition to the information shown in the Generic and Full reports, data is collected for the error counts (MSUs and SUs) and retransmits pegged during the last full second. Averages for the MSUs, percent bandwidth, bytes transmitted and received for the last rolling sampling period, and the maximum of these averages since the card was loaded or the data was reset is also displayed.

```
pass:loc=1301:cmd="msucount -l a"
```

```
    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT: Command In Progress

;
    MSUCOUNT: MSU Count Report


                    Last       Avg        Avg Max    Max        Total
                    --------   --------   --------   --------   ----------
     TX Bandwidth:        98%        61%        80%        98%
     RX Bandwidth:        98%        61%        80%        98%
     Bytes TXed:         7840       4900       6370       7840   1248056004
     Bytes RXed:         7840       4900       6370       7840   1024579036
     MSUs TXed:           160        100        130        160     45937854
     MSUs RXed:           160        100        130        160     41495837
     Errored SUs:           1                                10          103
     Errored MSUs:          4                                 4           21
     Retransmits:          10                                23          353
     Forced PCR:           20                                50          189


    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT: command complete

;
```

On cards running ATMHC GPL, the -l slk option, in addition to the information shown in the Generic and Full reports, data is collected for the different types of error counts during the last full second. Averages for the MSUs, percent bandwidth used, bytes transmitted and received for the last rolling sampling period and the maximum of these averages since the card was loaded or the data was reset is displayed. The total number of MSUs and bytes and errors since the card was loaded or the data was reset is also displayed.

```
pass:loc=1301:cmd="msucount -l a"
```

```
    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT: Command In Progress

;
    MSUCOUNT: MSU Count Report


                    Last       Avg        Avg Max    Max        Total
                    --------   --------   --------   --------   ----------
     TX Bandwidth:        98%        61%        80%        98%
     RX Bandwidth:        98%        61%        80%        98%
     Bytes TXed:         7840       4900       6370       7840   1248056004
```

```
     Bytes RXed:         7840       4900       6370       7840   1024579036
     MSUs TXed:           160        100        130        160     45937854
     MSUs RXed:           160        100        130        160     41495837
     Errored SUs:           1                                10          103
     Errored MSUs:          4                                 4           21
     Retransmits:          10                                23          353
     Forced PCR:           20                                50          189


    tekelecstp 10-01-19 11:50:34 EST  EAGLE 41.1.0
    MSUCOUNT: command complete

;
```

Related Commands

None.

msuroute — Message Signaling Unit (MSU) Routing Information

This command is used to provide a list of all routing keys currently configured on an SS7IPGW/IPGWI card that could be used to route a particular MSU. With 3 types of routing keys (fully specified, partial and default) the complexity associated with figuring out how a particular MSU would be routed at any point in time is not trivial. This command provides output to help determine how MSUs will be routed based on current conditions.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `msuroute` command option -k has the parameter rtkey. The full routing key must be specified for the MSU for which the summary will be displayed, as in the command `msuroute -k 5-5-5:5:6-6-6:1100`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

-h

This option is used to provide help information for the command.

-k rtkey

This option is mandatory in the command to specify the full routing key for the MSU for which the summary will be displayed. The routing key is specified as a single parameter with up to five colon-separated fields. The subsystem is not specified when SI is not equal to *3*.

The -p point code type modifier is used to identify the format of the routing key that follows the -k option in the command.

The following are valid formats for the routing key that follows the -k option in the command:

- n-c-m:s:n—For DPC, SI, SSN type routing keys. The network, cluster and member (n-c-m) are in the range *0-255*. The service indicator (s) is *3* or *sccp*. The subsystem (n) is in the range *0-255*.
- n-c-m:s—For DPC, SI, type routing keys. The network, cluster and member (n-c-m) are in the range *0-255*. The service indicator (s) is in the range *0-2*, *4*, or *6-15*. There is no subsystem.
- n-c-m:s:no-co-mo:cs:ce—For DPC, SI, CIC type routing keys. The DPC network, cluster and member (n-c-m) are in the range *0-255*. The service indicator (s) is *5* or *isup*. There is no subsystem. The OPC

network, cluster and member (no-co-mo) are in the range *0-255*. The starting circuit identification code (cs) and ending circuit identification code (ce) are in the range *0* to *16363*.

-p point code type

This option modifier is used to identify the point code type (ANSI, ITU international, ITU national, 24-bit ITU national, 16-bit ITU national, ITU international spare, ITU national spare) in the routing key that follows the -k option in the command.

Range:

ansi, *itui*, *itun*, *itun24*, *itun16*, *ituis*, *ituns*

Default:

ansi

-x routing context

This option modifier is used to display the routing key report using routing context.

Example

```
msuroute -h
msuroute -p ansi –k 5-5-5:5:6-6-6:1100
msuroute -p ansi –k 5-5-5:5:6-6-6:1100:1100
msuroute -k 5-5-5:5:6-6-6:1100
msuroute -k 5-5-5:5:6-6-6:1100:1100
msuroute –p ansi –k 5-5-5:8
msuroute –p itun –k 345:5:678:100:200
msuroute –p itun –k 345-gr:5:678-gr:100:200
msuroute –p itun24 –k 10-200-10:5:10-200-1:1:100
msuroute -p itun16 -k 1-2-1:5:1-2-1:1:100
```

Dependencies

The -k option must be specified in the command, and must specify a full routing key.

This command is not supported for IPLIM/IPLIMI cards.

Notes

The `msuroute` command is executed through the pass command.

The -ppoint code type modifier option can be used with the -k option to specify the format of the routing key that follows the -k option in the command.

Output

The output for each `msuroute` command consists of a list of all of the routing keys that exist on the IPGWx card that could be used to route the MSU. The list of routing keys is presented in the hierarchical search order in which the keys would be used. The list of routing keys indicates keys that have IP connections available for traffic, and indicates which routing key would currently be used to route the MSU (marked with ***).

For the routing key that is selected to route the MSU, the list of IP connections associated with the key is also displayed.

Note: Most of the following output examples show command entries for ANSI MSUs. Because, other than echoing the input command back to the screen, there is nothing in the output that contains specific fields from any configured keys. The output would not be different if the user entered ITUI MSUs instead of ANSI MSUs.

Either brief or full help reports can be displayed. A full help report is generated by adding the -h full option to the command line.

This example shows a brief help report:

```
pass:loc=1105:cmd="msuroute -h"
```

```
Command Accepted - Processing
      Usage: msuroute [ [-x rc] | [-k [rtkey] [-p pctype] ] ]
                      [-h [full]]

    Options: -x  routing key report using routing context
             -k  routing key report using MTP3 parameters
                 rtkey :: ([dpc][:si][:opc | :ssn][:cics][:cice])
             -p  pctype :: (ANSI, ITUI, ITUN, ITUN24, ITUN16, ITUIS, ITUNS)
             -h  display command help (brief or full)

;
```

This example shows a full help report:

```
pass:loc=1305:cmd="msuroute -h full"
```

```
0        1         2         3         4         5         6         7
12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678
    Usage: msuroute [ [-x rc] | [-k [rtkey] [-p pctype] ] ]
                    [-h [full]]

    Options: -x  routing key report using routing context
             -k  routing key report using MTP3 parameters
                 rtkey :: dpc:si:opc:cics:cice | dpc:si:ssn | dpc:si
             -p  pctype :: (ANSI, ITUI, ITUN, ITUN24, ITUN16, ITUIS, ITUNS)
             -h  display command help (brief or full)

    -k option details:

        Use the -p option along with -k to specify the SS7 network
        domain and point code format for the network. The SS7IPGW
        default pctype is ANSI. The IPGWI default pctype is ITUI.

            Network  PC Format Notes
            -------  --------- ---------------------------------------
            ANSI     N-C-M
            ITUN     N         Non-Spare ITU National, no group code
            ITUN     N-GC      Non-Spare ITU National with group code
            ITUI     Z-A-I     Non-Spare ITU International
```

```
            ITUN24   N-C-M     Non-Spare ITU National, 24-bits
            ITUN16   U-S-M     Non-Spare ITU National, 16-bits
            ITUNS    N         Spare ITU National, no group code
            ITUNS    N-GC      Spare ITU National with group code
            ITUIS    Z-A-I     Spare ITU International


        SS7 Traffic Partition              RTKEY Parameter Example
        --------------------------------  ----------------------------
        SCCP SSN 5 to DPC 1-1-1            -k 1-1-1:3:5
        ISUP CIC 1 to 1-1-1 from 2-2-2     -k 1-1-1:5:2-2-2:1
        TUP CIC 1 to 1-1-1 from 2-2-2      -k 1-1-1:4:2-2-2:1
        QBICC CIC 1 to 1-1-1 from 2-2-2    -k 1-1-1:13:2-2-2:1
        ISUP CIC 0-5 to 1-1-1 from 2-2-2   -k 1-1-1:5:2-2-2:0:5
        TUP CIC 0-5 to 1-1-1 from 2-2-2    -k 1-1-1:4:2-2-2:0:5
        QBICC CIC 0-5 to 1-1-1 from 2-2-2  -k 1-1-1:13:2-2-2:0:5

;
    eagle10212 06-06-01 12:56:46 EST  EAGLE 35.0.0
    MSUROUTE command complete
```

This example shows output for an ANSI CIC-based MSU, showing at least 1 routing key of every key type in the search hierarchy configured on the 1105 card. Only key types that are configured on the card will be listed in the display.

```
pass:loc=1105:cmd="msuroute –p ANSI –k 5-5-5:5:6-6-6:1100"
```

```
Command Accepted - Processing

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    pass:loc=1105:cmd="msuroute -x ANSI -k 5-5-5:5:6-6-6:1100"
    Command entered at terminal #1.
;

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    PASS: Command sent to card
;

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    MSUROUTE command in progress
;

    rlghncxa03w 04-04-29 11:31:09 EST  EAGLE5 31.6.0

    TABLE   KEYTYPE                   #ConnCfgd   #ConnAvail   RTKEY USED
    DYN     FULL                      1           0            no
    DYN     PARTIAL: IGNORE-CIC       2           0            no
    DYN     PARTIAL: IGNORE-CIC+OPC   1           0            no
    DYN     PARTIAL: DPC-SI ONLY      3           3            yes
    DYN     PARTIAL: DPC ONLY         2           2            no
    DYN     PARTIAL: SI ONLY          4           0            no
    DYN     DEFAULT                   4           4            no
    STATIC  FULL                      12          4            no
    STATIC  PARTIAL: IGNORE-CIC       3           0            no
    STATIC  PARTIAL: IGNORE-CIC+OPC   2           0            no
    STATIC  PARTIAL: DPC-SI ONLY      3           2            no
    STATIC  PARTIAL: DPC ONLY         2           2            no
    STATIC  PARTIAL: SI ONLY          1           0            no
    STATIC  DEFAULT                   2           0            no

    IP Connections Associated with the RTKEY USED
```

```
    Name                            Avail?
    Vox1                            yes
    Mgc2                            yes
    Mgc24                           yes

    MSUROUTE command complete
;
```

This example shows output for an ANSI SCCP MSU. Several key types in the search hierarchy are not configured on the 1105 card, and therefore are not part of the output (for example, static full key or static partial SI only). Only key types that are configured on the card will be listed in the display.

```
pass:loc=1105:cmd="msuroute –p ANSI –k 5-5-5:3:34"
```

```
Command Accepted - Processing

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    pass:loc=1105:cmd="msuroute -p ANSI -k 5-5-5:3:34"
    Command entered at terminal #1.
;

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    PASS: Command sent to card
;

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    MSUROUTE command in progress
;

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    TABLE   KEYTYPE                 #ConnCfgd   #ConnAvail   RTKEY USED
    DYN     PARTIAL: DPC-SI ONLY    3           2            yes
    DYN     PARTIAL: DPC ONLY       2           2            no
    DYN     DEFAULT                 4           4            no
    STATIC  PARTIAL: DPC-SI ONLY    3           2            no
    STATIC  PARTIAL: DPC ONLY       2           2            no
    STATIC  DEFAULT                 2           0            no

    IP Connections Associated with the RTKEY USED
    Name                            Avail?
    Scpsandiego                     no
    scpdenver                       yes
    scpkansascity                   yes

    MSUROUTE command complete
;
```

This example shows output for an ANSI MSU with SI=8:

```
pass:loc=1105:cmd="msuroute –p ANSI -k 5-5-5:8"
```

```
Command Accepted - Processing

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    pass:loc=1105:cmd="msuroute -p ANSI -k 5-5-5:8"
    Command entered at terminal #1.
;

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    PASS: Command sent to card
```

```
;
    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    MSUROUTE command in progress
;
    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0

    TABLE   KEYTYPE                  #ConnCfgd   #ConnAvail   RTKEY USED
    DYN     FULL                     7           0            no
    DYN     PARTIAL: DPC ONLY        2           2            yes
    DYN     PARTIAL: SI ONLY         2           0            no
    DYN     DEFAULT                  4           4            no
    STATIC  FULL                     11          0            no
    STATIC  PARTIAL: DPC ONLY        2           2            no
    STATIC  PARTIAL: SI ONLY         1           0            no
    STATIC  DEFAULT                  2           0            no

    IP Connections Associated with the RTKEY USED
    Name                             Avail?
    SI8sock1                         yes
    SI8sock2                         yes

    MSUROUTE command complete
;
```

These examples show output for an ITUN and an ITUN24 MSU with SI=5. The output format is the same for all four commands.

The ITUDUPPC feature is OFF (default):

```
pass:loc=1105:cmd="msuroute –p itun –k 345:5:678:100:200"
```

The ITUDUPPC feature is ON (the 2-letter group code must be specified with the DPC and OPC)

```
pass:loc=1105:cmd="msuroute –p itun –k 345-gr:5:678-gr:100:200"
```

An ITUN24 MSU with SI=5:

```
pass:loc=1105:cmd="msuroute –p itun24 –k 10-200-10:5:10-200-1:1:100"
```

An ITU-I Spare MSU with SI=5:

```
msuroute –p ituis -k 3-11-1:5:4-11-1:5:5
```

```
Command Accepted - Processing

    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    pass:loc=1105:cmd="msuroute -p ITUN -k 345:678:100:200"
    Command entered at terminal #1.
;
    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    PASS: Command sent to card
;
    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    MSUROUTE command in progress
;
    rlghncxa03w 06-06-01 11:31:09 EST  EAGLE5 35.0.0
    TABLE   KEYTYPE                  #ConnCfgd   #ConnAvail   RTKEY USED
```

```
    DYN     FULL                        1           0           no
    DYN     PARTIAL: IGNORE CIC         2           0           no
    DYN     PARTIAL: IGNORE CIC+OPC     1           0           no
    DYN     PARTIAL: DPC-SI ONLY        3           3           yes
    DYN     PARTIAL: DPC ONLY           2           2           no
    DYN     PARTIAL: SI ONLY            4           0           no
    DYN     DEFAULT                     4           4           no
    STATIC  FULL                        12          4           no
    STATIC  PARTIAL: IGNORE-CIC         3           0           no
    STATIC  PARTIAL: IGNORE-CIC+OPC     2           0           no
    STATIC  PARTIAL: DPC-SI ONLY        3           2           no
    STATIC  PARTIAL: DPC ONLY           2           2           no
    STATIC  PARTIAL: SI ONLY            1           0           no
    STATIC  DEFAULT                     2           0           no

    IP Connections Associated with the RTKEY USED
    Name                              Avail?
    Vox1                              yes
    Mgc2                              yes
    Mgc24                             yes

    MSUROUTE command complete
;
```

Related Commands

None.

msutrace

MSU Trace

This command provides filter and trace capability for MSUs passing through the IP7 GPLs. This command provides a view of MSU data as it exists in the PSTN network and its corresponding format as it exists in the IP network.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `msutrace` command option -a has the parameter action. The action that the command is to take can be specified, as in the command `msutrace -a acttrace`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

-a action

Action option.

Range:

acttrace

Activate (turn on) MSU tracing

clrtrace

Clear all data from trace buffers

dacttrace

Deactivate (turn off) MSU tracing

chgfilter

Change filter used to indicate which MSUs are placed in the trace buffers

-g get option

Get option.

Range:

config

Displays the current command settings: trace ON/OFF status, filter settings, and trace buffers used/available

trace

Displays contents of trace buffers containing captured MSU data

-h help

This option displays help information about the command.

Range:

full

If *full* is specified, the detailed version of the help information is displayed.

If *full* is not specified (just -h), the simple verion of the help information is displayed.

-m mode

This option specifies which MSUs are captured.

Range:

normerr

trace only MSUs with normalization errors

all

trace all MSUs regardless of MSU contents

-p point code type

This option specifies which type of point code is contained in the filter key, when the key contains a DPC or OPC.

Range:

ansi, *itui*, *itun*, *itun24*, *itun16*, *ituis*, *ituns*

Default:

ansi

-k filter key

The -k, -c, and -p options are used to specify the filter key used to determine which MSUs will have data placed in the trace buffers.

Range:

-k filter key *[-p] [-c pcType]*

The syntax for the filter key portion of the -kfilter key option is specified as a single string parameter with up to five colon-separated fields. The filter key can contain one or more of the following fields:

- *n-c-m*—ANSI DPC in the format *network-cluster-member*
- *no-co-mo*—ANSI OPC in the format *network-cluster-member*
- *z-a-i*—ITU-I DPC in the format *zone-area-id*
- *zo-ao-io*—ITU-I OPC in the format *zone-area-id*
- *un-sna-mna*---16-bit ITU-N DPC in the format *unit number-sub number area-main number area*
- *msa-ssa-sp*—24-bit ITU-N DPC in the format *main sigaling area-sub signaling area-signaling point*
- *nnnnn*—ITU-N DPC
- *nnnnn-gc*—ITU-N DPC with Group Code when the Duplicate Point Code feature is ON
- *no*—ITU-N OPC
- *no-gc*—ITU-N OPC with Group Code when the Duplicate Point Code feature is ON
- *s*—SI (Service Indicator)
- *cs*—CIC Start value (start of the CIC range)
- *ce*—CIC End value (end of the CIC range)
- *n*—SSN (Subsystem Number)

These examples show valid formats:

- n-c-m:s:n—For DPC, SI, SSN type routing keys. The network, cluster and member (*n-c-m*) are in the range 0-255. The service indicator (s) is 3 or sccp. The subsystem (**n**) is in the range 0-255.
- n-c-m:s—For DPC, SI type routing keys. The network, cluster and member (*n-c-m*) are in the range 0-255. The service indicator (s) is in the range 0-2, 4, or 6-15. There is no subsystem number. As a default, counts for all routing keys within the option combination are displayed.
- n-c-m:s:no-co-mo:cs:ce—For DPC, SI, CIC type routing keys. The DPC network, cluster and member (*n-c-m*) are in the range 0-255. The service indicator (s) is 5 or isup. There is no subsystem. The OPC network, cluster and member (*no-co-mo*) are in the range 0-255. The starting circuit identification code (cs) and ending circuit identification code (ce) are in the range 0 - 16363.
- z-a-i—For DPCN and DPCI routing keys, the zone, area and ID (*z-a-i*) are in the range of 000-007 (zone and ID) and 000-255 (area).
- msa-ssa-sp—For 24-bit DPCN routing keys, the main signaling area, sub signaling area and signaling point (*msa-ssa-sp*) are in the range of 000-255.
- *un-sna-mna*---For 16-bit DPCN routing keys, the unit number, sub number area and main number area (*un-sna-mna*) are in the range of 0-127, 0-15, 0-31 respectively.

-t

This option specifies the routing key type (IPGWx only).

-x rc

This option generates a routing key report using routing context.

Example

```
pass:loc=1105:cmd="msutrace -h"

pass:loc=1105:cmd="msutrace -h full"

pass:loc=1105:cmd="msutrace -g config"
```

```
pass:loc=1315:cmd="msutrace -g trace"
pass:loc=1105:cmd="msutrace -a clrtrace"
pass:loc=1105:cmd="msutrace -a acttrace"
pass:loc=1105:cmd="msutrace -a chgfilter -p ansi -k 3-3-3:5:4-4-4:10:1000"
pass:loc=1105:cmd="msutrace -a chgfilter -p itui -t partial -k 1-3-3:5:2-4-4"
pass:loc=1105:cmd="msutrace -a chgfilter -p itun -t partial -k 1536:5"
pass:loc=1105:cmd="msutrace -a chgfilter -m normerr"
pass:loc=1105:cmd="msutrace -a chgfilter -m all"
pass:loc=1105:cmd="msutrace -a chgfilter -p ansi -k 1-1-1:5:2-2-2:10:1000"
```

Dependencies

If no options are specified, the simple version of the help information is displayed.

The point code type defaults to ANSI when the -p option is not specified.

The -p option is allowed only on key types that contain a DPC or OPC.

Notes

The `msutrace` command is executed through the `pass` command.

The `mustrace` command captures the data portion of the PSTN packet, starting at the SIO bytes.

The `msutrace` command captures the entire M3UA or SUA packet. This includes the M3UA or SUA header and additional data stored inside system buffer chain elements. The `msutrace` command currently does not support the trace and capture of M3UA / SUA SSNM (Class 2) messages.

The `msutrace` command captures data in trace buffers. If the set of trace buffers becomes full with captured MSU data after MSU tracing is activated, no more data capturing will take place. The -aclrtrace option must be specified to reset (clear) the content of the trace buffers. After the trace buffers are empty again, `msutrace` will restart capturing qualified MSUs.

If MSU tracing is activated with the -a acttrace option before a properly formatted filter key is entered, the `msutrace` command will not capture any data due to lack of a proper filter. When the -a chgfilter option is specified to enter a properly formatted filter, the `msutrace` command will start capturing qualified MSUs.

Output

Note: The `msutrace` pass command exists on the IPLIM/IPLIMI cards as a debug-only pass command. All command syntax and output are identical to the SS7IPGW and IPGWI commands described in this section.

Both brief and full versions of IPGW reports can be requested. A full report is requested by including the -f in the command line.

This example shows a brief help report:

```
pass:loc=1305:cmd="msutrace -h"
```

```
    Usage: msutrace [-a action_cmd] [-g get_cmd]
                    [ [-x rc] | [-k [rtkey] [-p pctype] [-t keytype]] ]
                    [-m mode] [-h [full]]

    Options:
        -a    action_cmd: an Action Command
        -g    get_cmd: a Get Command
        -x    routing key report using routing context
        -k    routing key report using MTP3 parameters
              rtkey :: ([dpc][:si][:opc | :ssn][:cics][:cice])
        -p    pctype :: (ANSI, ITUI, ITUN, ITUN24, ITUN16, ITUIS, ITUNS)
        -t    routing key type
              keytype :: (<full>, partial, default)
        -m    mode: mode for qualifying MSUs captured=[normerr | all]
        -h    displays this message (brief or full)

    get_cmd:        [config | trace]
        config      config
        trace       trace

    action_cmd:     [acttrace | chgfilter | clrtrace | dacttrace]
        acttrace    acttrace
        chgfilter   chgfilter [<fltrkey>] | [-m mode] (at least 1 required)
                              (valid fltrkey should be present either before
                               specifying mode or in the same command)
        clrtrace    clrtrace
        dacttrace   dacttrace

    <fltrkey>:      [ [-x rc] | [-k [rtkey] [-p pctype] [-t keytype]] ]
                    (see 'msutrace -h full' for complete description)

    MSUTRACE command complete
;
```

This example shows a full help report:

```
pass:loc=1305:cmd="msutrace -h full"
```

```
    Usage: msutrace [-a action_cmd] [-g get_cmd]
                    [ [-x rc] | [-k [rtkey] [-p pctype] [-t keytype]] ]
                    [-m mode] [-h [full]]

    Options:
        -a    action_cmd: an Action Command
        -g    get_cmd: a Get Command
        -x    routing key report using routing context
        -k    routing key report using MTP3 parameters
              rtkey :: ([dpc][:si][:opc | :ssn][:cics][:cice])
        -p    pctype :: (ANSI, ITUI, ITUN, ITUN24, ITUN16, ITUIS, ITUNS)
        -t    routing key type
              keytype :: (<full>, partial, default)
        -m    mode: mode for qualifying MSUs captured = [normerr | all]
        -h    displays this message (brief or full)

    get_cmd:        [config | trace]
        config      Display the current MSUTRACE settings:
                    trace On/Off status, filter settings, and
                    trace buffers used/available.
                    ex:  msutrace -g config
        trace       Display content of trace buffers containing captured
```

```
                  MSU data
                  ex:  msutrace -g trace

    action_cmd:   [acttrace | chgfilter | clrtrace | dacttrace  ]
        acttrace  Activate (turn-on) MSU-tracing.
                  ex:  msutrace -a acttrace
        chgfilter chgfilter [<fltrkey>] | [-m mode] (at least 1 required)
                            (valid fltrkey should be present either before
                             specifying mode or in the same command)
                  Change filter used to qualify which MSUs are placed in
                  trace buffers:
                  Flow of command should be
                  Either entering filter key before specifying mode :
                  ex: To trace MSUs based on MSU content:
                      msutrace -a chgfilter <fltrkey>
                  ex: To only trace MSUs with Normalization errors:
                      msutrace -a chgfilter -m normerr
                  ex: To trace all MSUs regardless of error conditions:
                      msutrace -a chgfilter -m all
                  Or entering filter key along with mode:
                  ex: To trace MSUs based on MSU content
                         with Normalization errors:
                      msutrace -a chgfilter <fltrkey> -m normerr
                  ex: To trace MSUs based on MSU content
                         regardless of error conditions:
                      msutrace -a chgfilter <fltrkey> -m all

        clrtrace  Clear all data from trace buffers.
                  ex:  msutrace -a clrtrace

        dacttrace Deactivate (turn-off) MSU-tracing.
                  ex:  msutrace -a dacttrace

        -k option details:

        Use the -p option along with -k to specify the SS7 network
        domain and point code format for the network. The SS7IPGW
        and IPLIM default pctype is ANSI. The IPGWI and IPLIMI
        default pctype is ITUI.

        For IPSG both ANSI and ITU network point code formats are
        eligible for trace when the default filter or an SI only
        filter is specified. The IPSG default pctype is ANSI when the
        filter contains OPC or DPC and the -p option is not specified.

            Network  PC Format Notes
            -------  --------- ---------------------------------------
            ANSI     N-C-M
            ITUN     N         Non-Spare ITU National, no group code
            ITUN     N-GC      Non-Spare ITU National with group code
            ITUI     Z-A-I     Non-Spare ITU International
            ITUN24   N-C-M     Non-Spare ITU National, 24-bits
            ITUN16   U-S-M     Non-Spare ITU National, 16-bits
            ITUNS    N         Spare ITU National, no group code
            ITUNS    N-GC      Spare ITU National with group code
            ITUIS    Z-A-I     Spare ITU International

        Use the -t option along with -k to specify certain MTP3 and
        user part MSU fields as wildcards for the routing key or LS.

        SS7 Traffic Partition              RTKEY/MTP3 Parameter Example
        ---------------------------------  ----------------------------
        Any User Part to DPC 1-1-1         -k 1-1-1    -t partial
        SCCP to DPC 1-1-1                  -k 1-1-1:3  -t partial
```

```
        ISUP to DPC 1-1-1                 -k 1-1-1:5  -t partial
        TUP to DPC 1-1-1                  -k 1-1-1:4  -t partial
        QBICC to DPC 1-1-1                -k 1-1-1:13 -t partial
        SI [0-2,6-12,14,15] to DPC 1-1-1  -k 1-1-1:SI
        SCCP SSN 5 to DPC 1-1-1           -k 1-1-1:3:5
        ISUP to DPC 1-1-1 from OPC 2-2-2  -k 1-1-1:5:2-2-2  -t partial
        TUP to DPC 1-1-1 from OPC 2-2-2   -k 1-1-1:4:2-2-2  -t partial
        QBICC to DPC 1-1-1 from OPC 2-2-2 -k 1-1-1:13:2-2-2 -t partial
        ISUP CIC 1 to 1-1-1 from 2-2-2    -k 1-1-1:5:2-2-2:1
        TUP CIC 1 to 1-1-1 from 2-2-2     -k 1-1-1:4:2-2-2:1
        QBICC CIC 1 to 1-1-1 from 2-2-2   -k 1-1-1:13:2-2-2:1
        ISUP CIC 0-5 to 1-1-1 from 2-2-2  -k 1-1-1:5:2-2-2:0:5
        TUP CIC 0-5 to 1-1-1 from 2-2-2   -k 1-1-1:4:2-2-2:0:5
        QBICC CIC 0-5 to 1-1-1 from 2-2-2 -k 1-1-1:13:2-2-2:0:5
        Default Routing Key               -k                -t default
        Any User Part to DPC=LS APC       -x LS RCONTEXT     (IPSG Only)

;

    tekelecstp 10-03-06 19:41:33 EST  EAGLE5 42.0.9

    MSUTRACE command complete

;
```

This example shows the current settings of the `msutrace` command options: trace ON/OFF status, filter settings, and trace buffers that are used and available:

```
pass:loc=1105:cmd="msutrace -g config"
```

```
Command Accepted - Processing
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="msutrace -g config"
    Command entered at terminal #1.
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command in progress
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE configurations

    Trace = On

    Trace buffers: 2 of 3 contain captured MSU data

    MSUTRACE: filter settings
    DPCA        SI SSN OPCA        CICS       CICE        MODE
    055-055-055 13 *** 016-006-006 1234567890 1234567890  normerr

;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command complete
;
```

This example shows the current settings of the `msutrace` command options: trace ON/OFF status, filter settings, and trace buffers that are used and available, when the filter key specifies an ITU-I spare point code:

```
pass:loc=1105:cmd="msutrace -g config"
```

```
Command Accepted - Processing
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    pass:loc=1105:cmd="msutrace -g config"
    Command entered at terminal #1.
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    PASS: Command sent to card
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    MSUTRACE command in progress
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    MSUTRACE configurations

    Trace = On

    Trace buffers: 3 of 3 USED

    MSUTRACE: filter settings
       DPCI        SI SSN     OPCI        CICS       CICE        MODE
     s-2-011-1     2  ***     ****        ****       ****        all
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    MSUTRACE command complete
;
```

This example shows the current settings of the `msutrace` command when an IPSG card is used:

```
pass:loc=1304:cmd="msutrace -g config"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    MSUTRACE: Configurations

    MSU Tracing is off

    Trace buffers: 0 of 3 USED

    MSUTRACE: filter settings

       DPCA        SI SSN    OPCA        CICS      CICE      MODE
       004-004-004 ** *** ****           ****      ****      all

;
```

This example shows a trace with a DPC-only filter key specified via the –x <rcontext>option:.

```
pass:loc=1304:cmd="msutrace -a acttrace"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    MSUTRACE command complete
;
```

This example shows the captured trace buffer for an IPSG card:

```
pass:loc=1304:cmd="msutrace -g trace"
```

```
    rlghncxa03w 08-01-29 11:31:09 EST  EAGLE 38.0.0

    ----------
    BUFFER:  0
    ----------
    Filter used:

       DPCA        SI SSN    OPCA        CICS      CICE      MODE
       004-004-004 ** *** ****           ****      ****      all

    Timestamp:  08-01-21  16:06:17.420
    Direction:  Tx
    Error Code:  0

    PSTN DATA
    ---------
    85 04 04 04 05 05 05 00 00 00 00 6e 01 00 f9 e3      ...........n....
    33 c7 00 00 1d 00 00 00 00 10 00 12 00 14 00 16      3...............
    00 18 00 1a 00 1c 00 1e 00                           .........

    IP DATA
    -------
    01 00 01 01 00 00 00 44 00 06 00 08 00 00 00 04      .......D........
    02 10 00 31 00 05 05 05 00 04 04 04 05 02 00 00      ...1............
    00 00 00 6e 01 00 f9 e3 33 c7 00 00 1d 00 00 00      ...n....3.......
    00 10 00 12 00 14 00 16 00 18 00 1a 00 1c 00 1e      ................
    00 00 00 00                                          ....


    MSUTRACE command complete
;
```

This example retreives contents of the trace buffers. The example contains 1 stored trace buffer for a transmitted M3UA PDU.

```
pass:loc=1303:cmd="msutrace -g trace"
```

```
Command Accepted - Processing
    eagle10202 01-01-19 10:20:56 GMT  EAGLE5 31.6.0
    pass:loc=1303:cmd="msutrace -g trace"
    Command entered at terminal #4.
;

    eagle10202 01-01-19 10:20:56 GMT  EAGLE5 31.6.0
    PASS: Command sent to card
;

    eagle10202 01-01-19 10:20:56 GMT  EAGLE5 31.6.0

    MSUTRACE command in progress
;

    eagle10202 01-01-19 10:20:56 GMT  EAGLE5 31.6.0

    ----------
    BUFFER:  0
    ----------
    Filter used:
```

```
    DPCA        SI SSN OPCA        CICS      CICE      MODE
    001-001-001 5  *** 001-001-002 0         100       all

    Timestamp:  02-06-07  08:40:29.435
    Direction:  Tx
    Error Code:  0

    PSTN DATA
    ---------
    85 01 01 01 02 01 01 b2 00 00 01 00 00 00 00 03      ................
    05 00 02 80 80 0d 00 00 21 43 65 87 09 21 43 65      ........!Ce..!Ce
    87 09 01                                             ...

    IP DATA
    -------
    01 00 01 01 00 00 00 3c 02 00 00 08 00 00 00 01      .......<........
    02 10 00 2b 00 01 01 02 00 01 01 01 05 02 00 b2      ...+............
    00 00 01 00 00 00 00 03 05 00 02 80 80 0d 00 00      ................
    21 43 65 87 09 21 43 65 87 09 01 00                  !Ce..!Ce....


    MSUTRACE command complete
;
```

This example retrieves contents of the trace buffers with ITU-I spare point codes. The example contains 3 stored trace buffers.

```
pass:loc=1317:cmd="msutrace -g trace"
```

```
Command Accepted - Processing
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    pass:loc=1317:cmd="msutrace -g trace"
    Command entered at terminal #4.
;

    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    PASS: Command sent to card
;

    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0

    MSUTRACE command in progress

;

    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0

    ----------
    BUFFER:  0
    ----------
    Filter used:

       DPCI        SI SSN    OPCI        CICS       CICE      MODE
     s-2-011-1     2  ***    ****        ****       ****      all

    Timestamp:  05-01-26  10:33:14.330
    Direction:  Tx
    Error Code:  0

    PSTN DATA
    ---------
    02 59 50 16 a2 80 03 83 ce 46 0a 00 00 00            .YP......F....
```

```
    IP DATA
    -------
    54 41 4c 49 6d 74 70 33 0e 00 02 59 50 16 a2 80      TALImtp3...YP...
    03 83 ce 46 0a 00 00 00                              ...F....

    ----------
    BUFFER:  1
    ----------
    Filter used:

      DPCI        SI SSN    OPCI        CICS       CICE      MODE
    s-2-011-1     2  ***    ****        ****       ****      all

    Timestamp:  05-01-26  10:33:14.335
    Direction:  Tx
    Error Code:  0

    PSTN DATA
    ---------
    02 59 50 16 a2 80 84 04 c8 46 0a 00 00 00            .YP......F....

    IP DATA
    -------
    54 41 4c 49 6d 74 70 33 0e 00 02 59 50 16 a2 80      TALImtp3...YP...
    84 04 c8 46 0a 00 00 00                              ...F....

    ----------
    BUFFER:  2
    ----------
    Filter used:

       DPCI        SI SSN    OPCI        CICS       CICE      MODE
     s-2-011-1     2  ***    ****        ****       ****      all

    Timestamp:  05-01-26  10:33:14.340
    Direction:  Tx
    Error Code:  0

    PSTN DATA
    ---------
    02 59 50 16 f2 80 01 81 c1 46 0f 00 00 00            .YP......F....

    IP DATA
    -------
    54 41 4c 49 6d 74 70 33 0e 00 02 59 50 16 f2 80      TALImtp3...YP...
    01 81 c1 46 0f 00 00 00                              ...F....


    MSUTRACE command complete

;
```

This example clears the contents of the trace buffers:

```
pass:loc=1105:cmd="msutrace -a clrtrace"
```

```
Command Accepted - Processing

    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="msutrace -a clrtrace"
    Command entered at terminal #1.
```

```
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command in progress
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command completed
;
```

This example activates MSU tracing:

```
pass:loc=1105:cmd="msutrace -a acttrace"
```

```
Command Accepted - Processing

    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="msutrace -a acttrace"
    Command entered at terminal #1.
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command in progress
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command completed
;
```

This example deactivates MSU tracing:

```
pass:loc=1105:cmd="msutrace -a dacttrace"
```

```
Command Accepted - Processing

    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="msutrace -a dacttrace"
    Command entered at terminal #1.
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command in progress
;   4.0.0
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command completed
;
```

Examples for Entering a Filter Key

The output shown at the end of these command examples is the same for each example, except for the echo of the entered command.

Command with the -a *chgfilter* option to insert a fully specified ANSI PC CIC filter key.

This filter key qualifies for capture MSUs with the following properties:

- DPC = 3-3-3 (ANSI)

- SI = 5
- OPC = 4-4-4 (ANSI)
- CIC = [10..1000]

```
pass:loc=1105:cmd="msutrace -a chgfilter -p ansi -k 3-3-3:5:4-4-4:10:1000"
```

Command with the -a *chgfilter* option to insert a fully specified ANSI SCCP filter.

This filter key qualifies for capture MSUs with the following properties:

- DPC = 3-3-3 (ANSI)
- SI = 3
- SSN = 230

```
pass:loc=1105:cmd="msutrace -a chgfilter -k 3-3-3:3:230"
```

Command with the -a *chgfilter* option to insert a fully specified ANSI DPC SI filter key.

This filter key qualifies for capture MSUs with the following properties:

- DPC = 3-3-3 (ANSI)
- SI = 6

```
pass:loc=1105:cmd="msutrace -a chgfilter -k 3-3-3:6"
```

Command with the -a *chgfilter* option to insert a fully specified ITUN24 PC CIC filter key.

This filter key qualifies for capture MSUs with the following properties:

- DPC = 13-103-3 (ITUN24)
- SI = 5
- OPC = 14-104-4 (ITUN24)
- CIC = [10..1000]

```
pass:loc=1105:cmd="msutrace -a chgfilter -p itun24 -k
13-103-3:5:14-104-4:10:1000"
```

Command with the -a *chgfilter* option to insert a partial ITUI DPC SI OPC filter key.

This filter key qualifies for capture MSUs with the following properties:

- DPC = 1-3-3 (ITUI)
- SI = 5
- OPC = 2-4-4 (ITUI)

```
pass:loc=1105:cmd="msutrace -a chgfilter -p itui -k 1-3-3:5:2-4-4"
```

Command with the -a *chgfilter* option to insert a partial DPC SI ITUN PC filter key, with the Duplicate Point Code feature turned off:

This filter key qualifies for capture MSUs with the following properties:

- DPC = 1536 (ITUN)
- SI = 5

```
pass:loc=1105:cmd="msutrace -a chgfilter -p itun -k 1536:5"
```

Command with the -a *chgfilter* option to insert a partial DPC SI ITUN PC filter key, with the Duplicate Point Code feature turned on:

This filter key qualifies for capture MSUs with the following properties:

- DPC = 1536-bb (ITUN)
- SI = 5

```
pass:loc=1105:cmd="msutrace -a chgfilter -p itun -k 1536-bb:5"
```

Command with the -a *chgfilter* option to insert a partial ANSI DPC filter key.

This filter key qualifies for capture MSUs with the following properties:

- DPC = 3-3-3 (ANSI)

```
pass:loc=1105:cmd="msutrace -a chgfilter -k 3-3-3"
```

Command with the -a *chgfilter* option to insert a partial SI filter key. Because no DPC or OPC field is specified, point code type does not have to be indicated.

This filter key qualifies for capture MSUs with the following properties:

- SI = 5

This filter key qualifies for capture MSUs with the following properties:

- DPC = 13-113-3 (ITUN24)

```
pass:loc=1105:cmd="msutrace -a chgfilter -p itun24 -k 13-113-3"
```

```
Command Accepted - Processing

    eagle20003 06-06-01 10:16:57 EST  EAGLE5 35.0.0
    pass:loc=1105:cmd="msutrace -a chgfilter -p ansi -k 3-3-3:5:4-4-4:10:1000"
    Command entered at terminal #1.
;
    eagle20003 99-11-27 10:16:57 EST EAGLE5 31.6.0
    PASS: Command sent to card
;
    eagle20003 99-11-27 10:16:57 EST EAGLE5 31.6.0
    MSUTRACE command in progress
;
    eagle20003 99-11-27 10:16:57 EST EAGLE5 31.6.0
    MSUTRACE command completed
;
```

These commands include the -m *mode* option to change the trace capture mode.

Mode to have a ‘capture-on-normalization error’ property such that only MSUs with normalization processing errors are traced:

```
pass:loc=1105:cmd="msutrace -a chgfilter -m normerr"
```

Set a default filter key and the filter’s mode at the same time:

```
pass:loc=1105:cmd="msutrace -a chgfilter -k -t default -m all"
```

```
Command Accepted - Processing
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="msutrace -a chgfilter -k -t default -m all"
    Command entered at terminal #1.
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
```

```
    MSUTRACE command in progress
;
    eagle20003 99-11-27 10:16:57 EST  EAGLE5 31.6.0
    MSUTRACE command completed
;
```

These commands insert a partial DPC-SI filter key with ITU-I spare point code and show the `msutrace`getfilter command output with the filter key after the chgfilter command is processed to completion.

This filter key will qualify MSUs with at least the following properties:

- DPCI = (ITU-I Spare) 2-11-1
- SI=5

```
pass:loc=1317:cmd="msutrace –a chgfilter –p ituis –k 2-11-1:5"
```

```

Command Accepted - Processing

    eagle20003 06-06-01 10:16:03 EST  EAGLE5 35.5.0
    pass:loc=1317:cmd="msutrace -a chgfilter -p ituis -k 2-11-1:5"
    Command entered at terminal #1.
;
    eagle20003 06-06-01 10:16:03 EST  EAGLE5 35.5.0
    PASS: Command sent to card
;
    eagle20003 06-06-01 10:16:03 EST  EAGLE5 35.5.0
    MSUTRACE command in progress
;
    eagle20003 06-06-01 10:16:03 EST  EAGLE5 35.5.0
    MSUTRACE command completed
;
```

```
pass:loc=1317:cmd="msutrace –g config"
```

```

Command Accepted - Processing

    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    pass:loc=1317:cmd="msutrace -g config"
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    PASS: Command sent to card
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    MSUTRACE command in progress
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    MSUTRACE configurations

    Trace = On

    Trace buffers: 3 of 3 USED

    MSUTRACE: filter settings
       DPCI        SI SSN     OPCI        CICS       CICE        MODE
     s-2-011-1     5  ***     ****        ****       ****        all
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    MSUTRACE command complete
;
```

These commands insert a full DPC-SI-OPC filter key with an ITU-N spare point code when the Duplicate Point Code feature is on, and show the `msutrace`getfilter command output with the filter key after the chgfilter command is processed to completion.

This filter key will qualify MSUs with at least the following properties:

- DPC = (ITU-N Spare) 6234-aa
- SI=5
- OPC=(ITU-N Spare) 6233-aa
- CICS=1
- CICE=200

```
pass:loc=1315:cmd="msutrace –a chgfilter –p ITUNS –k 6234-aa:5:6233-aa:1:200"
```

```
Command Accepted - Processing

    eagle20003 06-06-01 10:16:03 EST  EAGLE5 35.0.0
    pass:loc=1315:cmd="msutrace -a chgfilter -p ITUNS -k
    6234-aa:5:6233-aa:1:200"
    Command entered at terminal #1.
;
    eagle20003 06-06-01 10:16:03 EST  EAGLE5 35.0.0
    PASS: Command sent to card
;
    eagle20003 06-06-01 10:16:03 EST  EAGLE5 35.0.0
    MSUTRACE command in progress
;
    eagle20003 06-06-01 10:16:03 EST  EAGLE5 35.0.0
    MSUTRACE command completed
;
```

```
pass:loc=1317:cmd="msutrace –g config"
```

```
Command Accepted - Processing

    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    pass:loc=1317:cmd="msutrace -g config"
    Command entered at terminal #1.
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    PASS: Command sent to card
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    MSUTRACE command in progress
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
    MSUTRACE configurations

    Trace = On

    Trace buffers: 0 of 3 USED

    MSUTRACE: filter settings
       DPCN        SI SSN     OPCI        CICS       CICE        MODE
     s-6234-aa     5  ***   s-6233-aa     ****       ****        all
;
    eagle20003 05-01-27 10:16:03 EST  EAGLE5 31.12.0
```

```
    MSUTRACE command complete
;
```

Related Commands

None.

netstat

Network Statistics

This command is used to display network statistics from the TCP/IP stack. This command allows troubleshooting of network interface and routing configuration problems within the private EPAP-Service Module IP network.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `netstat` command option -m has the parameter buffer pool. The pool for which information will be displayed can be specified, as in the command `netstat -m sys`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

-a

This option displays socket information for all protocols.

-d

This option displays driver measurement data.

The **-m** modifier displays multicast information. The **-p** modifier displays PHY registers. The **-z** modifier clears driver measurements. The **-h** modifier displays history measurements for the past 24 hours or the measurements collected a user defined hour ago. The **-f** modifier displays driver measurement data in full format (for GPLs that are loaded on E5-based cards only).

The **-m**, **-p**, and **-h** modifiers are not supported for GPLs that are loaded on E5-based cards.

-e

This option displays DPL driver measurement data. This option is supported only for GPLs that are loaded on E5-based cards.

-f, -h

These options provide help information for the command.

-i

This option displays interface information for all interfaces.

-m buffer pool

This option displays buffer pool information for the specified pool.

Range:

data

SENS protocol stack data buffer pool

sys

system buffer pool

dd

Ethernet device driver buffer pool

Default:

All three buffer pools are displayed.

-p protocol

This option displays information for the specified protocol.

Rnage:

tcp

transmission control protocol

udp

user datagram protocol

ip

internet protocol

icmp

internet control message protocol

sctp

stream control transmission protocol

Default:

None

-r

This option displays the Route table.

Example

```
pass:cmd="netstat -i":loc=1105
pass:cmd="netstat -a":loc=1111
pass:cmd="netstat -p tcp":loc=1111
pass:cmd="netstat -m data":loc=1105
pass:cmd="netstat -r":loc=1105
pass:cmd="netstat -e":loc=1111
pass:cmd="netstat -d 0 -f":loc=1111
```

Dependencies

Only one of the options can be specified at a time.

Notes

The `netstat` command is executed through the `pass` command.

The options {-m,-p,-h} are not supported for GPLs that are loaded on E5-based cards.

Output for GPLs that are NOT loaded on E5-based cards

```
pass:loc=1107:cmd="netstat"
```

or

```
pass:loc=1107:cmd="netstat -h"
```

```
    Command Accepted - Processing

    tekelecstp 08-02-02 12:16:34 EST  EAGLE 38.0.0
    PASS: Command sent to card

    Usage: netstat [-a] [-h] [-m data|sys|dd] [-p icmp|igmp|ip|sctp|tcp|udp]
                   [-i] [-r] [-d 0|1 [-m] [-p] [-z] [-h 1..24]]

    Options:
        -a        display socket information for all protocols
        -h        Displays this message
        -m        display buffer pool information for 1 of the system pools
        -p        display socket information for 1 of the protocols
        -i        display interface information for all interfaces
        -r        display the route table information
        -d        display driver measurement data

;
    tekelecstp 08-02-02 12:16:34 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:loc=1105:cmd="netstat -a"
```

```
    Command Accepted - Processing

    tekelecstp 08-02-07 07:59:12 EST  EAGLE 38.0.0
    PASS: Command sent to card
;
    tekelecstp 08-02-07 07:59:12 EST  EAGLE 38.0.0

    Active Internet connections (including servers)
                                    Local Address
    PCB      Proto Recv-Q Send-Q  Foreign Address      (state)
    -------- ----- ------ ------  -------------------- -------
    11df510  TCP        0      0          0.0.0.0.111  LISTEN
                                           0.0.0.0.0
    11df384  UDP        0      0          0.0.0.0.1008
                                           0.0.0.0.0
    11df48c  UDP        0      0          0.0.0.0.111
                                           0.0.0.0.0
;
```

```
    tekelecstp 08-02-07 07:59:12 EST  EAGLE 38.0.0

    NETSTAT command complete
```

The interfaces listed in the `netstat -i` output correspond to the card's ports as follows:

- seeq 0 = IP interface A
- seeq 1 = IP interface B
- DPLend = pseudo-IP interface used only by network cards for STC-style Integrated Monitoring
- LO = local loopback interface

`pass:loc=1105:cmd="netstat -i"`

```
    tekelecstp 11-01-07 07:59:20 EST  EAGLE 43.0.0
    pass: loc=1105: cmd="netstat -i"
    Command entered at terminal #1.
;

    tekelecstp 11-01-07 07:59:20 EST  EAGLE 43.0.0
    PASS: Command sent to card
;

    tekelecstp 11-01-07 07:59:20 EST  EAGLE 43.0.0
    DPLend (unit number 0):
         Flags: (0x63) UP BROADCAST ARP RUNNING 10MB HDX DIX
         Type: ETHERNET_CSMACD
         Internet address: 172.20.48.25
         Broadcast address: 172.20.51.255
         Netmask 0xffff0000 Subnetmask 0xfffffc00
         Ethernet address is 00:00:00:00:00:00
         Metric is 0
         Maximum Transfer Unit size is 485
         1 packets received; 1 packets sent
         0 multicast packets received
         0 multicast packets sent
         0 input errors; 0 output errors
         0 collisions; 0 dropped
    seeq (unit number 1):
         Flags: (0x63) UP BROADCAST ARP RUNNING 10MB HDX DIX
         Type: ETHERNET_CSMACD
         Internet address: 192.168.55.112
         Broadcast address: 192.168.55.255
         Netmask 0xffffff00 Subnetmask 0xffffff00
         Ethernet address is 00:00:17:04:00:62
         Metric is 0
         Maximum Transfer Unit size is 1500
         28 packets received; 16 packets sent
         13 multicast packets received
         0 multicast packets sent
         0 input errors; 0 output errors
         0 collisions; 0 dropped
    lo (unit number 0):
         Flags: (0x8069) UP LOOPBACK MULTICAST ARP RUNNING 10MB HDX DIX
         Type: SOFTWARE_LOOPBACK
         Internet address: 127.0.0.1
         Netmask 0xff000000 Subnetmask 0xff000000
         Metric is 0
         Maximum Transfer Unit size is 32768
         6 packets received; 6 packets sent
         0 multicast packets received
         0 multicast packets sent
         0 input errors; 0 output errors
```

```
         0 collisions; 0 dropped
    seeq (unit number 0):
         Flags: (0x63) UP BROADCAST ARP RUNNING 10MB HDX DIX
         Type: ETHERNET_CSMACD
         Internet address: 192.168.100.112
         Broadcast address: 192.168.100.255
         Netmask 0xffffff00 Subnetmask 0xffffff00
         Ethernet address is 00:00:17:04:00:61
         Metric is 0
         Maximum Transfer Unit size is 1500
         5 packets received; 1 packets sent
         5 multicast packets received
         0 multicast packets sent
         0 input errors; 0 output errors
         0 collisions; 0 dropped

;

    tekelecstp 11-01-07 07:59:20 EST  EAGLE 43.0.0

    NETSTAT command complete
```

```
pass:loc=1105:cmd="netstat -m data"
```

```
    Command Accepted - Processing

    tekelecstp 08-02-07 07:59:56 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    eagle20004 08-02-07 07:59:56 EST  EAGLE 38.0.0
    type        number
    ---------   ------
    FREE    :    9553
    DATA    :      0
    HEADER  :      0
    SOCKET  :      0
    PCB     :      0
    RTABLE  :      0
    HTABLE  :      0
    ATABLE  :      0
    SONAME  :      0
    ZOMBIE  :      0
    SOOPTS  :      0
    FTABLE  :      0
    RIGHTS  :      0
    IFADDR  :      0
    CONTROL :      0
    OOBDATA :      0
    IPMOPTS :      0
    IPMADDR :      0
    IFMADDR :      0
    MRTABLE :      0
    TOTAL   :    9553
    number of mbufs: 9553
    number of times failed to find space: 0
    number of times waited for space: 0
    number of times drained protocols for space: 0
    ------------------
    CLUSTER POOL TABLE
    ------------------
    size     clusters  free      usage
    ---------------------------------
```

```
    64       1000      1000      41
    128      1250      1250      848
    256      1250      1250      0
    512      200       200       0
    1024     100       100       0
    2048     20        20        0
    ----------------------------------

;

    tekelecstp 08-02-07 07:59:56 EST  EAGLE 38.0.0

    NETSTAT command complete
```

```
pass:loc=1105:cmd="netstat -m sys"
```

```
    Command Accepted - Processing

    tekelecstp 08-02-07 08:00:14 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    eagle20004 08-02-07 08:00:14 EST  EAGLE 38.0.0
    type        number
    ---------   ------
    FREE    :    3069
    DATA    :      0
    HEADER  :      0
    SOCKET  :      3
    PCB     :      4
    RTABLE  :     17
    HTABLE  :      0
    ATABLE  :      0
    SONAME  :      0
    ZOMBIE  :      0
    SOOPTS  :      0
    FTABLE  :      0
    RIGHTS  :      0
    IFADDR  :      6
    CONTROL :      0
    OOBDATA :      0
    IPMOPTS :      0
    IPMADDR :      1
    IFMADDR :      0
    MRTABLE :      0
    TOTAL   :    3100
    number of mbufs: 3100
    number of times failed to find space: 0
    number of times waited for space: 0
    number of times drained protocols for space: 0
    ------------------
    CLUSTER POOL TABLE
    ------------------
    size     clusters  free      usage
    ----------------------------------
    64       650       640       12
    128      200       188       33
    256      500       494       6
    512      200       197       24
    ----------------------------------
;

    tekelecstp 08-02-07 08:00:14 EST  EAGLE 38.0.0
```

```
    NETSTAT command complete
```

```
pass:loc=1105:cmd="netstat -m dd"
```

```
    Command Accepted - Processing

    tekelecstp 08-02-07 08:00:24 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-02-07 08:00:24 EST  EAGLE 38.0.0

    END-0 Buffer Pool
    -----------------
    CLUSTER POOL TABLE
    -----------------
    size     clusters  free      usage
    ---------------------------------
    1528     80        77        10
    ---------------------------------

    END-1 Buffer Pool
    -----------------
    CLUSTER POOL TABLE
    -----------------
    size     clusters  free      usage
    ---------------------------------
    1528     80        72        58
    ---------------------------------

;

    tekelecstp 08-02-07 08:00:24 EST  EAGLE 38.0.0

    NETSTAT command complete
```

```
pass:loc=1105:cmd="netstat -p icmp"
```

```
    Command Accepted - Processing

;

    tekelecstp 08-02-07 08:00:29 EST  EAGLE 38.0.0
    0966.1083    SYSTEM       INFO    REPT COND: system alive
                 Report Date:08-02-27  Time:08:00:29
;

    tekelecstp 08-02-27 08:00:29 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-02-27 08:00:29 EST  EAGLE 38.0.0
    ICMP:
        1 call to icmp_error
        0 error not generated because old message was icmp
        Output histogram:
                destination unreachable: 1
        0 message with bad code fields
        0 message < minimum length
        0 bad checksum
        0 message with bad length
```

```
        Input histogram:
                echo reply: 6
                destination unreachable: 1
        0 message response generated
;

    tekelecstp 08-02-07 08:00:29 EST  EAGLE 38.0.0

    NETSTAT command complete
```

```
pass:loc=1105:cmd="netstat -p ip"
```

```
    Command Accepted - Processing

    tekelecstp 08-02-07 08:00:44 EST EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-02-07 08:00:44 EST EAGLE 38.0.0
    IP:
            48 total
             0 badsum
             0 tooshort
             0 toosmall
             0 badhlen
             0 badlen
             0 infragments
             0 fragdropped
             0 fragtimeout
             0 forward
            14 cantforward
             0 redirectsent
             1 unknownprotocol
             0 nobuffers
             0 reassembled
             0 outfragments
             0 noroute

;

    tekelecstp 08-02-07 08:00:44 EST EAGLE 38.0.0

    NETSTAT command complete
```

```
pass:loc=1105:cmd="netstat -p tcp"
```

```
    Command Accepted - Processing

    tekelecstp 08-02-07 08:00:54 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-02-07 08:00:54 EST  EAGLE 38.0.0
    TCP:
        0 packet sent
                0 data packet (0 byte)
                0 data packet (0 byte) retransmitted
                0 ack-only packet (0 delayed)
                0 URG only packet
                0 window probe packet
                0 window update packet
                0 control packet
```

```
        0 packet received
                0 ack (for 0 byte)
                0 duplicate ack
                0 ack for unsent data
                0 packet (0 byte) received in-sequence
                0 completely duplicate packet (0 byte)
                0 packet with some dup. data (0 byte duped)
                0 out-of-order packet (0 byte)
                0 packet (0 byte) of data after window
                0 window probe
                0 window update packet
                0 packet received after close
                0 discarded for bad checksum
                0 discarded for bad header offset field
                0 discarded because packet too short
        0 connection request
        0 connection accept
        0 connection established (including accepts)
        0 connection closed (including 0 drop)
        0 embryonic connection dropped
        0 segment updated rtt (of 0 attempt)
        0 retransmit timeout
                0 connection dropped by rexmit timeout
        0 persist timeout
        0 keepalive timeout
                0 keepalive probe sent
                0 connection dropped by keepalive
        0 pcb cache lookup failed

;

    tekelecstp 08-01-07 08:00:54 EST  EAGLE 38.0.0

    NETSTAT command complete
```

pass:loc=1305:cmd="netstat -p sctp"

```
    Command Accepted - Processing

    tekelecstp 08-01-25 11:20:41 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-25 11:20:41 EST  EAGLE 38.0.0
        ip packets sent..................................... 1474882
            ip packets sent with data chunk................. 306354
            control chunks (excluding retransmissions)...... 1172759
            ordered data chunks (excluding retransmissions).. 1534350
            unordered data chunks (excluding retransmissions) 0
            user messages fragmented due to MTU............. 0
            retransmit data chunks sent..................... 4
            sacks sent...................................... 496302
            send failed..................................... 0
        ip packets received................................. 1816035
            ip packets received with data chunk............. 989957
            control chunks (excluding duplicates)........... 833141
            ordered data chunks (excluding duplicates)...... 989968
            unordered data chunks (excluding duplicates)..... 0
            user messages reassembled....................... 0
            data chunks read................................ 988601
            duplicate tsns received......................... 0
            sacks received.................................. 153763
            gap ack blocks received......................... 0
```

```
            out of the blue................................ 4
            with invalid checksum.......................... 0
        connections established............................ 2954
            by upper layer................................. 0
            by remote endpoint............................. 2958
        connections terminated............................. 4
            ungracefully................................... 2952
            gracefully..................................... 0
        associations dropped due to retransmits............ 0
        consecutive retransmit timeouts.................... 4
        retransmit timer count............................. 6
        fast retransmit count.............................. 0
        heartbeat requests received........................ 330275
        heartbeat acks received............................ 340239
        heartbeat requests sent............................ 340258
        associations supported............................. 50
        milliseconds cookie life at 4-way start-up handshake. 5000
        retransmission attempts allowed at start-up phase.... 8

;

    tekelecstp 08-01-25 11:20:41 EST  EAGLE 38.0.0

    NETSTAT command complete
```

pass:loc=1105:cmd="netstat -p udp"

```
    Command Accepted - Processing

    tekelecstp 08-02-10 08:01:05 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-02-10 08:01:05 EST  EAGLE 38.0.0
    UDP:
        42 total packets
        29 input packets
        13 output packets
        0 incomplete header
        0 bad data length field
        0 bad checksum
        16 broadcasts received with no ports
        0 full socket
        13 pcb cache lookups failed
        1 pcb hash lookup failed

;

    tekelecstp 08-02-10 08:01:05 EST  EAGLE 38.0.0

    NETSTAT command complete
```

pass:loc=1105:cmd="netstat -r"

```
    Command Accepted - Processing

    tekelecstp 08-02-07 08:01:14 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-02-07 08:01:14 EST  EAGLE 38.0.0
```

```
    ROUTE NET TABLE
    destination      gateway             flags  Refcnt  Use          Interface

    ------------------------------------------------------------------------

    0.0.0.0          192.168.55.250       3      0       14           seeq1
    192.168.55.0     192.168.55.112       101    0       0            seeq1
    192.168.100.0    192.168.100.112      101    0       0            seeq0
    ------------------------------------------------------------------------


    ROUTE HOST TABLE
    destination      gateway             flags  Refcnt  Use          Interface

    ------------------------------------------------------------------------

    127.0.0.1        127.0.0.1            5      1       6            lo0
    ------------------------------------------------------------------------

;

    tekelecstp 08-02-07 08:01:14 EST  EAGLE 38.0.0

    NETSTAT command complete
```

pass:loc=1107:cmd="netstat -d 0"

```
    Command Accepted - Processing

    tekelecstp 08-01-30 09:49:57 EST  EAGLE 38.0.0
    6734.1083    SYSTEM        INFO    REPT COND: system alive
                 Report Date:08-01-30  Time:09:49:57
;

    tekelecstp 08-01-30 09:49:57 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-30 09:49:57 EST  EAGLE 38.0.0
    Report Time       = 05-11-30  09:50:01.435
    Card Load Time    = 05-11-29  16:46:49.775
    Last Reset Time   = 05-11-29  16:46:49.775

    overflow = 0          excess coll. = 0          align. error = 0
    crc = 0               underflow = 0             rx collision = 0
    dribble = 0           late coll. = 0            very long = 0
    short fr = 0              coll. = 0             exc defer = 0
    oversize = 0          cs error = 0              rxerror = 132
    rxabort = 0           tx bytes = 60             rx broadcast = 104853
    read err = 0          tx frames = 1             tx broadcast = 1
    rx bytes = 6385476                              tx multicast = 0
    rx frames = 104856
    bit bucket = 0
    term count = 0
    runts = 0

;
```

pass:loc=1107:cmd="netstat -d 0 -m"

```
    Command Accepted - Processing
```

```
    tekelecstp 08-02-02 10:34:59 EST  EAGLE 38.0.0
    6734.1083    SYSTEM        INFO    REPT COND: system alive
                 Report Date:08-02-02  Time:10:34:59
;

    tekelecstp 08-02-02 10:34:59 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-02-02 10:34:59 EST  EAGLE 38.0.0

    Report Time       = 05-12-02  10:35:01.755
    Card Load Time    = 05-11-30  16:14:26.590
    Last Reset Time   = 05-11-30  16:14:26.590

    IP Mulicast Reference Table
         Bit  0  1  2  3  4  5  6  7
      Byte-0  0  0  0  0  0  0  0  0
      Byte-1  0  0  0  0  0  0  0  0
      Byte-2  0  0  0  0  0  0  0  0
      Byte-3  0  0  0  0  0  0  0  0
      Byte-4  0  0  0  0  0  0  0  0
      Byte-5  0  0  0  0  0  0  0  0
      Byte-6  0  0  0  0  0  0  1  0
      Byte-7  0  0  0  0  0  0  0  0

    Mulicast MAC Address List
      MAC Addr             Ref-Cnt   Byte  Bit
      01:00:5e:00:00:01      01      6     6

    Hardware Multicast Filter Register (unit=0)
      00 00 00 00 00 00 40 00
;

    tekelecstp 08-02-02 10:34:59 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:loc=1107:cmd="netstat -d 1 -m"
```

```
    Command Accepted - Processing

    tekelecstp 08-01-30 09:51:07 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-30 09:51:07 EST  EAGLE 38.0.0
    Report Time       = 05-11-30  09:51:07.745
    Card Load Time    = 05-11-29  16:46:49.775
    Last Reset Time   = 05-11-30  09:50:43.510

    Multicast is NOT enabled for unit=1

;

    tekelecstp 08-01-30 09:51:07 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:loc=1107:cmd="netstat -d 0 -p"
```

```
    Command Accepted - Processing

    tekelecstp 08-01-30 09:50:55 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-30 09:50:55 EST  EAGLE 38.0.0

    Register           Value
    --------           ------
    Control        =   0x2100
    Status         =   0x7809
    PHY ID #1      =   0x0016
    PHY ID #2      =   0xf831
    AN Adv.        =   0x01e1
    AN REC         =   0x0000
    Config #1      =   0x0022
    Config #2      =   0xff00
    Status Output  =   0x02c0
    Mask           =   0xfff0

;

    tekelecstp 08-01-30 09:50:55 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:loc=1107:cmd="netstat -d 0 -z"
```

```
    Command Accepted - Processing

    tekelecstp 08-01-30 09:50:43 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-30 09:50:43 EST  EAGLE 38.0.0
    Report Time       = 05-11-30  09:50:43.510
    Card Load Time    = 05-11-29  16:46:49.775
    Last Reset Time   = 05-11-30  09:50:43.510

    overflow = 0          excess coll. = 0          align. error = 0
    crc = 0               underflow = 0             rx collision = 0
    dribble = 0           late coll. = 0            very long = 0
    short fr = 0              coll. = 0             exc defer = 0
    oversize = 0          cs error = 0              rxerror = 0
    rxabort = 0           tx bytes = 0              rx broadcast = 0
    read err = 0          tx frames = 0             tx broadcast = 0
    rx bytes = 0                                    tx multicast = 0
    rx frames = 0
    bit bucket = 0
    term count = 0
    runts = 0

    Driver measurements for unit=0 cleared
;

    tekelecstp 08-01-30 09:50:43 EST  EAGLE 38.0.0

    NETSTAT command complete
```

```
;
```

```
pass:loc=1107:cmd="netstat -d 0 -h"
```

```
    Command Accepted - Processing

    tekelecstp 08-01-30 09:50:12 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-30 09:50:12 EST  EAGLE 38.0.0
    Report Time       = 05-11-30  09:50:12.500
    Card Load Time    = 05-11-29  16:46:49.775
    Last Reset Time   = 05-11-29  16:46:49.775

    Hours Ago     Tx Frames     Tx Errors     Rx Frames     Rx Errors
    1             0             0             6298          0
    2             0             0             6295          0
    3             0             0             6295          0
    4             0             0             6295          0
    5             0             0             6295          0
    6             0             0             6295          0
    7             0             0             6296          0
    8             0             0             6296          0
    9             0             0             6294          0
    10            0             0             6294          0
    11            0             0             6295          0
    12            0             0             6296          0
    13            0             0             6294          0
    14            0             0             6295          0
    15            0             0             6294          0
    16            0             0             5248          0
    17            1             0             4852          0
    18            --            --            --            --
    19            --            --            --            --
    20            --            --            --            --
    21            --            --            --            --
    22            --            --            --            --
    23            --            --            --            --
    24            --            --            --            --

;

    tekelecstp 08-01-30 09:50:12 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:loc=1107:cmd="netstat -d 0 -h 18"
```

```
    Command Accepted - Processing

    tekelecstp 08-01-30 10:20:57 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-30 10:20:57 EST  EAGLE 38.0.0

    Report Time       = 05-11-30  10:20:57.735
    Card Load Time    = 05-11-29  16:46:49.775
```

```
    Last Reset Time   = 05-11-30  09:51:22.480

    NETSTAT:  Invalid hour number, cannot display 18 hour(s) ago.
              Stats have only been saved for 17 hour(s).
;

    tekelecstp 08-01-30 10:20:57 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

`pass:loc=1107:cmd="netstat -d 0 -h 15"`

```
Command Accepted - Processing
;

    tekelecstp 08-01-30 09:50:24 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-30 09:50:24 EST  EAGLE 38.0.0

    Report Time       = 05-11-30  09:50:24.080
    Card Load Time    = 05-11-29  16:46:49.775
    Last Reset Time   = 05-11-29  16:46:49.775

    overflow = 0          excess coll. = 0          align. error = 0
    crc = 0               underflow = 0             rx collision = 0
    dribble = 0           late coll. = 0            very long = 0
    short fr = 0              coll. = 0             exc defer = 0
    oversize = 0          cs error = 0              rxerror = 0
    rxabort = 0           tx bytes = 0              rx broadcast = 6296
    read err = 0          tx frames = 0             tx broadcast = 0
    rx bytes = 383160                               tx multicast = 0
    rx frames = 6294
    bit bucket = 0
    term count = 0
    runts = 0

;

    tekelecstp 08-01-30 09:50:24 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

Output for GPLs on E5-based Cards

`pass:cmd="netstat":loc=1111`

or

`pass:cmd="netstat -h":loc=1111`

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:43:47 EST  EAGLE 38.0.0
    PASS: Command sent to card
;
```

```
    tekelecstp 08-01-19 04:43:47 EST  EAGLE 38.0.0

   Usage: netstat [-a] [-e] [-h] [-m data|sys|dd] [-p icmp|igmp|ip|sctp|tcp|udp]

                  [-i] [-r] [-d 0|1 [-m] [-p] [-z] [-h 1..24] [-f]]
    Options:
        -a        display socket information for all protocols
        -e        display DPL driver measurement data
        -d        display Ethernet driver measurement data
        -h        display this message
        -m        display buffer pool information for 1 of the system pools
        -p        display socket information for 1 of the protocols
        -i        display interface information for all interfaces
        -r        display the route table information

;

    tekelecstp 08-01-19 04:43:47 IST  EAGLE 38.0.0

    NETSTAT command complete

;
```

pass:cmd="netstat -a":loc=1111

```
Command Accepted - Processing

    tekelecstp 08-06-21 16:26:30 IST  EAGLE5 39.0.0
    pass:cmd="netstat -a":loc=1105
    Command entered at terminal #3.
;

    tekelecstp 08-06-21 16:26:30 IST  EAGLE5 39.0.0
    PASS: Command sent to card
;

    tekelecstp 08-06-21 16:26:30 IST  EAGLE5 39.0.0
    SDS Shell Output

    -> tklc_inetstatShow
    PCB      Proto Recv-Q     Send-Q      Local Address         (state)
                                          Foreign Address
    -------- ----- ---------- ----------  -------------------- -------
    2354720  TCP            0          0  0.0.0.0.23            LISTEN
                                          0.0.0.0.0
    232cd60  UDP     16921935          0  0.0.0.0.161
                                          0.0.0.0.0
    232cc20  UDP            0          0  127.0.0.1.1026
                                          127.0.0.1.17185
    232cae0  UDP     16921930          0  0.0.0.0.17185
                                          0.0.0.0.0
    232c9a0  UDP     16921922          0  0.0.0.0.68
                                          0.0.0.0.0
    232c5e0  UDP     16921912          0  127.0.0.1.1024
                                          0.0.0.0.0
    232c220  UDP            0          0  127.0.0.1.1025
                                          127.0.0.1.1024
    value = 1 = 0x1

;

    tekelecstp 08-06-21 16:26:30 IST  EAGLE5 39.0.0
```

```
;

    tekelecstp 08-06-21 16:26:30 IST  EAGLE5 39.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -e":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:45:51 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:45:51 EST  EAGLE 38.0.0

    Dual Port Link Statistics
    In Ucast Octets = 0                 In Ucast Pkts = 0
    Out Ucast Octet = 0                 Out Ucast Pkts = 0
    Out Bcast Octets = 0                Out Bcast Pkts = 0
    Out Ucast Octets Err = 0            Out Ucast Pkts Err = 0
    Out Bcast Octet Err = 0             Out Bcast Pkts Err = 0
    Invaled copy lenths = 0             IP Frame too big = 0
    No Mbufs Avail = 0                  No System bufs Avail = 0
    TVG Func Err = 0                    System buf Err = 0
    Inbound too big = 0

;

    tekelecstp 08-01-19 04:45:51 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

Output for the `netstat -i` command varies based on the card type. The GEI interfaces are the ports that carry signaling and monitoring traffic external to the EAGLE. The number of these ports varies with the IP connection. Information for all 4 GEI interfaces is displayed on only FC Capable cards as shown below.

The interfaces listed in the netstat - i output correspond to a card's ports as follows:

- For Signaling GPLs (IPSG, IPLIMx, IPGWx):
- gei 2 = IP signaling interface A
- gei 0 = IP signaling interface B
- gei 3 = Fast Copy interface A
- gei 1 = Fast Copy interface B
- DPLend = pseudo-IP interface used only by network cards for STC-style Integrated Monitoring
- LO = local loopback interface

For SCCPx GPLs:

- gei 0 = IP interface A
- gei 1 = IP interface B
- DPLend = pseudo-IP interface used only by network cards for STC-style Integrated Monitoring
- LO = local loopback interface

- BOND = interface formed by bonding the two IP interfaces

```
pass:cmd="netstat -i":loc=1111
```

```
    e1030703 09-12-13 19:15:31 EST  EAGLE 42.0.0
    pass:loc=1111:cmd="netstat -i"
    Command entered at terminal #17.
;

    e1030703 09-12-13 19:15:31 EST  EAGLE 42.0.0
    PASS: Command sent to card
;
Command Accepted - Processing
    e1030703 09-12-13 19:15:38 EST  EAGLE 42.0.0

    NETSTAT command complete

;
Command Executed
    e1030703 09-12-13 19:15:31 EST  EAGLE 42.0.0
    SDS Shell Output

    -> tklc_ifShow
    lo (unit number 0):
         Flags: (0x48049) UP LOOPBACK MULTICAST TRAILERS ARP RUNNING INET_UP
         Type: SOFTWARE_LOOPBACK
         inet: 127.0.0.1
         Netmask 0xff000000 Subnetmask 0xff000000
         Metric is 0
         Maximum Transfer Unit size is 1536
         0 packets received; 1 packets sent
         0 multicast packets received
         0 multicast packets sent
         0 input errors; 0 output errors
         0 collisions; 0 dropped
         0 output queue drops
    DPLend (unit number 0):
         Flags: (0x60043) UP BROADCAST ARP RUNNING INET_UP
         Type: ETHERNET_CSMACD
         inet: 172.20.48.249
         Broadcast address: 172.20.51.255
         Netmask 0xffff0000 Subnetmask 0xffffc00
         Ethernet address is 00:00:00:00:00:f9
         Metric is 0
         Maximum Transfer Unit size is 485
         84 octets received
         56 octets sent
         2 unicast packets received
         2 unicast packets sent
         0 non-unicast packets received
         0 non-unicast packets sent
         0 incoming packets discarded
         0 outgoing packets discarded
         0 incoming errors
         0 outgoing errors
         0 unknown protos
         0 collisions; 0 dropped
         0 output queue drops
    gei (unit number 2):
         Flags: (0x70043) UP BROADCAST ARP RUNNING INET_UP
         PHY Flags: (0x12212) AUTONEG 100MB FDX DIX
         Type: ETHERNET_CSMACD
         inet: 192.168.54.117
         Broadcast address: 192.168.54.255
```

```
          Netmask 0xffffff00 Subnetmask 0xffffff00
          Ethernet address is 00:00:17:0d:46:bc
          Metric is 0
          Maximum Transfer Unit size is 1500
          320 octets received
          128 octets sent
          0 unicast packets received
          0 unicast packets sent
          0 multicast packets received
          0 multicast packets sent
          5 broadcast packets received
          2 broadcast packets sent
          0 incoming packets discarded
          0 outgoing packets discarded
          0 incoming errors
          0 outgoing errors
          0 unknown protos
          0 collisions; 0 dropped
          0 output queue drops
     gei (unit number 0):
          Flags: (0x30002) DOWN BROADCAST ARP
          PHY Flags: (0x2221) AUTONEG DIX
          Type: ETHERNET_CSMACD
          inet: 192.168.51.42
          Broadcast address: 192.168.51.255
          Netmask 0xffffff00 Subnetmask 0xffffff00
          Ethernet address is 00:00:17:0d:48:64
          Metric is 0
          Maximum Transfer Unit size is 1500
          0 octets received
          64 octets sent
          0 unicast packets received
          0 unicast packets sent
          0 multicast packets received
          0 multicast packets sent
          0 broadcast packets received
          1 broadcast packets sent
          0 incoming packets discarded
          0 outgoing packets discarded
          0 incoming errors
          0 outgoing errors
          0 unknown protos
          0 collisions; 0 dropped
          0 output queue drops
     gei (unit number 3):
          Flags: (0x78042) DOWN BROADCAST MULTICAST ARP RUNNING INET_UP
          PHY Flags: (0x2224) AUTONEG DIX
          Type: ETHERNET_CSMACD
          inet: 172.21.48.249
          Broadcast address: 172.21.49.255
          Netmask 0xffff0000 Subnetmask 0xfffffe00
          Ethernet address is 00:00:17:0d:46:bd
          Metric is 0
          Maximum Transfer Unit size is 2000
          0 octets received
          0 octets sent
          0 unicast packets received
          0 unicast packets sent
          0 multicast packets received
          0 multicast packets sent
          0 broadcast packets received
          0 broadcast packets sent
          0 incoming packets discarded
          0 outgoing packets discarded
```

```
          0 incoming errors
          0 outgoing errors
          0 unknown protos
          0 collisions; 0 dropped
          0 output queue drops
    gei (unit number 1):
          Flags: (0x78042) DOWN BROADCAST MULTICAST ARP RUNNING INET_UP
          PHY Flags: (0x2221) AUTONEG DIX
          Type: ETHERNET_CSMACD
          inet: 172.22.48.249
          Broadcast address: 172.22.49.255
          Netmask 0xffff0000 Subnetmask 0xfffffe00
          Ethernet address is 00:00:17:0d:48:65
          Metric is 0
          Maximum Transfer Unit size is 2000
          0 octets received
          0 octets sent
          0 unicast packets received
          0 unicast packets sent
          0 multicast packets received
          0 multicast packets sent
          0 broadcast packets received
          0 broadcast packets sent
          0 incoming packets discarded
          0 outgoing packets discarded
          0 incoming errors
          0 outgoing errors
          0 unknown protos
          0 collisions; 0 dropped
          0 output queue drops
    value = 26 = 0x1a
;
    e1030703 09-10-13 19:15:38 EST  EAGLE 42.0.0

;

    e1030703 09-10-13 19:15:38 EST  EAGLE 42.0.0

    NETSTAT command complete

;
```

This example displays BOND and GEI interfaces. Bond interfaces are supported by only E5-SM4G and E5-SM8G-B cards.

```
pass:cmd="netstat -i":loc=1111
```

```
    e1030703 09-12-13 19:15:31 EST  EAGLE 42.0.0
    pass:loc=1111:cmd="netstat -i"
    Command entered at terminal #17.
;

    e1030703 09-12-13 19:15:31 EST  EAGLE 42.0.0
    PASS: Command sent to card
;
Command Accepted - Processing
    e1030703 09-12-13 19:15:38 EST  EAGLE 42.0.0

    NETSTAT command complete

;
Command Executed
    e1030703 09-12-13 19:15:31 EST  EAGLE 42.0.0
```

```
SDS Shell Output

-> tklc_ifShow
lo (unit number 0):
     Flags: (0x48049) UP LOOPBACK MULTICAST TRAILERS ARP RUNNING INET_UP
     Type: SOFTWARE_LOOPBACK
     inet: 127.0.0.1
     Netmask 0xff000000 Subnetmask 0xff000000
     Metric is 0
     Maximum Transfer Unit size is 1536
     0 packets received; 1 packets sent
     0 multicast packets received
     0 multicast packets sent
     0 input errors; 0 output errors
     0 collisions; 0 dropped
     0 output queue drops
DPLend (unit number 0):
     Flags: (0x20043) UP BROADCAST ARP RUNNING
     Type: ETHERNET_CSMACD
     Ethernet address is 00:00:00:00:00:00
     Metric is 0
     Maximum Transfer Unit size is 485
     0 octets received
     0 octets sent
     0 unicast packets received
     0 unicast packets sent
     0 non-unicast packets received
     0 non-unicast packets sent
     0 incoming packets discarded
     0 outgoing packets discarded
     0 incoming errors
     0 outgoing errors
     0 unknown protos
     0 collisions; 0 dropped
     0 output queue drops
gei (unit number 0):
     Flags: (0x78042) DOWN BROADCAST MULTICAST ARP RUNNING INET_UP
     PHY Flags (0x2022) 100MB HDX DIX
     Type: ETHERNET_CSMACD
     inet: 192.168.122.4
     Broadcast address: 192.168.122.255
     Netmask 0xffffff00 Subnetmask 0xffffff00
     Ethernet address is 00:00:17:0d:0f:3a
     Metric is 0
     Maximum Transfer Unit size is 1500
     0 octets received
     0 octets sent
     0 unicast packets received
     0 unicast packets sent
     0 multicast packets received
     0 multicast packets sent
     0 broadcast packets received
     0 broadcast packets sent
     0 incoming packets discarded
     0 outgoing packets discarded
     0 incoming errors
     0 outgoing errors
     0 unknown protos
     0 collisions; 0 dropped
     0 output queue drops
gei (unit number 1):
     Flags: (0x78042) DOWN BROADCAST MULTICAST ARP RUNNING INET_UP
     PHY Flags (0x2021) 10MB HDX DIX
     Type: ETHERNET_CSMACD
```

```
          inet: 192.168.121.4
          Broadcast address: 192.168.121.255
          Netmask 0xffffff00 Subnetmask 0xffffff00
          Ethernet address is 00:00:17:0d:0f:3b
          Metric is 0
          Maximum Transfer Unit size is 1500
          0 octets received
          0 octets sent
          0 unicast packets received
          0 unicast packets sent
          0 multicast packets received
          0 multicast packets sent
          0 broadcast packets received
          0 broadcast packets sent
          0 incoming packets discarded
          0 outgoing packets discarded
          0 incoming errors
          0 outgoing errors
          0 unknown protos
          0 collisions; 0 dropped
          0 output queue drops
     Bond (unit number 0):
          Flags: (0x60043) UP BROADCAST ARP RUNNING INET_UP
          Type: ETHERNET_CSMACD
          inet: 192.168.123.4
          Broadcast address: 192.168.123.255
          Netmask 0xffffff00 Subnetmask 0xffffff00
          Ethernet address is 00:00:00:00:00:00
          Metric is 0
          Maximum Transfer Unit size is 485
          0 octets received
          0 octets sent
          0 unicast packets received
          0 unicast packets sent
          0 non-unicast packets received
          0 non-unicast packets sent
          0 incoming packets discarded
          0 outgoing packets discarded
          0 incoming errors
          0 outgoing errors
          0 unknown protos
          0 collisions; 0 dropped
          0 output queue drops
     value = 26 = 0x1a

;

     e1030703 09-12-13 19:15:38 EST  EAGLE 42.0.0
;

     e1030703 09-12-13 19:15:38 EST  EAGLE 42.0.0

     NETSTAT command complete

;
```

```
pass:cmd="netstat -m data":loc=1111
```

```
     Command Accepted - Processing

     tekelecstp 08-01-19 04:46:24 EST  EAGLE5 38.0.0
     PASS: Command sent to card
;
```

```
    tekelecstp 08-01-19 04:46:24 EST  EAGLE5 38.0.0
    SDS Shell Output
    -> netStackDataPoolShow
    type        number
    ---------   ------
    FREE    :    37587
    DATA    :     23
    HEADER  :     22
    SOCKET  :      0
    PCB     :      0
    RTABLE  :      0
    HTABLE  :      0
    ATABLE  :      0
    SONAME  :      0
    ZOMBIE  :      0
    SOOPTS  :      0
    FTABLE  :      0
    RIGHTS  :      0
    IFADDR  :      0
    CONTROL :      0
    OOBDATA :      0
    IPMOPTS :      0
    IPMADDR :      0
    IFMADDR :      0
    MRTABLE :      0
    TAG     :      0
    TOTAL   :    37632
    number of mbufs: 37632
    number of times failed to find space: 0
    number of times waited for space: 0
    number of times drained protocols for space: 0
    ____________________
    CLUSTER POOL TABLE
   ------------------------------------------------------------------------------

    size      clusters  free      usage     minsize   maxsize   avgsize
   ------------------------------------------------------------------------------

    64        6336      6336      33        4         56        13
    128       6336      6313      712952418 128       128       1
    256       6336      6336      0         0         0         0
    512       10240     10218     712654339 293       293       3
    1024      1024      1024      0         0         0         0
    2048      1024      1024      0         0         0         0
   ------------------------------------------------------------------------------

    value = 80 = 0x50 = 'P'
;

    tekelecstp 08-01-19 04:46:24 EST  EAGLE5 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -m sys":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:46:44 EST  EAGLE 38.0.0
    PASS: Command sent to card
;
```

```
    tekelecstp 08-01-19 04:46:44 EST  EAGLE 38.0.0
    SDS Shell Output

    -> netStackSysPoolShow
    type        number
    ---------   ------
    FREE    :    3696
    DATA    :      4
    HEADER  :      0
    SOCKET  :      0
    PCB     :      0
    RTABLE  :      0
    HTABLE  :      0
    ATABLE  :      0
    SONAME  :      0
    ZOMBIE  :      0
    SOOPTS  :      0
    FTABLE  :      0
    RIGHTS  :      0
    IFADDR  :      0
    CONTROL :      0
    OOBDATA :      0
    IPMOPTS :      0
    IPMADDR :      0
    IFMADDR :      0
    MRTABLE :      0
    TAG     :      0
    TOTAL   :    3700
    number of mbufs: 3700
    number of times failed to find space: 0
    number of times waited for space: 0
    number of times drained protocols for space: 0
    _____________________
    CLUSTER POOL TABLE
   ____________________________________________________________________________

    size      clusters  free      usage     minsize   maxsize   avgsize
    ----------------------------------------------------------------------------

    20        500       477       28        8         20        16
    44        500       495       5         24        32        35
    96        500       487       13        48        96        65
    172       500       490       10        116       160       150
    292       500       487       1059      176       256       0
    664       500       486       1064      384       592       1
    1144      100       95        5         1144      1144      228
    ----------------------------------------------------------------------------

    value = 80 = 0x50 = 'P'
;

    tekelecstp 08-01-19 04:46:47 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -m dd":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:47:03 EST  EAGLE 38.0.0
```

```
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:47:03 EST  EAGLE 38.0.0
    END-0 Buffer Pool
    ------------------
    CLUSTER POOL TABLE
    ------------------
    size clusters  free      usage
    ---------------------------------------
    1536 800       480       0
    ---------------------------------------

    END-1 Buffer Pool
    ------------------
    CLUSTER POOL TABLE
    ------------------
    size clusters  free      usage
    ---------------------------------------
    1536 800       640       0
    ---------------------------------------

;

    tekelecstp 08-01-19 04:47:05 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -p icmp":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:47:13 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:47:13 EST  EAGLE 38.0.0
    SDS Shell Output

    -> icmpstatShow
    ICMP:
        0 call to icmp_error
        0 error not generated because old message was icmp
        Output histogram:
                echo: 1042
        0 message with bad code fields
        0 message < minimum length
        0 bad checksum
        0 message with bad length
        Input histogram:
                echo reply: 1042
        0 message response generated
    value = 30 = 0x1e

;

    tekelecstp 08-01-19 04:47:13 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -p igmp":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:47:31 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:47:31 EST  EAGLE 38.0.0
    SDS Shell Output

    -> igmpstatShow
    IGMP:
        0 invalid queries received
        0 invalid reports received
        0 bad checksums received
        0 reports for local groups received
        0 membership queries received
        0 membership reports received
        0 short packets received
        0 total messages received
        0 membership reports sent
    value = 27 = 0x1b

;

    tekelecstp 08-01-19 04:47:31 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -p ip":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:47:50 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:47:50 EST  EAGLE 38.0.0
    SDS Shell Output

    -> ipstatShow
                  total  392695394
                 badsum          0
              tooshort          0
              toosmall          0
               badhlen          0
                badlen          0
           infragments          0
           fragdropped          0
           fragtimeout          0
               forward          0
           fastforward          0
           cantforward          0
          redirectsent          0
       unknownprotocol          0
             delivered  392695394
              localout  712875071
             nobuffers          0
           reassembled          0
            fragmented          0
```

```
            outfragments          0
                cantfrag          0
              badoptions          0
                 noroute          0
                 badvers          0
                  rawout          0
                 toolong          0
               notmember          0
                   nogif          0
                 badaddr          0

    value = 1 = 0x1

;

    tekelecstp 08-01-19 04:47:50 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -p tcp":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:48:10 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:48:10 EST  EAGLE 38.0.0
    SDS Shell Output

    -> tcpstatShow
    TCP:
        712802525 packets sent
                712802521 data packets (-1599247397 bytes)
                0 data packet (0 byte) retransmitted
                2 ack-only packets (0 delayed)
                0 URG only packet
                0 window probe packet
                0 window update packet
                3 control packets
        392101363 packets received
                392101363 acks (for -1599247397 bytes)
                0 duplicate ack
                0 ack for unsent data
                0 packet (0 byte) received in-sequence
                0 completely duplicate packet (0 byte)
                0 packet with some dup. data (0 byte duped)
                0 out-of-order packet (0 byte)
                0 packet (0 byte) of data after window
                0 window probe
                0 window update packet
                0 packet received after close
                0 discarded for bad checksum
                0 discarded for bad header offset field
                0 discarded because packet too short
        3 connection requests
        0 connection accept
        1 connection established (including accepts)
        2 connections closed (including 0 drop)
        0 embryonic connection dropped
        392101363 segments updated rtt (of 44575243 attempts)
```

```
        1 retransmit timeout
                0 connection dropped by rexmit timeout
        0 persist timeout
        7 keepalive timeouts
                0 keepalive probe sent
                0 connection dropped by keepalive
        0 pcb cache lookup failed
    value = 27 = 0x1b
;

    tekelecstp 08-01-19 04:48:10 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -p sctp":loc=1106
```

```
    Command Accepted - Processing

    tekelecstp 08-01-24 05:41:04 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-24 05:41:04 EST  EAGLE 38.0.0
    ip packets sent..................................... 214
        ip packets sent with data chunk................. 8
        control chunks (excluding retransmissions)..... 211
        ordered data chunks (excluding retransmissions).. 8
        unordered data chunks (excluding retransmissions) 0
        user messages fragmented due to MTU............. 0
        retransmit data chunks sent..................... 0
        sacks sent...................................... 9
        send failed..................................... 0
    ip packets received................................. 215
        ip packets received with data chunk............. 8
        control chunks (excluding duplicates)........... 211
        ordered data chunks (excluding duplicates)..... 8
        unordered data chunks (excluding duplicates)..... 0
        user messages reassembled....................... 0
        data chunks read................................ 8
        duplicate tsns received......................... 0
        sacks received.................................. 9
        gap ack blocks received......................... 0
        out of the blue................................. 0
        with invalid checksum........................... 0
    connections established............................. 1
        by upper layer.................................. 0
        by remote endpoint.............................. 1
    connections terminated.............................. 0
        ungracefully.................................... 0
        gracefully...................................... 0
    associations dropped due to retransmits............. 0
    consecutive retransmit timeouts..................... 0
    retransmit timer count.............................. 0
    fast retransmit count............................... 0
    heartbeat requests received......................... 99
    heartbeat acks received............................. 99
    heartbeat requests sent............................. 99
    associations supported.............................. 16
    milliseconds cookie life at 4-way start-up handshake. 5000
    retransmission attempts allowed at start-up phase.... 10
```

```
;

    tekelecstp 08-01-24 05:41:04 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -p udp":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:48:40 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:48:40 EST  EAGLE 38.0.0
    SDS Shell Output

    -> udpstatShow
    UDP:
        714029 total packets
        612012 input packets
        102017 output packets
        0 incomplete header
        0 bad data length field
        0 bad checksum
        510042 broadcasts received with no ports
        0 full socket
        0 pcb cache lookup failed
        0 pcb hash lookup failed
    value = 26 = 0x1a

;

    tekelecstp 08-01-19 04:48:40 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

```
pass:cmd="netstat -r":loc=1112
```

```
    Command Accepted - Processing

    tekelecstp 08-02-19 05:58:13 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-02-19 05:58:13 EST  EAGLE 38.0.0
    SDS Shell Output

    -> tklc_routeShow

    ROUTE NET TABLE
    destination      gateway              flags  Refcnt  Use       Interface
    ------------------------------------------------------------------------
    172.20.48.0      172.20.48.250        33554689  0       0         DPLend0
    192.168.55.0     192.168.55.252       33554689  2       0         gei2
    ------------------------------------------------------------------------

    ROUTE HOST TABLE
```

```
    destination      gateway              flags  Refcnt  Use       Interface
    -------------------------------------------------------------------------
    127.0.0.1        127.0.0.1            35651589  3       15        lo0
    192.168.99.100   192.168.55.211       33554439  0       0         gei2
    -------------------------------------------------------------------------
    value = 0 = 0x0

;

    tekelecstp 08-02-19 05:58:13 EST  EAGLE 38.0.0

    NETSTAT command
```

pass:cmd="netstat -d 0":loc=1111

```
Command Accepted - Processing

    tekelecstp 08-01-19 04:49:16 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:49:16 EST  EAGLE 38.0.0

    Report Time       = 00-00-00  00:00:59.001
    Card Load Time    = 00-00-00  00:00:09.905
    Last Reset Time   = 00-00-00  00:00:09.905

    crc err = 0             align err = 0             symbol err = 0
    rx err = 0              missed pkt = 0            sequence err = 0
    cr ex er = 0            rx len err = 0            rx no buf = 0
    rx total = 243721       rx undersz = 0            rx frag = 0
    good pkt rx= 243721     rx bcast = 11652          rx mcast = 0
    rx oversz = 0           rx jabber = 0             collision = 0
    tx total = 381079       late coln = 0             tx underun = 0
    good pkt tx= 381079     tx bcast = 0              tx mcast = 0
    defer count = 0                          tx no crs = 0
    good octets rx = 16988038                total octets rx = 16988038
    good octets tx = 137538057               total octets tx = 137538057

;

    tekelecstp 08-01-19 04:49:16 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

pass:cmd="netstat -d 0 -z":loc=1111

```
    tekelecstp 08-01-19 04:50:07 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:50:07 EST  EAGLE 38.0.0

    Driver measurements for unit 0 cleared
;

    tekelecstp 08-01-19 04:50:07 EST  EAGLE 38.0.0

    NETSTAT command complete
```

```
;
```

```
pass:cmd="netstat -d 0 -f":loc=1111
```

```
    Command Accepted - Processing

    tekelecstp 08-01-19 04:50:22 EST  EAGLE 38.0.0
    PASS: Command sent to card
;

    tekelecstp 08-01-19 04:50:22 EST  EAGLE 38.0.0

    Report Time       = 00-00-00  00:01:01.335
    Card Load Time    = 00-00-00  00:00:09.905
    Last Reset Time   = 00-00-00  00:00:46.665

    crc err = 0            align err = 0            symbol err = 0
    rx err = 0             missed pkt = 0           sequence err = 0
    cr ex er = 0           rx len err = 0           rx no buf = 0
    rx total = 13562       rx undersz = 0           rx frag = 0
    good pkt rx= 13562     rx bcast = 149           rx mcast = 0
    rx oversz = 0          rx jabber = 0            collision = 0
    tx total = 22019       late coln = 0            tx underun = 0
    good pkt tx= 22019     tx bcast = 0             tx mcast = 0
    single col = 0         excess coln = 0          multi colsn = 0
    pkt rx  64 = 179       pkt rx  127 = 13383      pkt rx  255 = 0
    pkt rx 511 = 0         pkt rx 1023 = 0          pkt rx 1522 = 0
    pkt tx  64 = 30        pkt tx  127 = 0          pkt tx  255 = 0
    pkt tx 511 = 21989     pkt tx 1023 = 0          pkt tx 1522 = 0
    tcp cxt tx = 0         rx FIFO head = 0x00000caf rx FIFO tail = 0x00000caf

    rx FIFO pc = 0         rx FIFO hs = 0x00000caf   rx FIFO ts = 0x00000caf
    tcp tx fc = 0          tx FIFO head = 0x00001f30 tx FIFO tail = 0x00001f30

    tx FIFO pc = 0         tx FIFO hs = 0x00001f30   tx FIFO ts = 0x00001f30
    XON rcv = 0            XON xmit = 0              XOFF rcv = 0
    XOFF tx = 0                          unsupport FC = 0
    defer count = 0                      tx no crs = 0
    good octets rx = 948266              total octets rx = 948266
    good octets tx = 7983927             total octets tx = 7983927

;

    tekelecstp 08-01-19 04:50:22 EST  EAGLE 38.0.0
    5463.1083    SYSTEM        INFO    REPT COND: system alive
                 Report Date:02-01-19  Time:04:50:24

;

    tekelecstp 08-01-19 04:50:22 EST  EAGLE 38.0.0

    NETSTAT command complete

;
```

Related Commands

None.

nslookup Nameserver Lookup

This command returns the IP address for a given hostname, or returns a hostname for a given IP address.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `nslookup` command has the option destination. An IP address or hostname can be specified for the destination, as in the commands `nslookup 192.168.100.3` and `nslookup dcm1107a`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

destination

The destination can be either an IP address or hostname.

IP address

The IP address is a TCP/IP address expressed in standard "dot notation." IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.9.200.44*, where *192.9.200* is the network number and *44* is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

hostname

Hostname. The logical name assigned to the device with the IP address indicated.

Range:

a-z, *A–Z*, *0–9*, *-*, *.*

(any string of characters beginning with a letter and comprising up to 60 characters in length)

-h

This option provides help information for the command.

Example

```
nslookup 192.9.200.44
```

```
nslookup nc.tekelec.com
```

Dependencies

The actual `nslookup` text string must be followed by a destination (either a hostname or IP address).

Whether a host is found depends on the configuration of the host table and domain name servers.

Notes

The `nslookup` command is executed through the `pass` command.

Output

`pass:loc=1105:cmd="nslookup"`

or

`pass:loc=1105:cmd="nslookup -h"`

```
Command Accepted - Processing
    rlghncxa03w 04-07-27 08:43:21 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="nslookup"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:43:21 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:43:21 EST  EAGLE5 31.6.0

    Usage: nslookup [hostname|ipaddr]

    Options:
        hostname  String name
        ipaddr    d.d.d.d
;
    rlghncxa03w 04-07-27 08:43:22 EST  EAGLE5 31.6.0
    NSLOOKUP command complete
;
```

`pass:loc=1105:cmd="nslookup dcm1107a"`

```
Command Accepted - Processing
    rlghncxa03w 04-07-27 08:43:46 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="nslookup dcm1107a"
    Command entered at terminal #1.
;

    rlghncxa03w 04-07-27 08:43:46 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 08:43:46 EST  EAGLE5 31.6.0

    NSLOOKUP command in progress

;
    rlghncxa03w 04-07-27 08:43:46 EST  EAGLE5 31.6.0

    Configured Domain Name Data

    DNSA = 192.168.100.3
    DNSB = 0.0.0.0
    Domain Name = nc.tekelec.com
    Search Order = LOCAL First
```

```
    Resolving host name - dcm1107a

    Host Table entry
        dcm1107a - 192.168.100.113
    DNS Server - No entry exists

    Currently using Host Table entry

    NSLOOKUP command complete
;
```

```
pass:loc=1105:cmd="nslookup 198.89.40.60"
```

```
Command Accepted - Processing

    rlghncxa03w 04-07-27 13:21:49 EST EAGLE5 31.6.0
    pass: loc=1105: cmd="nslookup 198.89.40.60"
    Command entered at terminal #1.
;

    rlghncxa03w 04-07-27 13:21:49 EST EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 13:21:49 EST EAGLE5 31.6.0

    NSLOOKUP command in progress


;

    rlghncxa03w 04-07-27 13:21:49 EST EAGLE5 31.6.0

    Configured Domain Name Data

    DNSA = 198.89.40.60
    DNSB = 0.0.0.0
    Domain Name = nc.tekelec.com
    Search Order = LOCAL First

    Resolving IP address - 198.89.40.60

    Host Table - No entry exists
    DNS Server
        tekral.nc.tekelec.com - 198.89.40.60

    Currently using DNS Server entry


    NSLOOKUP command complete
```

Related Commands

None.

This command is used to maintain per-translation statistics and to test Point Code and CIC Translation (PCT) functionality. The command can use Stats mode to reset or display per-translation statistics or Test mode to test PCT behavior.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

-h

This option is used to provide help information for the command.

The following options are common to both Stats mode and Test mode:

-p pctype

Point Code Type. This option applies to all point codes in the option list.

Range:

ansi, itui, itun

Default

ansi

The following options apply to only Stats mode:

-a realpc

Real Point Code

-c cicr

CIC range. This option can be specified only if SI is 4, 5, or 13.

Range:

The option can be in one of these forms:

- wildcard(*)
- *ecics-ecice:rcics-rcice*, e.g., *5-10:15-20*
- *ecics:rcics* (e.g., *5:6*, which is equivalent to *5-5:6-6*)

-e epc

Emulated Point Code

-f fpc

Filter Point Code. This option can be a wildcard (*).

-l

List the stats for the selected rules. The -e or -a option must be supplied. Both of these options can be specified.

-r

Resets the stats for selected rules. If no other options are specified, then this option resets stats on all rules. If other options are specified, then the -e or -a option must be specified.

-s si

Range:

0, 3, 4, 5, 13, or wildcard (*)

-u ssn

Subsystem Number. The si=3 option must be specified before this option can be specified. This option can be a wildcard (*)

The following options apply only to Test mode.

-c cic

CIC in simulated MSU. If a value of 4, 5, or 13 is specified for the si option, then the -c must be specified.

-d dpc

Destination Point Code in simulated MSU.

-o opc

Originating Point Code in simulated MSU.

-s si

SI in simulated MSU.

-u ssn

Subsystem number in CgPA and CdPA in simulated MSU. The si=3 option must be specified before the -u option can be specified. If the -u is not specified, and the si=3 is specified, then the route on SSN is off.

```
pass:loc=1201:cmd="pct -h"
```

```
pass:loc=1201:cmd=”pct –m stats –r –e 4-3-1”
```

```
pass:loc=1201:cmd="pct -m test -d 4-3-1 -o 7-2-30 -s 3 -u 26"
```

Dependencies

None

Notes

None

Output

This example shows a help report:

```
pass:loc=1201:cmd="pct -h"
```

```
Command Accepted – Processing
    Usage:
      pct -m stats [-l | -r] [-p pctype] [-e epc] [-f fpc] [-a realpc] [-s si]
[-u ssn] [-c cicr]
      pct -m test [-p pctype] -d dpc -o opc -s si [-c cic] [-u ssn]
```

```
  pct -h
Modes:
  stats - reset or display per-rule stats
  test  - test PCT behavior for a message with the specified field values
Common Options:
  -p   pctype is ANSI, ITUI, or ITUN
stats Mode Options:
  -r   reset the stats for selected rules
       with no other options, resets stats on all rules
       if other options present, -e or -a must be supplied
  -l   list the stats for selected rules (default)
       the -e or -a option must be supplied
       both -e and -a may be supplied
  -e   emulated point code
  -a   real point code
  -c   cicr is in these forms:
         * (see Note 1)
         ecics-ecice:rcics-rcice, e.g., 5-10:15-20
         ecics:rcics, e.g., 5:6 which is equiv to 5-5:6-6
       allowed only if SI is 4, 5, or 13
  -f   filter pc; may be * (see Note 1)
  -s   si; can be 0, 3, 4, 5, 13, or * (see Note 1)
  -u   ssn; may be * (see Note 1)
       allowed only if SI is 3
test Mode Options:
  -d   DPC in simulated MSU
  -o   OPC in simulated MSU
  -s   SI in simulated MSU
  -u   SSN in CgPA and CdPA in simulated MSU;
       if absent and si is 3, indicates that route on SSN is off;
       allowed only if SI is 3
  -c   CIC in simulated MSU;
       required if SI is 4, 5, or 13
Notes:
  1. an explicit * will match only with rule containing a wildcard; to match

     on wildcard or a specific value, do not specify the associated option
```

Stats Mode

With the -l option, all matching translations are displayed along with the following three statistics for each translation:

- DPCLKP – Number of successful translations of the DPC and/or CIC of a message (the number of successful DPC lookups).
- OPCLKP – Number of successful translations of the OPC and/or CIC of a message (the number of successful OPC lookups).
- MSUDISC – Number of messages discarded after successfully translating the DPC of a message from an emulated point code to a real point code, but where the real point code is unreachable.

The IDX (index) column is the unique row number of the entry in the PCT table. The index for a particular translation is the same across all cards.

The output for a single translation consists of two or three lines.

For translations with an SI of 4, 5, or 13, the CIC range field is displayed only for translations with a specific value for the CIC range.

This example lists all translations with an EPC of 4-3-1 (ANSI):

```
pass:loc=1201:cmd="pct –m stats –l –e 4-3-1"
```

```
Command Accepted – Processing

    idx            epc            rpc            fpc si ssn
      6    004-003-001    007-003-001    007-002-030  3  24
        dpclkp: 0  opclkp: 0  msudisc: 0
      7    004-003-001    007-003-002    007-002-030  3  26
        dpclkp: 0  opclkp: 0  msudisc: 0
      8    004-003-001    007-003-006    007-002-030  5 ---
        ecic: 100-105  rcic: 200-205
        dpclkp: 0  opclkp: 0  msudisc: 0
      9    004-003-001    007-003-011    007-002-*    3  24
        dpclkp: 0  opclkp: 0  msudisc: 0
     10    004-003-001    007-003-016    007-*-*      3  24
        dpclkp: 0  opclkp: 0  msudisc: 0
     11    004-003-001    007-003-021    007-002-030  3   *
        dpclkp: 0  opclkp: 0  msudisc: 0
     12    004-003-001    007-003-026    007-002-030  5 ---
        dpclkp: 0  opclkp: 0  msudisc: 0
     13    004-003-001    007-003-031    007-002-*    3   *
        dpclkp: 0  opclkp: 0  msudisc: 0
     14    004-003-001    007-003-036    007-003-*    3   *
        dpclkp: 0  opclkp: 0  msudisc: 0
     15    004-003-001    007-003-041    007-*-*      3   *
        dpclkp: 0  opclkp: 0  msudisc: 0
     16    004-003-001    007-003-046    008-*-*      3   *
        dpclkp: 0  opclkp: 0  msudisc: 0
     17    004-003-001    007-003-051    007-002-029  * ---
        dpclkp: 0  opclkp: 0  msudisc: 0
     18    004-003-001    007-003-056    007-002-030  * ---
        dpclkp: 0  opclkp: 0  msudisc: 0
     19    004-003-001    007-003-061    007-002-*    * ---
        dpclkp: 0  opclkp: 0  msudisc: 0
     20    004-003-001    007-003-066    007-*-*      * ---
        dpclkp: 0  opclkp: 0  msudisc: 0
     21    004-003-001    007-003-071 --------------  3  24
        dpclkp: 0  opclkp: 0  msudisc: 0
     22    004-003-001    007-003-076 --------------  5 ---
        ecic: 100-105  rcic: 200-205
        dpclkp: 0  opclkp: 0  msudisc: 0
     23    004-003-001    007-003-081 --------------  3   *
        dpclkp: 0  opclkp: 0  msudisc: 0
     24    004-003-001    007-003-086 --------------  5 ---
        dpclkp: 0  opclkp: 0  msudisc: 0
     25    004-003-001    007-003-091 --------------  * ---
        dpclkp: 0  opclkp: 0  msudisc: 0
```

This example resets counters for all translations with an EPC of 4-3-1 (ANSI):

```
pass:loc=1201:cmd="pct –m stats –r –e 4-3-1"
```

```
Command Accepted – Processing

Stats reset on 20 rules
```

Test Mode

Test mode allows determination of whether an incoming message with the specified field values would result in a match on an entry in the PCT table. Output includes the content of the message, as specified on the command line, the lookup result, and the matching entry if a match exists.

This example shows a match on the DPC lookup:

```
pass:loc=1201:cmd="pct -m test -d 4-3-1 -o 7-2-30 -s 3 -u 26"
```

```
Command Accepted – Processing

    Point Code and CIC Translation Lookup Test
    MSU content:
      OPC:    007-002-030
      DPC:    004-003-001
       SI:              3
      SSN:             26
    Lookup result:
      Match on DPC was found
    Matching entry:
    idx            epc            rpc            fpc si ssn
      7    004-003-001    007-003-002    007-002-030  3  26
```

This example shows a match on the OPC lookup:

```
pass:loc=1201:cmd="pct -m test -d 7-2-30 -o 7-3-2 -s 3 -u 26"
```

```
Command Accepted – Processing

    Point Code and CIC Translation Lookup Test
    MSU content:
      OPC:    007-003-002
      DPC:    007-002-030
       SI:              3
      SSN:             26
    Lookup result:
      Match on OPC was found
    Matching entry:
    idx            epc            rpc            fpc si ssn
      7    004-003-001    007-003-002    007-002-030  3  26
```

This example shows a match on a DPC lookup where the matching translation has a wildcard Filter PC and a wildcard SI:

```
pass:loc=1201:cmd="pct -m test -d 4-3-1 -o 9-9-9 -s 4 –c 106"
```

```
Command Accepted – Processing

    Point Code and CIC Translation Lookup Test
    MSU content:
      OPC:    009-009-009
      DPC:    004-003-001
       SI:              4
      CIC:           106
    Lookup result:
      Match on DPC was found
    Matching entry:
    idx            epc            rpc            fpc si ssn
     25    004-003-001    007-003-091 --------------  * ---
```

Related Commands

None.

ping

Packet Internetwork Groper

This command is used to test for the presence of hosts on the network. This command is invoked with a destination (either a hostname or IP address).

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `ping` command has the option destination. An IP address or hostname can be specified for the destination, as in the commands `ping 192.9.200.44` and `ping nc.tekelec.com`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

destination

The destination can be either an IP address or hostname.

IP address

The IP address is a TCP/IP address expressed in standard "dot notation." IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.9.200.44*, where *192.9.200* is the network number and *44* is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

hostname

Hostname. The logical name assigned to the device with the IP address indicated.

Range:

any string of characters beginning with a letter and comprising (*a..z, A..Z, 0..9*, '-', or '.') up to 120 characters in length.

-i

The number of ping requests to send.

Range:

1 - 5

Default:

3

-n

The size of message to use in test.

Range:

12 - 2048

Default:

64

-h

This option provides help information for the command.

-f

This option sets the DF (Don't Fragment) bit in the IP header of ICMP packet.

Example

```
ping 192.9.200.44
ping nc.tekelec.com
ping 192.9.200.44 -i 5 -n 2048
ping 10.254.111.21 -f -n 1480
```

Dependencies

The actual `ping` text string must be followed by a destination (either a hostname or IP address) prior to the options.

Notes

The `ping` command is executed through the `pass` command.

Output

`pass:loc=1105:cmd="ping"` or

`pass:loc=1105:cmd="ping -h"`

```
Command Accepted - Processing

    rlghncxa03w 04-07-27 08:29:35 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="ping"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:29:35 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:29:35 EST  EAGLE5 31.6.0

    Usage: ping <hostname | ipaddr> [-h] [-i size] [-n count]
    Options:
       -f        Sets the DF (Don't Fragment) bit in IP header of ICMP packet.
       -h        Displays this message
       -i count  Number of pings to send. Range=1..5. Default=3.
       -n size   Sets size of ICMP echo packet. Range=12..2048. Default=64.
       hostname  Name of machine to ping
       ipaddr    IP Address of machine to ping (d.d.d.d)
;
```

```
    rlghncxa03w 04-07-27 08:29:36 EST  EAGLE5 31.6.0

    PING command complete
;
```

```
pass:loc=1105:cmd="ping tekral"
```

```

Command Accepted - Processing

    rlghncxa03w 04-07-27 08:30:16 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="ping tekral"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:30:16 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:30:16 EST  EAGLE5 31.6.0
    PING command in progress
;
    rlghncxa03w 04-07-27 08:30:18 EST  EAGLE5 31.6.0
    PING tekral (192.168.100.3): 56 data bytes
    64 bytes from tekral.nc.tekelec.com (192.168.100.3):icmp_seq=0.time=5. ms
    64 bytes from tekral.nc.tekelec.com (192.168.100.3):icmp_seq=1.time=0. ms
    64 bytes from tekral.nc.tekelec.com (192.168.100.3):icmp_seq=2.time=0. ms
    ----tekral PING Statistics----
    3 packets transmitted, 3 packets received, 0% packet loss
    round-trip (ms)  min/avg/max = 0/1/5

    PING command complete
;
```

```
pass:loc=1105:cmd="ping 192.168.100.3"
```

```

Command Accepted - Processing

    rlghncxa03w 04-07-27 08:30:44 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="ping 192.168.100.3"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:30:44 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:30:44 EST  EAGLE5 31.6.0
    PING command in progress
;
    rlghncxa03w 04-07-27 08:30:46 EST  EAGLE5 31.6.0
    PING 192.168.100.3: 56 data bytes
    64 bytes from tekral.nc.tekelec.com (192.168.100.3):icmp_seq=0.time=5. ms
    64 bytes from tekral.nc.tekelec.com (192.168.100.3):icmp_seq=1.time=0. ms
    64 bytes from tekral.nc.tekelec.com (192.168.100.3):icmp_seq=2.time=0. ms
    ----192.168.100.3 PING Statistics----
    3 packets transmitted, 3 packets received, 0% packet loss
    round-trip (ms)  min/avg/max = 0/1/5

    PING command complete
;
```

```
pass:loc=1105:cmd="ping tekral -i 2"
```

```
Command Accepted - Processing

    rlghncxa03w 04-07-27 08:31:46 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="ping tekral -i 2"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:31:46 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:31:46 EST  EAGLE5 31.6.0

    PING command in progress
;
    rlghncxa03w 04-07-27 08:31:47 EST  EAGLE5 31.6.0
    PING tekral (192.168.100.3): 56 data bytes
    64 bytes from tekral.nc.tekelec.com(192.168.100.3):icmp_seq=0.time=10. ms
    64 bytes from tekral.nc.tekelec.com(192.168.100.3):icmp_seq=1.time=0. ms
    ----tekral PING Statistics----
    2 packets transmitted, 2 packets received, 0% packet loss
    round-trip (ms)  min/avg/max = 0/5/10

    PING command complete
;
```

```
pass:loc=1105:cmd="ping tekral -i 2 -n 200"
```

```
    rlghncxa03w 04-07-27 08:32:09 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="ping tekral -i 2 -n 200"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:32:09 EST  EAGLE5 31.6.0

    PING command in progress
;
    rlghncxa03w 04-07-27 08:32:10 EST  EAGLE5 31.6.0
    PING tekral (192.168.100.3): 192 data bytes
    200 bytes from tekral.nc.tekelec.com(192.168.100.3):icmp_seq=0.time=5. ms
    200 bytes from tekral.nc.tekelec.com(192.168.100.3):icmp_seq=1.time=0. ms
    ----tekral PING Statistics----
    2 packets transmitted, 2 packets received, 0% packet loss
    round-trip (ms)  min/avg/max = 0/2/5

    PING command complete
;
```

Note: In this example, the response shows eight bytes less than the entry (192 as opposed to 200) because the `ping` command may use eight bytes automatically.

```
pass:loc=1308:cmd="ping 10.254.111.21 -f -n 1480"
```

```
Command Accepted - Processing

eagle10212 12-06-19 10:07:42 EST EAGLE5 44.0.0-64.33.0
pass:loc=1380:cmd="ping 10.254.111.21 -f - n 1480"
Command entered at terminal #5.

eagle10212 12-06-19 10:07:42 EST EAGLE5 44.0.0-64.33.0

PING command in progress
```

```
;

eagle10212 12-06-16 10:07:42 EST EAGLE5 44.0.0-64.33.0
PING 10.254.111.21: 1472 data bytes
DF bit set. Fragmentation Needed
PING: no answer from 10.254.111.21
PING command complete
;
```

```
pass:loc=1308:cmd="ping 10.254.111.21 -f -n 1380"
```

```

Command Accepted -Processing
eagle10212 12-06-19 10:06:58 EST  EAGLE5 44.0.0-64.33.0
    pass:loc=1308:cmd="ping 10.254.111.21 -f -n 1380"
    Command entered at terminal #5.

    eagle10212 12-06-19 10:06:58 EST  EAGLE5 44.0.0-64.33.0

    PING command in progress

;

    eagle10212 12-06-19 10:06:58 EST  EAGLE5 44.0.0-64.33.0

;
    eagle10212 12-06-19 10:07:00 EST  EAGLE5 44.0.0-64.33.0
    PING 10.254.111.21: 1372 data bytes
    1380 bytes from e1021301.1308a (10.254.111.21): icmp_seq=0. time=329319. ms

    1380 bytes from e1021301.1308a (10.254.111.21): icmp_seq=1. time=330319. ms

    1380 bytes from e1021301.1308a (10.254.111.21): icmp_seq=2. time=331319. ms

    ----10.254.111.21 PING Statistics----
    3 packets transmitted, 3 packets received, 0% packet loss
    round-trip (ms)  min/avg/max = 329319/330319/331319

    PING command complete

;
```

Related Commands

None.

sctp Stream Control Transmission Protocol

This command is used to provide a view of SCTP instance and association information.

Options

-a aname

This option is used to retrieve the measurements and information for a specific association.

-l

This option is used to display logging details for associations. The logging details are independent of the association state (close or open).

-p <port>

This option is used to retrieve the measurements for a specified SCTP port.

-r

This option is used to reset specified measurements. The associated report is not displayed.

-h

This option is used to display help information for the command. Either brief or full help reports can be generated.

-m

This option is used to display SCTP incoming/outgoing (IO) header audit reports for common and dedicated IO header pools. The IO header is a transmission sequence number (TSN) control block used in processing SCTP chunks. The report shows total, currently available, and minimum IO header counts for the IO header pool shared by all associations (common pool) and the IO header pool for each association (dedicated pool).

Example

```
pass:cmd="sctp -a aname":loc=1307
pass:cmd="sctp -l":loc=1307
pass:cmd="sctp -l aname":loc=1307
pass:cmd="sctp -p port":loc=1307
pass:cmd="sctp -r -a aname":loc=1307
pass:cmd="sctp -r -l aname":loc=1307
pass:cmd="sctp -m"
pass:cmd="sctp"
```

Dependencies

The -r option can be specified in the same command as the -a, -p, or -l option. Otherwise, only one option can be specified at a time.

Notes

None

Output

Either brief or full help reports can be displayed. A full help report is generated by adding the -h full option to the command line.

This example shows a brief help report:

```
pass:loc=1305:cmd="sctp -h"
```

```
    Usage: [ [[[-a aname] | [-p port] | [-l [aname]]] [-r [-s]]] | [-m] | [-h
[full]] ]

    Options:
        (no parameters)    display list of SCTP ports
        -a aname           display association report
        -p port            display SCTP port report
        -r                 reset specified SCTP measurements
        -m                 display IO header usage report
        -l aname           display association event log
        -l                 display all event logs
        -r -l              reset all SCTP event logs
        -r -s              reset all SCTP measurements and pegs
        -h                 displays command help (brief or full)

;

    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0

    SCTP command complete

;
```

This example shows a full help report:

```
pass:loc=1307:cmd="sctp -h full"
```

```
    Usage: sctp [[[[-a aname] | [-p port] | [-l [aname]]] [-r [-s]]] | [-m] |
[-h [full]]]

    Options:
        (no parameters)    display list of SCTP ports
        -a aname           display association report
        -p port            display SCTP port report
        -r                 reset specified SCTP measurements
        -m                 display IO header usage report
        -l aname           display association event log
        -l                 display all event logs
        -r -l              reset all SCTP event logs
        -r -s              reset all SCTP measurements and pegs
        -h                 displays command help (brief or full)

    no parameters option
        Summary list of all SCTP instances.  To list all the SCTP
        ports issue the following command:
                    sctp

    -a aname option details
        Retrieves detailed information and measurements for a specific
        association. For example the following SCTP command will get the
        measurements and detailed information for the association with
        association name = assoc1.
                    sctp -a assoc1
        In remote address field of output configured RHOST or ARHOST or both IP

        address will be displayed based on the presence in association remote
network
    array

    -p port option details
```

```
        Retrieves detailed information for a specified SCTP port.
        For example the following SCTP command will get the detailed
        information for the SCTP port with a local port of 200.
                     sctp -p 200
        In remote address field of output configured RHOST or ARHOST or both IP

        address will be displayed based on the presence in association remote
network
        array

    -r option details
        Resets specified SCTP Measurements. See examples below.
        Resets measurements for specified association:
                     sctp -r -a assoc
        Resets measurements for all associations on port 2000:
                     sctp -r -p 2000
        Resets measurements and event logs for all ports/associations:
                     sctp –r
        Resets event logs for specified association:
                     sctp -r -l assoc
        Resets event logs for all associations:
                     sctp -r -l
        Resets measurements for all associations:
                     sctp -r -s

    -m
        This option displays SCTP IO header audit report for common and
        dedicated IO header pools. The report shows total, currently
        available and minimum (low water mark) IO header counts for common
        and each association's dedicated pool.
        IO header is a TSN control block used in processing SCTP chunks.
        Common pool is IO header pool shared by all associations.
        Dedicated pool is a per-association IO header pool.
                     sctp -m;

    -l option details
        This option displays logging details for associations. The logging
        details are independent of the association state (close or open).
        See examples below:
        The following SCTP command will get the logging details
        for all associations on the specified card.
                     sctp -l
        The following SCTP command will get the logging
        details for the association with association name = assoc1.
                     sctp -l assoc1

;
        rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0

        SCTP command complete

;
```

This example shows a summary list of all SCTP ports. All SCTP ports and number of associations associated with each port is displayed.

`pass:loc=1307:cmd="sctp"`

```
    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0
    Local   Local IP       Num of
    Port    Address        Assoc
     7001   192.168.110.35       1
```

```
     2222   192.168.110.12 3
            192.168.112.12

;

    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0

    SCTP command complete

;
```

This example shows specific SCTP association information and measurements:

```
pass:loc=1307:cmd="sctp –a assoc1"
```

```
    e1090203 10-11-01 12:52:56 EST  EAGLE 43.0.0
    Aname       Local              Local   Remote             Remote
                Address     Port    Address            Port
    assoc1      192.168.110.12     2222    192.168.112.4      5555
                192.168.112.12             192.168.110.2

              Configuration                          State
           Retransmission Mode = LIN         State = OPEN
    Min. Retransmission Timeout = 10000      ULP association id = 18
    Max. Retransmission Timeout = 800000     Number of nets = 2
         Max. Number of Retries = 10         Inbound Streams = 1
        Min. Congestion Window  = 3000       Outbound Streams = 2
                Inbound Streams = 2
               Outbound Streams = 2
             Checksum Algorithm = crc32c
           Send/Rcv Buffer Size = 204800

                                Nets Data

         IP Address     192.168.112.4          State     Reachable
               Port     5555                 Primary     YES
                MTU     1500                    cwnd     16384
          ssthresh      16384                    RTO     120
         IP Address     192.168.112.5          State     Reachable
               Port     5555                 Primary     NO
                MTU     1500                    cwnd     16384
          ssthresh      16384                    RTO     120

         IP Address     192.168.110.2          State     Reachable
               Port     5555                 Primary     NO
                MTU     1500                    cwnd     16384
          ssthresh      16384                    RTO     120

                        Last Net Sent To = 192.168.112.4
                     Last Net Rcvd From = 192.168.112.4
                    Over All Eror Count = 0
                              Peers Rwnd = 13880
                                 My Rwnd = 16384
                              Max Window = 16384
                     Initial Seq Number = 24130
                  Next Sending Seq Number = 124686
                    Last Acked Seq Number = 124669
              Maximum Outbound Char Count = 16384
              Current Outbound Char Count = 2112
                 Number Unsent Char Count = 0
               Outbound Data Chunk Count = 16
                           Number Unsent = 0
                    Number To Retransmit = 0
```

```
                      ip datagrams rcvd = 155402
      ip datagrams with data chunks rcvd = 120844
                       data chunks rcvd = 367908
                       data chunks read = 367900
                          dup tsns rcvd = 8
                             sacks rcvd = 38734
                    gap ack blocks rcvd = 3
                 heartbeat requests rcvd = 135
                     heartbeat acks rcvd = 52
                 heartbeat requests sent = 52
                       ip datagrams sent = 129254
      ip datagrams with data chunks sent = 73084
                       data chunks sent = 396330
             retransmit data chunks sent = 135
                              sacks sent = 64872
                            send failed = 0
                 retransmit timer count = 0
         consecutive retransmit timeouts = 0
     RTO between RMIN and RMAX inclusive = 6
                  RTT greater than RMAX = 0
                  fast retransmit count = 135
                       recv timer count = 0
                  heartbeat timer count = 244
                       none left tosend = 0
                    none left rwnd gate = 5
                    none left cwnd gate = 8
                                UNKNOWN = 0

;

    e1090203 10-11-01 12:52:56 EST  EAGLE 43.0.0

    SCTP command complete

;
```

Field Descriptions for `sctp -a` Output

- Local Address-IP Address of the near end. The address that the local SCTP endpoint should bind.
- Local Port-SCTP port number, if ULP wants it to be specified.
- Remote Address-IP Address of the far end/destination. Destination address for transporting DATA.
- Remote Port-Port number of the destination.

Configuration:[Following rows are SCTP configured values]

- Retransmission Mode-Configured retransmission mode. Values are “LIN” or “RFC”.
- Min. Retransmission Timeout-Minimum Retransmission Timeout value configured.
- Max. Number of Retries-Configured maximum number of retries.
- Min. Congestion Window-Minimum and initial congestion window.
- Inbound Streams-The maximum number of inbound streams this association allows the peer end to create. The value can not be 0.
- Outbound Streams-The maximum number of outbound streams this association allows the peer end to create. The value can not be 0.

State: [Following rows are association state values]

- State-State of the association.
- ULP association id-Upper Layer Protocol association id.

- Number of nets-Number of networks.
- Inbound Streams-Number of Inbound streams the far end can support. Min(requested,offered)
- Outbound Streams-Number of Outbound streams the far end can support. Min(requested,offered)
- Checksum Algorithm-32 bit checksum field that is included in the SCTP common header. The CRC32c checksum should be set by the sender of each SCTP packet to provide additional protection against data corruption in the network.
- Send/Rcv Buffer Size-The maximum size of data to be transmitted/received in bytes.
- Nets Data-All of the available remote IP addresses and if they are reachable or not.
- Last Net Sent To-IP address of the last network sent on.
- Last Net Rcvd From-IP address of the last network received on.
- Over All Error Count-Total error count on the association.
- Peers Rwnd-The peers receive window.
- My Rwnd-My receive window.
- Max Window-Maximum receive window (the peers receive window is set to this value until it is learned).
- Initial Seq Number-Initial sequence number started at.
- Next Sending Seq Number-Next Sending sequence number.
- Last Acked Seq Number-Highest consecutive TSN that has been Acked.
- Maximum Outbound Char Count-Maximum outbound byte count (high water mark).
- Current Outbound Char Count-Current outbound byte count.
- Number Unsent Char Count-Number of unsent bytes.
- Outbound Data Chunk Count-Number of data chunks that were sent.
- ip datagrams rcvd-Number of IP packets received.
- ip datagrams with data chunks rcvd-Number of IP packets containing SCTP data chunks received.
- data chunks rcvd-Number of SCTP data chunks received.
- data chunks read-Number of SCTP data chunks read.
- dup tsns rcvd-Number of duplicate data chunks received.
- sacks rcvd-Number of selective acknowledgements received.
- gap ack blocks rcvd-Indicates the number of GAP Ack Blocks included in a SACK. This value informs the peer endpoint of gaps in the received sequences of DATA chunks as represented by their TSNs.
- heartbeat requests rcvd-Number of heartbeat requests received.
- heartbeat acks rcvd-Number of heartbeat acknowledges received.
- heartbeat requests sent-Number of heartbeat requests sent.
- ip datagrams sent-Number of IP packets transmitted.
- ip datagrams with data chunks sent-Number of IP packets containing SCTP data transmitted.
- data chunks sent-Number of data chunks sent.
- retransmit data chunks sent-Number of retransmitted data chunks for this association.
- sacks sent-Number of selective acknowledgements sent.
- send failed-Number of selective acknowledgements failed.
- retransmit timer count-Reports the retransmit timer count. Number of times the transmit timer has expired.
- consecutive retransmit timeouts-Count of the number of times consecutive timeouts occurred.
- RTO between RMIN and RMAX inclusive-If the calculated RTO is between the configured RMIN value and the RMAX value inclusively, then increment this peg count. This peg serves as an indication that the RMIN value may be configured incorrectly and will possibly cause frequent retransmits to occur due to RTO fluctuations.

- RTT greater than RMAX-If the calculated RTT is above the configured RMAX value, then increment this peg count. This peg serves as an indication that the RMAX value is configured incorrectly and will possibly cause frequent retransmits to occur due to RTO fluctuations.
- fast retransmit count-Number of retransmits due to fast retransmit.
- recv timer count-Number of times the receive timer has expired.
- heartbeat timer count-Number of times the heartbeat timer has expired.
- none left tosend-Number of times a transmit is attempted and there is no data chunks to send.
- none left rwnd gate-Number of times a transmit is denied due to no receive window space at peer.
- none left cwnd gate-Number of times a transmit is denied due to exceeding the local congestion window.
- UNKNOWN-Number of retransmit Datagrams for this assoc for error monitoring.

This example shows SCTP port measurements:

```
pass:loc=1307:cmd="sctp –p 2222”
```

```
    rlghncxa03w 09-05-01 08:32:09 EST  EAGLE5 41.0.0
    Local   Local IP        Num of
    Port    Address         Assoc
     2222   192.168.110.12  3
            192.168.112.12

    Assoc    Local            Local   Remote          Remote
      ID     IP Address       Port    Address         Port
        1   192.168.110.12    2222    192.168.112.4   5555
            192.168.112.12            192.168.110.2
        2   192.168.110.12    2222    192.168.112.4   5555
            192.168.112.12            192.168.110.3
        3   192.168.110.12    2222    192.168.112.4   7777
            192.168.112.12            192.168.110.4

                 no.of inqueued msgs = 0
                            max mtu = 1500
                     max init times = 8
                 max size reassembly = 1048576
                  default rwnd value = 16384
                    pre-open streams = 1
                 ip datagram counter = 2781

        Timer Values:       seconds        millisecs
                INIT              1                0
                RECV              0              200
                SEND              1                0
            SHUTDOWN              0              300
           HEARTBEAT              0              500
                PMTU            600                0
;

    rlghncxa03w 09-05-01 08:32:09 EST  EAGLE5 41.0.0

    SCTP command complete

;
```

This example shows all event logs for an association:

```
pass:loc=1307:cmd="sctp –l assoc1"
```

```
    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE 38.0.0
```

```
    SCTP Event Log
    Time         Event                Reason               Ripaddr         Rport

   ------------------------------------------------------------------------------

    01:19:04.165 SACK send fail       None                 192.168.63.235  10001

    01:19:04.175 Ck echo ack snd fail None                 192.168.63.235  10001

    01:19:04.180 Assoc UP             Unknown              192.168.63.235  10001

    01:19:04.180 Assoc Down           Shutdown Rcv         192.168.63.235  10001

    01:19:04.180 Shutdown ack send    None                 192.168.63.235  10001

    01:19:06.425 INIT Rcv             None                 192.168.63.142  10002

    01:19:06.425 Datagram Ignored     No Assoc Found       192.168.63.142  10002

    01:19:16.500 INIT tmr expr        None                 192.168.63.235  10001

    01:19:16.500 SACK send fail       None                 192.168.63.235  10001

    01:19:17.500 INIT tmr expr        None                 192.168.63.235  10001

    01:19:17.500 SACK send fail       None                 192.168.63.235  10001


    SCTP: command complete
;

    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE 38.0.0

    SCTP command complete

;
```

This example shows event logs for all associations on a given card location:

`pass:loc=1307:cmd="sctp –l"`

```
    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE 38.0.0

    SCTP Event Log
    Time         Event                Reason               Ripaddr         Rport

   ------------------------------------------------------------------------------

    01:19:04.165 SACK send fail       None                 192.168.63.235  10001

    01:19:04.175 Ck echo ack snd fail None                 192.168.63.235  10001

    01:19:04.180 Assoc UP             Unknown              192.168.63.235  10001

    01:19:04.180 Assoc Down           Shutdown Rcv         192.168.63.235  10001

    01:19:04.180 Shutdown ack send    None                 192.168.63.235  10001

    01:19:06.425 INIT Rcv             None                 192.168.63.142  10002

    01:19:06.425 Datagram Ignored     No Assoc Found       192.168.63.142  10002

    01:19:16.500 INIT tmr expr        None                 192.168.63.235  10001
```

```
    01:19:16.500 SACK send fail       None                192.168.63.235  10001
    01:19:17.500 INIT tmr expr        None                192.168.63.235  10001
    01:19:17.500 SACK send fail       None                192.168.63.235  10001

    SCTP: command complete
;
```

Event descriptions for the `sctp -l` command

- Shutdwn ACK tmr expNo shutdown complete was received in response to the shutdown acknowledgement within the timer's limits.
- PathMTU tmr expr-Indicates the PathMTU daemon timer has expired. At the expiration of this timer, path MTU for each path of each association that is not at the default of 1500 bytes is marked for retesting by raising that path's MTU. The MTU will be adjusted accordingly when the next frame that exceeds the updated MTU occurs, thereby allowing the path MTU to reflect dynamic network conditions.
- INIT tmr expr-If the T1-initialized timer expires, the endpoint must retransmit INIT and restart the T1-init timer without changing state.
- RECV tmr expr-If the receive timer expires, then a stand alone SACK is sent to the peer and this timer is moved back to idle.
- Send tmr expr-This retransmission timer will expire when outstanding data sent to an address has not been acknowledged.
- Shutdwn tmr expr-No shutdown acknowledgement was received in response to the transmitted shutdown within the timer's limits.
- HB tmr expr-No heartbeat acknowledgement was received in response to the transmitted heartbeat within the timer's limits.
- Cookie tmr expr-No cookie acknowledgement was received in response to the transmitted cookie echo within the timer's limits.
- New Cookie tmr expr-When this occurs, time to schedule another timer for the cookie change.
- Tx CHK tmr expr-Transmit check timer expired.
- Unknwn tmr expr-An unknown timer expired.
- INIT Rcv-An INIT was received for an association.
- Datagram Ignored-When an unrecognized chunk time is encountered.
- Assoc Down-An association is taken out of service.
- INTF Down-Interface on an association is down and out of consideration for selection.
- INTF Up-Interface on an association is up and now back in consideration for selection.
- Datagram Send Fail-IP Packet failed to send.
- Ignore Cookie-Happens when the cookie is not received first.
- Ignore INIT-If the INIT message is not received first, is not the only chunk, is received with a non-zero Verification tag, if the T bit value is 1 or if mandatory parameters are missing then the INIT message is discarded/ignored.
- Ignore INIT ACK-If the INIT ACK is not first, not the only chunk or too small (missing mandatory parameters), then the INIT ACK chunk is ignored.
- Ignore Shutdwn ACK-The SHUTDOWN Complete MUST be the only chunk, otherwise the packet is ignored.

- Ignore HB ACK-The received HB acknowledgement was ignored due to asymmetric routing (HBA not received on the same interface the original HB was transmitted on).
- Op Error Rcv-Occurs when the peer notifies that we are using an invalid stream or we received a Stale cookie.
- Assoc UP-Association up notification was generated for the upper layer.
- Assoc Restart-Association restart notification was generated for the upper layer.
- Shutdn ack send fail-Attempt to transmit a shutdown acknowledgement chunk failed.
- Shutdown ack send-A shutdown acknowledgement chunk was transmitted to the far end.
- Cookie ack send fail-An attempt to send a Cookie ACK to a specified address failed.
- Cookie ack send-A Cookie ACK was sent to a specified address.
- Stale Cookie send fail-Attempt to send a stale cookie error to the far end failed.
- Stale Cookie send-A stale cookie error was sent to the far end.
- HB req send fail-Attempt to send a HB to the far end failed.
- HB resp send fail-Attempt to send a HB acknowledgement to the far end failed.
- Shutdown send fail-The Shutdown chunk sent to a specified association failed.
- Shutdown send-A Shutdown chunk was sent to a specified association.
- Abort send fail-The Abort chunk sent to a specified association failed.
- Abort send-An Abort chunk was sent to a specified association.
- Abt W cause snd fail-The Abort chunk sent with the Cause parameter to a specified association failed.
- Abort wth cause send-An Abort chunk was sent to a specified association with the Cause parameter.
- SACK send fail-Attempt to send a SACK to the far end failed.
- Initiate send fail-An INIT chunk is used to initiate a SCTP association between two endpoints. This event occurs when an INIT send has failed.
- Initiate send-An INIT chunk is used to initiate a SCTP association between two endpoints. This event occurs when an INIT was successfully sent.
- OprErr send-An endpoint sends this chunk to its peer endpoint to notify it of certain error conditions. It contains one or more error causes. This event occurs when the OPPErr was successfully sent.
- OprErr send Fail-This event occurs when the OPPErr send failed.
- Init ack send fail-This event occurs when an INIT ACK send has failed.
- Init ack sent-This event occurs when an INIT ACK was successfully sent.
- Ck echo ack snd fail-An attempt to send a Cookie-Echo has failed.
- Cookie echo ack send-A cookie echo was sent to the far end in response to an accepted init-ack.
- Chunks send fail-This event occurs when a chunk that was sent has failed.
- Chunks send-This event occurs when a chunk has been successfully sent.
- Cookie send fail-Attempt to transmit a cookie to the far end during the four-way handshake failed.
- Init ack recv-Init acknowledgement chunk was received.
- Shutdown ack recv-Shutdown ack chunk was received.
- Shutdown ack sent-Shutdown ack chunk was transmitted to the far end in response to a received shutdown chunk.
- Abort sent-An Abort message was sent to ungracefully shutdown an association.
- Shutdn complete sent-Shutdown complete chunk was transmitted to the far end.

This example clears the logged events for an association:

```
pass:loc=1307:cmd="sctp –r –l assoc1"
```

```
    Command Accepted - Processing

    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE 38.0.0

    All event logs for specified association have been reset.

;

    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE 38.0.0

    SCTP command complete

;
```

This example resets association measurements:

```
pass:loc=1307:cmd="sctp –r -a assoc1"
```

```
    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0
    PASS: Command sent to card

    Association measurements have been reset.

    SCTP command complete
```

This example resets port measurements:

```
pass:loc=1307:cmd="sctp –r –p 4001"
```

```
    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0
    PASS: Command sent to card

    Port measurements have been reset.

    SCTP command complete
```

This example resets all measurements and event logs:

```
pass:loc=1307:cmd="sctp –r"
```

```
    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0
    PASS: Command sent to card

    All measurements and logs have been reset.

    SCTP command complete
```

This example resets measurements for all ports/associations:

```
pass:loc=1307:cmd="sctp –r -s"
```

```
Command Accepted - Processing

    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0

    All measurements have been reset.
```

```
;

    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0

    SCTP command complete

;
```

This example shows an IO header audit report:

```
sctp -m
```

```
    rlghncxa03w 08-02-01 08:32:09 EST  EAGLE5 38.0.0

    IO Headers in Common Pool (Total/CurrentFree/Min):    20494/20494/20494


    Inst ID    Sock Idx    Assoc ID    IO Headers(Total/CurrentFree/Min)
    2          0           1           400/400/398

;
```

Related Commands

None.

sockrtt Socket Round Trip Time

This command is used to report and reset the round-trip time statistics for application sockets. Minimum, maximum, and average times are kept for each open socket. The Retransmission Mode (BSD, FIXED, or MOD) and the Fixed Round Trip Time are also displayed.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `sockrtt` command has the option socket name. The socket name must be specified for which statistics will be displayed, as in the command `sockrtt socyellow`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

socket name

This option is **mandatory** and specifies the socket name for which statistics are to be displayed.

Range:

up to 15 alphanumeric characters.

-r

This option resets all statistics for the given socket name.

-h

This option provides help information for the command.

Example

`sockrtt`

`sockrtt -h`

`sockrtt socyellow`

`sockrtt socyellow -r`

Dependencies

None

Notes

The `sockrtt` command is executed through the `pass` command.

Output

`pass:loc=1105:cmd="sockrtt"` or

`pass:loc=1105:cmd="sockrtt -h"`

```
Command Accepted - Processing

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    Usage: SOCKRTT sockname [-r] [-h]
    Options:
        -r        Resets rtt data for specified socket
        -h        Displays this message
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    SOCKRTT command complete
;
```

`pass:loc=1105:cmd="sockrtt c7000"`

```
Command Accepted - Processing

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0


    SOCKRTT: Socket round-trip time report (in milliseconds)
    Configured Traffic Round-Trip Time
        Retransmission Mode             : FIXED
        Fixed Round Trip Time           : 250
```

```
    Measured Normal Traffic Round-Trip Times

        Minimum round-trip time          : 5
        Maximum round-trip time          : 195
        Weighted Average round-trip time : 10
        Last recorded round-trip time    : 10

    Measured Congested Traffic Round-Trip Times

        Minimum round-trip time          : 0
        Maximum round-trip time          : 0
        Weighted Average round-trip time : 0
        Last recorded round-trip time    : 0
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    SOCKRTT command complete
;
```

```
pass:loc=1105:cmd="sockrtt c7000 -r"
```

```

Command Accepted - Processing

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    pass:loc=1105:cmd="sockrtt c7000 -r"
    Command entered at terminal #1.
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    SOCKRTT: Socket round-trip time report (in milliseconds)
    Configured Traffic Round-Trip Time
        Retransmission Mode              : FIXED
        Fixed Round Trip Time            : 250

    Measured Normal Traffic Round-Trip Times
        Minimum round-trip time          : 0
        Maximum round-trip time          : 0
        Weighted Average round-trip time : 0
        Last recorded round-trip time    : 0

    Measured Congested Traffic Round-Trip Times
        Minimum round-trip time          : 0
        Maximum round-trip time          : 0
        Weighted Average round-trip time : 0
        Last recorded round-trip time    : 0
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    SOCKRTT command complete
;
```

Related Commands

None.

soipdata SEAS Over IP Data

This command is used to display the SOIP operational data captured for the last 24 hours.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter.

-f

This option displays full operational data (all counts).

-s

This option displays the number of errors received with error type Bad Source.

-d

This option displays the number of of errors received with error type Bad Destination.

-v

This option displays the number of errors received with error type Bad Version.

-g

This option displays the number of Good Day messages received.

-e

This option displays the number of error messages sent (Sum of Bad Version, Bad Source and Bad Destination).

-u

This option displays the number of UPL messages received.

-t

This option displays the number of UPL messages transmitted.

-r

This option resets the specified error count.

-h

This option displays help for the command.

Example

```
soipdata –h
soipdata –f
soipdata –r
soipdata –u
```

Dependencies

None

Notes

None

Output

pass:loc=1305:cmd= “soipdata –h”

```
    Usage: soipdata [[-f ] | [[-s] [-d] [-v] [-g] [–e] [-u] [-t] [-r][-h]]


    Options:
    -f  Display Full Operational data (all the counts)
    -s  Display number of SR-5129 Messages received with Bad Source
    -d  Display number of SR-5129 Messages received with Bad Destination
    -v  Display number of SR-5129 Messages received with Bad Version
    -g  Display number of Good Day Messages Received.
    -e  Display number of error messages sent (Sum of BadVersion, BadSource and
 BadDestination)
    -u  Display number of Number of UPL messages received
    -t   Display number of Number of UPL messages transmitted.
    -r   Reset the Specified Error Count
    -h  display command help
```

pass:loc=1305:cmd=” soipdata –f”

```
    SOIPDATA: SR-5129 Operational Data Report

    Operational Data
   ____________________________________________________________________________

    reason                                                                 count

    -----------------------------                                   -----------

    Message Recived with Bad Source                1
    Message Recived with Bad Destination        2
    Message Recived with Bad Version               0
    Number of Goodday Messages Received    1
    Number of Error Messages Sent                    10
    Number of UPL Messages Received             12000
    Number of UPL Messages Sent                      19000
```

pass:loc=1105:cmd=pass:loc=1305:cmd=”soipdata –r”

```
    SOIPDATA  : All SOIP Operational data has been reset
```

pass:loc=1305:cmd=”soipdata –r –u”

```
    SOIPDATA: Number of UPL Messages Received has been reset.
```

```
pass:loc=1305:cmd=”soipdata –u”
```

```
SOIP Operational Data
_____________________________________________________________________________

reason                                                              count
-----------------------------                                  -----------
Number of UPL Messages Received           0
```

Related Commands

None.

soiplog

SEAS Over IP Log

This command is used to display the logs for the SR-5129 messages for a particular SEAS terminal.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter.

-l

This option enables and disables logging.

-d

This option displays live message logs

-n X

This option displays the last X number of messages.

-h

This option displays the help for this command.

Example

```
soiplog –h
```

```
soiplog -l enable":loc=XXXX
```

Dependencies

None

Notes

With two active connections to the CCS MR, logging must be enabled on each IPSM card that has an active SEAS terminal in order to properly log all SR-5129 communication data.

Assuming a message size of 500 bytes, each IPSM card can log approximately 2000 messages.

If an attempt is made to enable logging on a terminal when logging is already enabled on a different terminal, then the following warning message appears in the previously enabled terminal.

"Warning: SOIP Logging Enabled from Terminal: <New logging enabled terminal>"

If an attempt is made to disable logging on a terminal when logging is already enabled on a different terminal, then the following warning message appears in the previously enabled terminal

“Warning: SOIP Logging disabled from Terminal: <New logging enabled terminal>”

If an attempt is made to turn on logging on a terminal when it is already enabled on a different terminal, then the following warning message appears in the previously enabled terminal.

“Warning: SOIPLOG Started on Terminal: <New logging enabled terminal>”

Output

`pass:loc=1305:cmd= “soiplog –h”`

```
    Usage: SOIPLOG [[-l option] |
                                    [-d] [-n] [-h]]

    Options:
     -l  <enable/disable>     Enable/Disable the logs
     -d                                        Display live message logs
    -n  <num>                        Display last <num> number of messages.
Range=1..2000
    -h                                          Display Command Help
```

To Enable Real time logging and display, the following commands must be entered one after the other:

`pass:cmd="soiplog -l enable":loc=XXXX`

`pass:cmd="soiplog -d":loc=XXXX`

To enable logging and to display the last N number of logged messages, the following commands must be entered one after the other:

`pass:cmd="soiplog -l enable":loc=XXXX`

`pass:cmd="soiplog -n N":loc=XXXX`

```
    [mm/dd/yy:hour:min:sec ] Message Received.

     0353 SR5129  Rcvd 064 bytes, trm=17
    7E 7E 7E 7E 00 00 00 38    02 01 01 02 01 50 04 0A     *~~~~   8     P  *
    41 42 43 44 45 46 47 48    49 50 04 0B 53 45 41 53     *ABCDEFGHIJ  SEAS*
    4E 4A 43 43 53 4D 31 04    11 50 49 53 43 4E 4A 53     *NJCCSM1  PISCNJS*
    4E 44 38 31 58 49 46 30    31 41 02 01 00 02 01 01     *ND81XIF01A      *

    [mm/dd/yy:hour:min:sec ] Message Received.

     0354 SR5129  Rcvd 133 bytes, trm=17
    7E 7E 7E 7E 00 00 00 7D    02 01 01 02 01 50 04 0A     *~~~~   }
   P      *
    41 42 43 44 45 46 47 48    49 50 04 0B 53 45 41 53     *ABCDEFGHIJ   SEAS*
```

```
    4E 4A 43 43 53 4D 31 04    11 50 49 53 43 4E 4A 53     *NJCCSM1 PISCNJS*
    4E 44 38 31 58 49 46 30    31 41 02 01 00 02 01 13     *ND81XIF01A
     *
    04 43 03 41 41 42 44 45    46 47 48 49 50 51 53 45     * ABCDEFGHIJKSE    *

    41 53 4E 4A 43 43 53 4D    31 00 56 52 46 00 2A 56     *ASNJCCSM1 VFY *V*
    46 59 2D 47 54 54 3A 3A    30 31 30 2C 2A 2A 2D 2A    *FY-GTT::010,
**-**
    2A 2D 2A 2A 2C 2A 2A 3A    31 32 33 34 35 36 3A 35     **-**,**:123456:5
     *
    30 2C 56 52 46
          *0,VRF                          *
```

Related Commands

None.

traceroute

IP Tracing Utility

This command is used to determine the path taken by a UDP message to a specified remote host. The command can be invoked with either a hostname or IP address.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `traceroute` command has the option IP address. The IP address can be specified for the remote host to which the UDP message is sent, as in the command `traceroute 208.55.20.177`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

IP address

The IP address is a TCP/IP address expressed in standard "dot notation." IP addresses consist of the system's network number and the machine's unique host number. An example IP address is *192.9.200.44*, where *192.9.200* is the network number and *44* is the machine's host number.

Range:

4 numbers separated by dots, with each number in the range of *0-255*.

hostname

Hostname. The logical name assigned to the device with the IP address indicated.

Range:

String of characters, beginning with a letter, up to 120 characters in length.

Valid characters are *a-z*, *A-Z*, *0-9*, - (hyphen), . (period)

-h

This option provides help information for the command.

-m maximum hops

This option specifies the maximum number of hops before the trace is terminated.

Range:

1-30

Default:

10

-n

This option specifies that only the IP Address of each host will be displayed (not the hostname).

-p port

This option provides the user port number.

Range:

1-65535

Default:

33434

Example

```
traceroute
traceroute www.remotedest.com
traceroute www.remotedest.com -m 20
traceroute www.remotedest.com -m 20 -n
traceroute 208.55.20.177
traceroute 208.55.20.177 -m 20 -p 40000
```

Dependencies

If a Domain Name is specified, the Domain Name must exist in the IP Host table or the Domain Name Server A or B must be provisioned.

Notes

The `traceroute` command is executed through the `pass` command.

Output

This example shows the help information for the coomand:

`pass:loc=1103:cmd="traceroute"` or

`pass:loc=1103:cmd="traceroute -h"`

```
    Command entered at terminal #1.
;
```

```
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    Usage: traceroute <hostname | ipaddr> [-h] [-m maxhops] [-n] [-p port]
    Options:
      -h         Displays this message
      -m maxhops Maximum number of hops to destination.  Range=1..30. Default=
10.
      -n names   Inhibits the display of intermediate host names
      -p port    Port number. Range=1..65535. Default=33434.
      hostname   Name of machine to trace
      ipaddr     IP Address of machine to trace (d.d.d.d)
    Errors:
      *          Timeout
      !N         Unreachable Network
      !H         Unreachable Host
      !?nn       Unknown Failure (nn = ICMP Code)

;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

TRACEROUTE command complete
```

This example shows output for a request to host *www.remotedest.com*. A maximum of 20 hops has been specified. Three packets are sent to each hop, with the time for each sample displayed. Intermediate host names are also displayed.

```
pass:loc=1103:cmd="traceroute www.remotedest.com -m 20"
```

```
    Command entered at terminal #1.
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    TRACEROUTE command in progress
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    Traceroute to www.remotedest.com (208.55.20.177),
                  20 hops max, 100 byte packets
     1    5ms    5ms    5ms 216-187-242-57.ded.btitelecom.net (216.187.242.57)
     2   25ms   25ms   85ms 216-187-251-74.ded.btitelecom.net (216.187.251.74)
     3   25ms   25ms   25ms bti-rdu-c1-rtr.btitelecom.net (208.216.228.254)
     4   30ms   25ms   25ms Serial4-1-0.GW2.RDU1.ALTER.NET (157.130.34.93)
     5   35ms   35ms   40ms 178.ATM2-0.XR1.DCA1.ALTER.NET (146.188.162.50)
     6   40ms   40ms   35ms 195.at-2-0-0.XR1.DCA6.ALTER.NET (152.63.33.22)
     7   40ms   40ms   40ms 0.so-1-3-0.XL1.DCA6.ALTER.NET (152.63.35.114)
     8   40ms   40ms   40ms POS6-0.BR3.DCA6.ALTER.NET (152.63.38.117)
     9   40ms   40ms   40ms a3-0.uunet.mclnva02.us.bb.verio.net (204.255.169.90)

    10   75ms   75ms   75ms p16-0-0-0.r00.atlnga03.us.bb.verio.net (129.250.2.49)
```

```
    11   95ms   95ms   95ms p4-0-2-0.r01.bcrtfl01.us.bb.verio.net (129.250.4.54)

    12   95ms   95ms   95ms ge-1-1.r01.border.boca.verio.net (129.250.28.52)
    13   95ms   95ms   95ms ge-8-1.r01.edge.boca.verio.net (208.55.254.9)
    14   95ms   95ms   95ms www.remotedest.com (208.55.20.177)

    TRACEROUTE command complete

;
```

This example shows a request to host *www.remotedest.com*. No maximum number of hops has been specified. Intermediate host names are displayed. The display terminates after 10 hops.

```
pass:loc=1103:cmd="traceroute www.remotedest.com"
```

```
    Command entered at terminal #1.
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    TRACEROUTE command in progress
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    Traceroute to www.remotedest.com (208.55.20.177),
                  10 hops max, 100 byte packets
     1    5ms    5ms    5ms 216-187-242-57.ded.btitelecom.net (216.187.242.57)
     2   25ms   25ms   25ms 216-187-251-74.ded.btitelecom.net (216.187.251.74)
     3   25ms   25ms   25ms bti-rdu-c1-rtr.btitelecom.net (208.216.228.254)
     4   25ms   25ms   25ms 157.130.34.93 (157.130.34.93)
     5   35ms   40ms   40ms 178.ATM2-0.XR1.DCA1.ALTER.NET (146.188.162.50)
     6   40ms   35ms   45ms 195.at-2-0-0.XR1.DCA6.ALTER.NET (152.63.33.22)
     7   45ms   40ms   40ms 0.so-1-3-0.XL1.DCA6.ALTER.NET (152.63.35.114)
     8   40ms   35ms   35ms POS6-0.BR3.DCA6.ALTER.NET (152.63.38.117)
     9   40ms   40ms   40ms a3-0.uunet.mclnva02.us.bb.verio.net (204.255.169.90)

    10   75ms   75ms   80ms p16-0-0-0.r00.atlnga03.us.bb.verio.net (129.250.2.49)


    Maximum number of hops reached

    TRACEROUTE command complete

;
```

This example shows a request to host IP address *208.55.20.177*. No maximum number of hops has been specified. Intermediate host names are displayed. The display terminates after 10 hops.

```
pass:loc=1103:cmd="traceroute 208.55.20.177"
```

```
    Command entered at terminal #1.
;
```

```
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    TRACEROUTE command in progress

;

     rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    Traceroute to www.remotedest.com (208.55.20.177),
                  10 hops max, 100 byte packets
     1    5ms    5ms    5ms 216-187-242-57.ded.btitelecom.net (216.187.242.57)
     2   55ms  260ms  300ms 216-187-251-74.ded.btitelecom.net (216.187.251.74)
     3   25ms   25ms   25ms bti-rdu-c1-rtr.btitelecom.net (208.216.228.254)
     4   25ms   25ms   25ms Serial4-1-0.GW2.RDU1.ALTER.NET (157.130.34.93)
     5   40ms   35ms   35ms 178.ATM2-0.XR1.DCA1.ALTER.NET (146.188.162.50)
     6   40ms   35ms   40ms 195.at-2-0-0.XR1.DCA6.ALTER.NET (152.63.33.22)
     7   35ms   40ms   40ms 0.so-1-3-0.XL1.DCA6.ALTER.NET (152.63.35.114)
     8   40ms   35ms   40ms POS6-0.BR3.DCA6.ALTER.NET (152.63.38.117)
     9   40ms   40ms   40ms a3-0.uunet.mclnva02.us.bb.verio.net (204.255.169.90)

    10   75ms   75ms   75ms p16-0-0-0.r00.atlnga03.us.bb.verio.net (129.250.2.49)

    Maximum number of hops reached

    TRACEROUTE command complete
;
```

This example shows a request to host IP address *208.55.20.177*. A maximum of 20 hops has been specified. Intermediate host names are displayed.

```
pass:loc=1103:cmd="traceroute 208.55.20.177 -m 20"
```

```
    Command entered at terminal #1.
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    TRACEROUTE command in progress
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

;

    rlghncxa03w 05-07-27 08:32:34 EST  EAGLE5 31.6.0
    Traceroute to www.remotedest.com (208.55.20.177),
                  20 hops max, 100 byte packets
     1    5ms    5ms    5ms 216-187-242-57.ded.btitelecom.net (216.187.242.57)
     2   25ms   25ms   25ms 216-187-251-74.ded.btitelecom.net (216.187.251.74)
     3   25ms   25ms   25ms bti-rdu-c1-rtr.btitelecom.net (208.216.228.254)
     4   25ms   25ms   25ms Serial4-1-0.GW2.RDU1.ALTER.NET (157.130.34.93)
     5   35ms   35ms   35ms 178.ATM2-0.XR1.DCA1.ALTER.NET (146.188.162.50)
     6   35ms   40ms   35ms 195.at-2-0-0.XR1.DCA6.ALTER.NET (152.63.33.22)
     7   35ms   35ms   35ms 0.so-1-3-0.XL1.DCA6.ALTER.NET (152.63.35.114)
     8   40ms   35ms   35ms POS6-0.BR3.DCA6.ALTER.NET (152.63.38.117)
```

```
     9   40ms   40ms   40ms a3-0.uunet.mclnva02.us.bb.verio.net (204.255.169.90)

    10   75ms   75ms   75ms p16-0-0-0.r00.atlnga03.us.bb.verio.net(129.250.2.49)

    11   95ms   95ms   95ms p4-0-2-0.r01.bcrtfl01.us.bb.verio.net (129.250.4.54)

    12   95ms   95ms   95ms ge-1-1.r01.border.boca.verio.net (129.250.28.52)
    13   95ms   95ms   95ms ge-8-1.r01.edge.boca.verio.net (208.55.254.9)
    14   95ms   95ms   95ms www.remotedest.com (208.55.20.177)

    TRACEROUTE command complete
;
```

This example shows a request to host IP address *208.55.20.177*. A maximum of 20 hops has been specified. Intermediate host names are not displayed because the –n option is specified.

```
pass:loc=1103:cmd="traceroute 208.55.20.177 -m 20 -n"
```

```
    Command entered at terminal #1.
;
     rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

     rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    TRACEROUTE command in progress
;

     rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

;

     rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    Traceroute to www.remotedest.com (208.55.20.177),
                  20 hops max, 100 byte packets
     1    5ms    5ms    5ms 216.187.242.57
     2   25ms   25ms   25ms 216.187.251.74
     3   25ms   25ms   25ms 208.216.228.254
     4   30ms   30ms   30ms 157.130.34.93
     5   35ms   40ms   40ms 146.188.162.50
     6   40ms   40ms   40ms 152.63.33.22
     7   40ms   45ms   40ms 152.63.35.114
     8   40ms   40ms   35ms 152.63.38.117
     9   40ms   40ms   40ms 204.255.169.90
    10   75ms   75ms   75ms 129.250.2.49
    11   95ms   95ms   95ms 129.250.4.54
    12   95ms   95ms   95ms 129.250.28.52
    13   95ms   95ms   95ms 208.55.254.9
    14  110ms  100ms   95ms 208.55.20.177

    TRACEROUTE command complete
;
```

This example shows a request to host IP address *www.remotedest.com*. A maximum of 20 hops has been specified. Intermediate host names are not displayed because the –n option is specified.

```
pass:loc=1103:cmd="traceroute www.remotedest.com -m 20 -n"
```

```
    Command entered at terminal #1.
```

```
;
    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    TRACEROUTE command in progress
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
;

    rlghncxa03w 05-07-27 08:32:34 EST  EAGLE5 31.6.0
    Traceroute to www.remotedest.com (208.55.20.177),
                 20 hops max, 100 byte packets
     1    5ms    5ms    5ms 216.187.242.57
     2   25ms   25ms   25ms 216.187.251.74
     3   25ms   25ms   25ms 208.216.228.254
     4   30ms   30ms   30ms 157.130.34.93
     5   35ms   40ms   40ms 146.188.162.50
     6   40ms   40ms   40ms 152.63.33.22
     7   40ms   45ms   40ms 152.63.35.114
     8   40ms   40ms   35ms 152.63.38.117
     9   40ms   40ms   40ms 204.255.169.90
    10   75ms   75ms   75ms 129.250.2.49
    11   95ms   95ms   95ms 129.250.4.54
    12   95ms   95ms   95ms 129.250.28.52
    13   95ms   95ms   95ms 208.55.254.9
    14  110ms  100ms   95ms 208.55.20.177

    TRACEROUTE command complete
;
```

This example shows a request to host IP address *208.55.20.177*. A maximum of 20 hops has been specified. Intermediate host names are displayed. Application Port 40000 is used.

```
pass:loc=1103:cmd="traceroute 208.55.20.177 -m 20 -p 40000"
```

```
    Command entered at terminal #1.
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0

    TRACEROUTE command in progress
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    Traceroute to www.remotedest.com (208.55.20.177),
                 20 hops max, 100 byte packets
     1    5ms    5ms    5ms 216-187-242-57.ded.btitelecom.net (216.187.242.57)
     2   25ms   25ms   25ms 216-187-251-74.ded.btitelecom.net (216.187.251.74)
     3   25ms   25ms   25ms 208.216.228.254 (208.216.228.254)
     4   25ms   25ms   25ms 157.130.34.93 (157.130.34.93)
     5   35ms   40ms   40ms 178.ATM2-0.XR1.DCA1.ALTER.NET (146.188.162.50)
```

```
     6   45ms   35ms   40ms 195.at-2-0-0.XR1.DCA6.ALTER.NET (152.63.33.22)
     7   35ms   40ms   40ms 0.so-1-3-0.XL1.DCA6.ALTER.NET (152.63.35.114)
     8   40ms   35ms   40ms POS6-0.BR3.DCA6.ALTER.NET (152.63.38.117)
     9   40ms   40ms   40ms a3-0.uunet.mclnva02.us.bb.verio.net (204.255.169.90)

    10   75ms   75ms   75ms p16-0-0-0.r00.atlnga03.us.bb.verio.net(129.250.2.49)

    11   95ms   95ms   95ms p4-0-2-0.r01.bcrtfl01.us.bb.verio.net (129.250.4.54)

    12   95ms   95ms   95ms ge-1-1.r01.border.boca.verio.net (129.250.28.52)
    13   95ms   95ms   95ms ge-8-1.r01.edge.boca.verio.net (208.55.254.9)
    14   95ms   95ms   95ms www.remotedest.com (208.55.20.177)

    TRACEROUTE command complete
;
```

This example shows a request to host IP address 204.202.136.31. A maximum of 20 hops has been specified. Intermediate host names are displayed. Several timeouts occur. An ICMP error is received (in this case, an unknown response with an ICMP code = 13), and the command is terminated immediately.

```
pass:loc=1103:cmd="traceroute 204.202.136.31 -m 20"
```

```

    Command entered at terminal #1.
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    PASS: Command sent to card
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
    TRACEROUTE command in progress
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE5 31.6.0
;

    rlghncxa03w 04-07-27 08:32:34 EST  EAGLE 31.6.0
    Traceroute to 204.202.136.31 (204.202.136.31),
                  20 hops max, 100 byte packets
     1    5ms    5ms    5ms 216-187-242-57.ded.btitelecom.net (216.187.242.57)
     2   25ms   25ms   25ms 216-187-251-74.ded.btitelecom.net (216.187.251.74)
     3   25ms   25ms   25ms bti-rdu-c1-rtr.btitelecom.net (208.216.228.254)
     4   25ms   25ms   25ms Serial4-1-0.GW2.RDU1.ALTER.NET (157.130.34.93)
     5   35ms   40ms   35ms 178.ATM2-0.XR1.DCA1.ALTER.NET (146.188.162.50)
     6   40ms   35ms   35ms 195.at-1-0-0.TR1.DCA6.ALTER.NET (152.63.33.206)
     7  110ms  115ms  115ms 121.at-1-1-0.TR1.SEA1.ALTER.NET (146.188.140.74)
     8  110ms  115ms  115ms 299.ATM7-0.XR1.SEA1.ALTER.NET (146.188.200.109)
     9  115ms  115ms  115ms 195.ATM5-0.GW5.SEA1.ALTER.NET (146.188.201.57)
    10  110ms  110ms  110ms waltdisney1-OC12-gw.customer.alter.net(157.130.182.30)

    11  110ms  115ms  110ms 204.202.138.71 (204.202.138.71)
    12    *      *      *   Request timed out
    13    !?13             Unreachable

    TRACEROUTE command complete

;
```

Related Commands

None.

ualog

User Adapter Log

Use this command to report on the user adapter (UA) state machine history for a specified association name. State machine history is kept in a circular buffer in memory. The -i and -x options are used to include or exclude groups of events from the state machine history.

Options

Options and option parameters that are underlined indicate that a value must be specified for that option or parameter. For example, the `ualog` command has the parameter aname. The association name must be specified for which the user adapter log will be displayed, as in the command `ualog s7000`. Do not enter the underlined option or parameter; enter a value for the information represented by the underlined option or parameter.

aname

This option specifies the association name for the display.

-h

This option displays help (usage) information for the command.

-i event group

This option includes groups of events in the state machine history.

Range:

service

ua

-xevent group

This option excludes groups of events from the state machine history.

Range:

service

ua

Example

```
pass:loc=1105:cmd="ualog s7000"
```

Dependencies

None

Notes

None

Output

pass:loc=1105:cmd="ualog s7000"

```
    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0
    PASS: Command sent to card
;
    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0
    UALOG command in progress
;
    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0

    UALOG: User Adapter state history log
           UA Version: 01
           ASP ID:0x00000002
           User Adapter Implemented: M3UA RFC
           Current settings: -i service ua

    Date      Time           ASP Event
    ---------------------------------------------
    05-07-27  17:17:46.940   Management Socket Open
    05-07-27  17:17:46.940   Transition to Connecting
    05-07-27  17:17:47.500   Socket Allowed for Traffic
    05-07-27  17:17:49.375   Socket Connection Established
    05-07-27  17:17:49.375   Transition to ASP-DOWN
    05-07-27  17:17:49.390   ASPUP PDU Received (ASP ID = 0x00000002)
    05-07-27  17:17:49.390   ASPUPACK PDU Transmitted
    05-07-27  17:17:49.390   Transition to ASP-INACTIVE LOADSHARE (RC=none)
    05-07-27  17:17:49.390   AS INACTIVE NTFY PDU Transmitted (RC=none)
    05-07-27  17:17:49.405   ASPACTIVE PDU Received (RC=none)
    05-07-27  17:17:49.405   ASPACTIVEACK PDU Transmitted (RC=none)
    05-07-27  17:17:49.405   Transition to ASP-ACTIVE LOADSHARE (RC=none)
    05-07-27  17:17:49.405   AS ACTIVE NTFY PDU Transmitted (RC=none)
   05-07-27  17:17:50.405   ASP INACT NTFY PDU Transmitted (ASP ID = 0x00000005)

    05-07-27  17:17:50.405   ASP ACT NTFY PDU Transmitted (ASP ID = 0x00000005)

   05-07-27  17:17:52.730   ASP FAILURE NFY PDU Transmitted (ASP ID = 0x00000003)


    UALOG command complete
;
```

pass:loc=1105:cmd="ualog s7000"

```
Command Accepted - Processing
    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0
    pass:loc=1105:cmd="ualog s7000"
;

    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0
    PASS: Command sent to card
;
```

```
    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0
    UALOG command in progress
;

    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0

    UALOG: User Adapter state history log
           UA Version: 01
           ASP ID: 0x00000007
           User Adapter Implemented: SUA RFC
           Current settings: -i service ua

    Date      Time          Event
    ------------------------------------------
    05-07-27  19:45:33.265   CLDT PDU Transmitted(RC=0000000001)
    05-07-27  19:48:07.490   ASPINACTIVE PDU Received(RC=none)
    05-07-27  19:48:07.490   ASPINACTIVEACK PDU Transmitted(RC=0000000002)
   05-07-27  19:48:07.490   Transition to ASP-INACTIVE LOADSHARE(RC=0000000002)

    05-07-27  19:48:07.490   AS PENDING NTFY PDU Transmitted(RC=0000000002)
    05-07-27  19:48:07.500   AS INACTIVE NTFY PDU Transmitted(RC=0000000002)
    05-07-27  19:48:19.730   ASPACTIVE PDU Received(RC=0000000001)
    05-07-27  19:48:19.730   ASPACTIVEACK PDU Transmitted(RC=0000000001)
    05-07-27  19:48:19.730   Transition to ASP-ACTIVE LOADSHARE(RC=0000000001)
    05-07-27  19:48:19.730   AS ACTIVE NTFY PDU Transmitted(RC=0000000001)

    UALOG: command complete
;
```

When a M3UA or SUA PDU is received that contains one or more errors, a response error message is transmitted containing an error code. Error codes are recorded to and displayed in the UALOG only when the UA peer-to-peer message logging option is enabled (*-i ua*), as shown.

`pass:loc=1315:cmd="ualog assoc1315a1"`

```
Command Accepted - Processing
    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0
    pass:loc=1315:cmd="ualog assoc1315a1"
    Command entered at terminal #3.
;

    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0
    PASS: Command sent to card
;

    rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0

    UALOG command in progress
;

   rlghncxa03w 05-07-27 08:10:00 EST  EAGLE5 34.0.0

    UALOG: User Adapter state history log
           UA Version: 01
           ASP ID:undefined
           User Adapter Implemented: M3UA RFC
           Current settings: -i service ua

    Date      Time          Socket Event
    ------------------------------------------
    05-07-27  17:17:46.940   Management Socket Open
```

```
    05-07-27  17:17:46.940   Transition to Connecting
    05-07-27  17:17:49.375   Socket Connection Established
    05-07-27  17:17:49.375   Transition to ASP-DOWN
    05-07-27  17:17:49.390   ASPUP PDU Received (ASP ID = undefined)
    05-07-27  17:17:49.390   ASPUPACK PDU Transmitted
    05-07-27  17:17:49.390   Transition to ASP-INACTIVE LOADSHARE
    05-07-27  17:17:49.390   AS INACTIVE NTFY PDU Transmitted
    05-07-27  17:17:49.405   ASPACTIVE PDU Received
    05-07-27  17:17:49.405   ASPACTIVEACK PDU Transmitted
    05-07-27  17:17:49.405   Transition to ASP-ACTIVE LOADSHARE
    05-07-27  17:17:49.405   AS ACTIVE NTFY PDU Transmitted
    05-07-27  17:17:49.450   DAUD PDU Received
    05-07-27  17:17:49.480   ERR PDU Transmitted (0x00000015)

    UALOG command complete
;
```

Error Codes

Note: Error codes 0x02, 0x08, 0x1a, 0x1b, 0x1c, 0x10, 0x17, and 0x18 are not used in M3UA

Error codes that can appear in the error messages:

- **0x01**—Invalid Version

  A message was received with an invalid or unsupported version. The error message contains the supported version in the Common Header.

- **0x03**—Unsupported Message Class

  A message was received with an unexpected or usupported Message Class.

- **0x04**—Unsupported Message Type

  A message was received with an unexpected or usupported Message Type.

- **0x05**—Unsupported Traffic Handling Mode

  This error is sent by a Signaling Gateway Process (SGP) if an Application Server Process (ASP) sends an ASP Active message with an unsupported Traffic Mode Type or a Traffic Mode Type that is incomsistent with the currently configured mode for the Application Server (AS).

- **0x06**—Unexpected Message

  This error message can be sent if a defined and recognized message is received that is not expected in the current state. In some cases the ASP might silently discard te message and not send an error message. Silent discard is used by an ASP if it received a DATA message from a signaling point while the ASP is in the ASP-INACTIVE state. If the unexpected message contains Routing Context, the Routing Context can be included in the error message.

- **0x07**—Protocol Error

  This error message is sent for any protocol anomaly, such s rception of a parameter tha is syntactically correct but unexpected in the current situation.

- **0x09**—Invalid Stream Identifier

  A message is received on an unexpected SCTP stream (for example, a Management message was received on a stream other than 0).

- **0x0d**—Refused - Management Blocking

  An ASP Up or ASP Active message is received and the request is refused for management reasons (such as management lockout). If this error is in response to an ASP Active message, the Routing Context in the ASP Active message can be included in the error message.

- **0x0e**—ASP Identifier Required

  This error message is sent by an SGP in response to an ASP Up message that does not contain an ASP Identifier parameter when the SGP requires one. The ASP should resend the ASP Up message with an ASP Identifier.

- **0x0f**—Invalid ASP Identifier

  This error message is sent by an SGP in responseto an ASP Up message with an invalid (for example, non-unique) ASP Identifier

- **0x11**—Invalid Parameter Value

  A message is received with an invalid parameter value (for example, a DUPU message was received with a Mask value other than 0).

- **0x12**—Parameter Field Error

  A message is received with a parameter that has a wrong length field.

- **0x13**—Unexpected Parameter

  A message contains an invalid parameter.

- **0x14**—Destination Status Unknown

  This error message can be sent if a DAUD is received at a Signaling Gateway (SG) asking for the availability/congestion status of a destination, and the SG does not provide the status (as in the case when the sender is not authorized to know the status). For this error, each invalid or unauthorized Point Code is be included along with the Network Appearance and/or Routing Context associated with the Point Code.

- **0x15**—Invalid Network Appearance

  This error message is sent by an SGP if an ASP sends a message with an invalid (unconfigured) Network Appearance value. For this error, the invalid (unconfigured) Network Appearance is be included in the Network Appearance parameter.

- **0x16**—Missing Parameter

  A message is received, and a mandatory parameter is not included in the message.

- **0x19**—Invalid Routing Context

  A message is received from a peer with an invalid (unconfigured) Routing Context value. The invalid Routing Context is included in the error message.

- **0x1a**—No Configured AS for ASP

  A message is received from a peer without a Routing Context parameter, and it is not known by configuration data which Application Servers are referenced.

Related Commands

None.

Appendix A

Reference Information

Topics:

- *Summary of Range Values for :link Parameter.3139*
- *Commands Listed by Class.....3140*
- *Possible Values for PST/SST/AST.....3153*
- *Point Code Formats and Conversion.....3157*
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This Appendix contains information that is used by multiple commands.

Summary of Range Values for :link Parameter

Table 54: Summary of Ranges for link Parameter lists the valid *link* parameter range values for signaling links assigned to each type of card for which a location can be specified in the command's `loc` parameter. The commands that use these values refer to this table in their *link* parameter description.

Note: The *port* parameter is a synonym for the *link* parameter in signaling link definitions for EAGLE commands. The *port* parameter will be removed in a future EAGLE release.

Table 54: Summary of Ranges for *link* Parameter

Card	Link	Supported Application
HC-MIM/E5-E1T1-B	A-A31, B-B31	SS7ANSI or CCS7ITU application. A maximum of 64 links can be assigned to each HC-MIM card.
HC-MIM/E5-E1T1-B for SE-HSL	A, B	SS7ANSI or CCS7ITU application. The card can support a maximum of 2 SE-HSL links.
HC-MIM/E5-E1T1-B for ST-HSL-A	A, B	SS7ANSI application. The card can support a maximum of 2 ST-HSL-A links.
E5-ATM/E5-ATM-B	A, A1, B	ATMANSI or ATMITU application. The card can support up to 3 signaling links.
E5-ENET/E5-ENET-B	A-A7, B-B7	IPLIM or IPLIIMI application with sockets, M2PA/SCTP associations, or M3UA/SCTP associations.
E5-ENET/E5-ENET-B	A-A15, B-B15	IPSG application.
E5-E1T1	A-A15, B-B15	SS7ANSI or CCS7ITU application. The card can support up to 32 links.
E5-E1T1 for SE-HSL	A	SS7ANSI or CCS7ITU application Only 1 SE-HSL link can be assigned to a card.

Card	Link	Supported Application
E5-E1T1 for ST-HSL-A	A	SS7ANSI application. Only 1 ST-HSL-A link can be assigned to a card.

Commands Listed by Class

Basic Commands

- *act-echo*
- *act-user*
- *canc-echo*
- *canc-echo*
- *canc-user*
- *chg-pid*
- *dact-cmd*
- *dact-user*
- *dlt-sccp-serv*
- *lock*
- *login*
- *logout*
- *rept-stat-user*
- *rtrv-cmd*
- *rtrv-cmdclass*
- *rtrv-sccp-serv*
- *rtrv-user*
- *unlock*

Database Administration Commands

- *act-ftp-trns*
- *act-lbp*
- *chg-acg-mic*
- *chg-acg-noc*
- *chg-ainpopts*
- *chg-aiqopts*
- *chg-appl-rtkey*
- *chg-as*
- *chg-assoc*
- *chg-atinpqopts*
- *chg-atm-lps*
- *chg-card*
- *chg-clkopts*

- *chg-csl*
- *chg-ctrl-feat*
- *chg-dstn*
- *chg-e1*
- *chg-feat*
- *chg-frm-pwr*
- *chg-ftp-serv*
- *chg-gsm-msg*
- *chg-gsmmap-scrn*
- *chg-gsmopts*
- *chg-gsms-opcode*
- *chg-gsmsmsopts*
- *chg-gta*
- *chg-gtcnv*
- *chg-gtmod*
- *chg-gtt*
- *chg-gttact*
- *chg-gttapath*
- *chg-gttaset*
- *chg-gttsel*
- *chg-gttset*
- *chg-gtw-stp*
- *chg-gws-actset*
- *chg-gws-redirect*
- *chg-inpopts*
- *chg-ip-card*
- *chg-ip-conn*
- *chg-ip-lnk*
- *chg-is41-msg*
- *chg-is41opts*
- *chg-is41smsopts*
- *chg-isup-msg*
- *chg-l2t*
- *chg-l3t*
- *chg-lbp*
- *chg-lnp-serv*
- *chg-lnpopts*
- *chg-loopset*
- *chg-ls*
- *chg-lsopts*
- *chg-m2pa-tset*
- *chg-map*
- *chg-mrn*
- *chg-netopts*
- *chg-npp-as*
- *chg-npp-serv*

- *chg-npp-srs*
- *chg-ppsopts*
- *chg-prefix*
- *chg-rte*
- *chg-rtx*
- *chg-sccp-msg*
- *chg-sccp-serv*
- *chg-sccpopts*
- *chg-scr-aftpc*
- *chg-scr-blkdpc*
- *chg-scr-blkopc*
- *chg-scr-cdpa*
- *chg-scr-cgpa*
- *chg-scr-destfld*
- *chg-scr-dpc*
- *chg-scr-isup*
- *chg-scr-opc*
- *chg-scr-sio*
- *chg-scr-tt*
- *chg-scrset*
- *chg-sg-opts*
- *chg-shlf*
- *chg-sid*
- *chg-sip-npp*
- *chg-sipopts*
- *chg-slt*
- *chg-snmp-host*
- *chg-snmpopts*
- *chg-srvsel*
- *chg-ss-appl*
- *chg-ss7opts*
- *chg-stpopts*
- *chg-t1*
- *chg-tatr-msg*
- *chg-tatropts*
- *chg-th-alm*
- *chg-tifopts*
- *chg-trm*
- *chg-ttmap*
- *chg-ttr-msg*
- *chg-ttropts*
- *chg-uaps*
- *chg-vflx-cd*
- *chg-vflx-opts*
- *chg-vflx-rn*
- *chg-vflx-vmsid*

- *chk-unref-ent*
- *dlt-acg-mic*
- *dlt-acg-noc*
- *dlt-appl-rtkey*
- *dlt-as*
- *dlt-assoc*
- *dlt-card*
- *dlt-csl*
- *dlt-cspc*
- *dlt-dlk*
- *dlt-dstn*
- *dlt-e1*
- *dlt-frm-pwr*
- *dlt-ftp-serv*
- *dlt-gserv-data*
- *dlt-gsmmap-scrn*
- *dlt-gsms-opcode*
- *dlt-gsmssn-scrn*
- *dlt-gta*
- *dlt-gtcnv*
- *dlt-gtmod*
- *dlt-gtt*
- *dlt-gttact*
- *dlt-gttapath*
- *dlt-gttaset*
- *dlt-gttsel*
- *dlt-gttset*
- *dlt-gws-redirect*
- *dlt-home-smsc*
- *dlt-homern*
- *dlt-ip-conn*
- *dlt-ip-host*
- *dlt-ip-node*
- *dlt-ip-rte*
- *dlt-lbp*
- *dlt-lnp-serv*
- *dlt-loopset*
- *dlt-ls*
- *dlt-map*
- *dlt-mrn*
- *dlt-na*
- *dlt-npp-as*
- *dlt-npp-srs*
- *dlt-pct*
- *dlt-prefix*
- *dlt-rmt-appl*

- *dlt-rte*
- *dlt-rtx*
- *dlt-scr-aftpc*
- *dlt-scr-blkdpc*
- *dlt-scr-blkopc*
- *dlt-scr-cdpa*
- *dlt-scr-cgpa*
- *dlt-scr-destfld*
- *dlt-scr-dpc*
- *dlt-scr-isup*
- *dlt-scr-opc*
- *dlt-scr-sio*
- *dlt-scr-tt*
- *dlt-scrset*
- *dlt-shlf*
- *dlt-sip-npp*
- *dlt-slk*
- *dlt-snmp-host*
- *dlt-spc*
- *dlt-srvsel*
- *dlt-ss-appl*
- *dlt-subnetid*
- *dlt-t1*
- *dlt-tt*
- *dlt-ttmap*
- *dlt-uim-acthresh*
- *dlt-vendid*
- *dlt-vflx-cd*
- *dlt-vflx-rn*
- *dlt-vflx-vmsid*
- *enable-ctrl-feat*
- *ent-acg-mic*
- *ent-acg-noc*
- *ent-appl-rtkey*
- *ent-as*
- *ent-assoc*
- *ent-card*
- *ent-csl*
- *ent-cspc*
- *ent-dlk*
- *ent-dstn*
- *ent-e1*
- *ent-frm-pwr*
- *ent-ftp-serv*
- *ent-gserv-data*
- *ent-gsmmap-scrn*

- *ent-gsms-opcode*
- *ent-gsmssn-scrn*
- *ent-gta*
- *ent-gtcnv*
- *ent-gtmod*
- *ent-gtt*
- *ent-gttact*
- *ent-gttapath*
- *ent-gttaset*
- *ent-gttsel*
- *ent-gttset*
- *ent-gws-redirect*
- *ent-home-smsc*
- *ent-homern*
- *ent-ip-conn*
- *ent-ip-host*
- *ent-ip-node*
- *ent-ip-rte*
- *ent-lbp*
- *ent-lnp-serv*
- *ent-loopset*
- *ent-ls*
- *ent-map*
- *ent-mrn*
- *ent-na*
- *ent-npp-as*
- *ent-npp-srs*
- *ent-pct*
- *ent-rmt-appl*
- *ent-rte*
- *ent-rtx*
- *ent-scr-aftpc*
- *ent-scr-blkdpc*
- *ent-scr-blkopc*
- *ent-scr-cdpa*
- *ent-scr-cgpa*
- *ent-scr-destfld*
- *ent-scr-dpc*
- *ent-scr-isup*
- *ent-scr-opc*
- *ent-scr-sio*
- *ent-scr-tt*
- *ent-scrset*
- *ent-serial-num*
- *ent-shlf*
- *ent-sid*

- *ent-sip-npp*
- *ent-slk*
- *ent-snmp-host*
- *ent-spc*
- *ent-srvsel*
- *ent-ss-appl*
- *ent-subnetid*
- *ent-t1*
- *ent-scr-tt*
- *ent-ttmap*
- *ent-vendid*
- *ent-vflx-cd*
- *ent-vflx-rn*
- *ent-vflx-vmsid*
- *rept-stat-db*
- *rtrv-acg-mic*
- *rtrv-acg-noc*
- *rtrv-ainpopts*
- *rtrv-aiqopts*
- *rtrv-appl-rtkey*
- *rtrv-as*
- *rtrv-assoc*
- *rtrv-atinpqopts*
- *rtrv-atm-lps*
- *rtrv-atm-prm*
- *rtrv-card*
- *rtrv-clkopts*
- *rtrv-csl*
- *rtrv-cspc*
- *rtrv-ctrl-feat*
- *rtrv-data-rtdb*
- *rtrv-dlk*
- *rtrv-dstn*
- *rtrv-e1*
- *rtrv-feat*
- *rtrv-frm-pwr*
- *rtrv-ftp-serv*
- *rtrv-gserv-data*
- *rtrv-gsm-msg*
- *rtrv-gsmmap-scrn*
- *rtrv-gsmopts*
- *rtrv-gsms-opcode*
- *rtrv-gsmsmsopts*
- *rtrv-gsmssn-scrn*
- *rtrv-gta*
- *rtrv-gtcnv*

- *rtrv-gtmod*
- *rtrv-gtt*
- *rtrv-gttact*
- *rtrv-gttapath*
- *rtrv-gttaset*
- *rtrv-gttsel*
- *rtrv-gttset*
- *rtrv-gtw-stp*
- *rtrv-gtwy-acthresh*
- *rtrv-gtwy-prmtrs*
- *rtrv-gws-actset*
- *rtrv-gws-redirect*
- *rtrv-home-smsc*
- *rtrv-homern*
- *rtrv-inpopts*
- *rtrv-ip-card*
- *rtrv-ip-conn*
- *rtrv-ip-host*
- *rtrv-ip-lnk*
- *rtrv-ip-node*
- *rtrv-ip-rte*
- *rtrv-is41-msg*
- *rtrv-is41opts*
- *rtrv-is41smsopts*
- *rtrv-isup-msg*
- *rtrv-l2t*
- *rtrv-l3t*
- *rtrv-lbp*
- *rtrv-lnp-serv*
- *rtrv-lnpopts*
- *rtrv-loopset*
- *rtrv-ls*
- *rtrv-m2pa-tset*
- *rtrv-map*
- *rtrv-mrn*
- *rtrv-na*
- *rtrv-netopts*
- *rtrv-npp-as*
- *rtrv-npp-serv*
- *rtrv-npp-srs*
- *rtrv-pct*
- *rtrv-ppsopts*
- *rtrv-prefix*
- *rtrv-rmt-appl*
- *rtrv-rte*
- *rtrv-rtx*

- *rtrv-sccp-msg*
- *rtrv-sccpopts*
- *rtrv-scr-aftpc*
- *rtrv-scr-blkdpc*
- *rtrv-scr-blkopc*
- *rtrv-scr-cdpa*
- *rtrv-scr-cgpa*
- *rtrv-scr-destfld*
- *rtrv-scr-dpc*
- *rtrv-scr-isup*
- *rtrv-scr-opc*
- *rtrv-scr-sio*
- *rtrv-scr-tt*
- *rtrv-scrset*
- *rtrv-seas-config*
- *rtrv-serial-num*
- *rtrv-sg-opts*
- *rtrv-shlf*
- *rtrv-sip-npp*
- *rtrv-sipopts*
- *rtrv-slk*
- *rtrv-slt*
- *rtrv-snmp-host*
- *rtrv-snmpopts*
- *rtrv-spc*
- *rtrv-srvsel*
- *rtrv-ss7opts*
- *rtrv-ss-appl*
- *rtrv-stp*
- *rtrv-stpopts*
- *rtrv-subnetid*
- *rtrv-t1*
- *rtrv-tatr-msg*
- *rtrv-tatropts*
- *rtrv-tbl-capacity*
- *rtrv-th-alm*
- *rtrv-tifopts*
- *rtrv-tps*
- *rtrv-trbltx*
- *rtrv-trm*
- *rtrv-tt*
- *rtrv-ttmap*
- *rtrv-ttr-msg*
- *rtrv-ttropts*
- *rtrv-uaps*
- *rtrv-uim-acthresh*

- *rtrv-vendid*
- *rtrv-vflx-cd*
- *rtrv-vflx-opts*
- *rtrv-vflx-rn*
- *rtrv-vflx-vmsid*
- *set-gtwy-acthresh*
- *set-scrrej-prmtrs*
- *set-uim-acthresh*
- *tst-msg*
- *tst-npp-msg*

System Maintenance Commands

- *act-alm-trns*
- *act-file-trns*
- *act-flash*
- *alw-card*
- *alw-imt*
- *alw-map-ss*
- *alw-trm*
- *aud-data*
- *canc-alm-trns*
- *chg-db*
- *chg-seas-config*
- *clr-imt-stats*
- *conn-imt*
- *copy-disk*
- *copy-ext-stats*
- *copy-fta*
- *copy-gpl*
- *copy-meas*
- *dact-alm-trns*
- *dact-rstst*
- *disc-imt*
- *disp-fta-dir*
- *dlt-fta*
- *flash-card*
- *format-disk*
- *inh-alm*
- *inh-card*
- *inh-imt*
- *inh-map-ss*
- *inh-trm*
- *init-card*
- *init-ext-stats*

- *init-flash*
- *init-imt-gpl*
- *init-mux*
- *init-network*
- *init-sys*
- *pass*
- *rept-imt-info*
- *rept-imt-lvl1*
- *rept-imt-lvl2*
- *rept-stat-alm*
- *rept-stat-applsock*
- *rept-stat-as*
- *rept-stat-assoc*
- *rept-stat-card*
- *rept-stat-cdt*
- *rept-stat-clk*
- *rept-stat-cluster*
- *rept-stat-ddb*
- *rept-stat-dlk*
- *rept-stat-dstn*
- *rept-stat-e1*
- *rept-stat-enet*
- *rept-stat-imt*
- *rept-stat-ipconn*
- *rept-stat-iptps*
- *rept-stat-lnp*
- *rept-stat-ls*
- *rept-stat-meas*
- *rept-stat-mfc*
- *rept-stat-mon*
- *rept-stat-mps*
- *rept-stat-mux*
- *rept-stat-rtd*
- *rept-stat-rte*
- *rept-stat-rtkey*
- *rept-stat-rtx*
- *rept-stat-sccp*
- *rept-stat-seas*
- *rept-stat-sip*
- *rept-stat-slan*
- *rept-stat-slk*
- *rept-stat-sys*
- *rept-stat-t1*
- *rept-stat-trbl*
- *rept-stat-trm*
- *rept-stat-xlist*

- *rls-alm*
- *rmv-card*
- *rmv-imt*
- *rmv-trm*
- *rst-card*
- *rst-dstn*
- *rst-imt*
- *rst-trm*
- *rtrv-bip*
- *rtrv-log*
- *rtrv-obit*
- *rtrv-trbl*
- *tst-bip*
- *tst-disk*
- *tst-e1*
- *tst-imt*
- *tst-t1*
- *unhb-alm*

Link Maintenance Commands

- *act-cdl*
- *act-dlk*
- *act-lpo*
- *act-slk*
- *alw-slk*
- *blk-slk*
- *canc-dlk*
- *canc-lpo*
- *canc-slk*
- *chg-meas*
- *chg-measopts*
- *chg-mtc-measopts*
- *dact-cdl*
- *dact-lbp*
- *dact-slk*
- *inh-slk*
- *rept-ftp-meas*
- *rept-meas*
- *rept-stat-cdl*
- *rept-stat-lfs*
- *rept-stat-tstslk*
- *rtrv-meas-sched*
- *rtrv-measopts*
- *rtrv-mtc-measopts*

- *tst-dlk*
- *tst-slk*
- *ublk-slk*
- *unhb-slk*

Program Update Commands

- *act-gpl*
- *chg-gpl*
- *rept-stat-gpl*
- *rtrv-gpl*

Security Administration Commands

- *canc-cmd*
- *chg-attr-seculog*
- *chg-cmd*
- *chg-cmdclass*
- *chg-eisopts*
- *chg-secu-dflt*
- *chg-secu-trm*
- *chg-user*
- *copy-seculog*
- *dlt-user*
- *ent-user*
- *rept-stat-seculog*
- *rtrv-attr-seculog*
- *rtrv-eisopts*
- *rtrv-secu-dflt*
- *rtrv-secu-trm*
- *rtrv-secu-user*
- *rtrv-seculog*
- *rtrv-sid*
- *set-date*
- *set-time*

Debug Commands

- *act-ip-lnk*
- *act-upgrade*
- *cdu*
- *chg-bip-fld*
- *chg-bip-rec*
- *chg-tbl*
- *chg-upgrade-config*

- *clr-disk-stats*
- *copy-tbl*
- *dact-ip-lnk*
- *dbg-ddb*
- *disp-bip*
- *disp-bp*
- *disp-disk-dir*
- *disp-disk-stats*
- *disp-mem*
- *disp-trace*
- *dlt-bp*
- *dlt-trace*
- *ent-bp*
- *ent-trace*
- *rtrv-upgrade-config*
- *send-msg*
- *set-mem*

Pass-Through Commands

- *arp*
- *aslog*
- *assocrtt*
- *connmgr*
- *ftptest*
- *linkinfo*
- *msucount*
- *msuroute*
- *msutrace*
- *netstat*
- *nslookup*
- *pct*
- *ping*
- *sctp*
- *sockrtt*
- *soipdata*
- *soiplog*
- *traceroute*
- *ualog*

Possible Values for PST/SST/AST

This section lists the possible values for the primary state (PST), secondary state (SST), and associated state (AST) shown in the output of the Report Status (rept-stat-) commands.

PST

Primary state possible values are the following:

IS-ANR

(IN SERVICE - ABNORMAL) The entity is in service but only able to perform a limited subset of its normal service functions.

IS-NR

(IN SERVICE - NORMAL) The entity is in service and handling all its normal service functions.

OOS-MA

(OUT OF SERVICE - MEMORY ADMINISTRATION) The entity is out of service because it has not been equipped.

OOS-MT

(OUT OF SERVICE - MAINTENANCE) The entity is out of service and is not available to perform its normal service function. The maintenance system is actively working to restore the entity to service.

OOS-MT-DSBLD

(OUT OF SERVICE - MAINTENANCE - DISABLED) The entity is out of service and the maintenance system is preventing the entity from performing its normal service function.

SST

Secondary state possible values are the following:

Active

(ACTIVE) The entity is currently in use and is handling its normal service function as the primary service provider. (MASTER) The entity is currently in a master state in relation to its redundant unit.

Allowed

(ALLOWED) The entity is handling its normal service function.

Avail

(AVAILABLE) Entity service is available to another entity.

Blocked

(BLOCKED) The entity has been manually prohibited from handling traffic.

Busy

(BUSY) The entity is handling the maximum traffic capacity and has no spare capacity for new service requests.

Conn

(CONNECT) The card’s entity status is in connected state.

DDL Hunt

(DDL HUNTING) The entity is currently in a state where the DDL is hunting for crossload info.

DDL Inhib

(DDL INHIBITED) The entity is currently in a state where the DDL is inhibited from crossload.

DDL NoXld

(DDL Unable to XLOAD) The entity is currently in a state where the DDL is unable to crossload.

DDLunstb

(DDL UNSTABLE) The entity is currently in DDL unstable state.

Disc

(Disconnect) The card's entity status is in disconnected state.

Fault

(FAULT) The entity has failed.

Idle

(IDLE) The entity is in use and has spare capacity for service.

Inhibited

(INHIBITED) The entity has been manually prevented from performing its normal service function.

Isolated

(ISOLATED) The entity cannot be detected through software or hardware.

LPBK

(LOOPBACK) The entity is currently in the Loopback state.

Manual

(MANUAL) The entity has manually been removed from service and is not carrying any traffic.

MEA

(Matintenance Equipment Administration) The entity has been auto-inhibited and has been restricted from functioning because it has not met the minimum hardware requirements for the current configuration.

MPS Unavl

(MPS unavailable). MPS is required, but unavailable for the entity.

Ovflw-1

(OVERFLOW) One entity cannot provide service to another entity due to service denial.

Prohibit

(PROHIBITED) The entity is not handling traffic because of a failure in the network.

Proh-Blk

(PROHIBITED and BLOCKED) The entity has been prohibited and blocked from handling traffic.

Restart

(RESTART) The entity is in MTP Restart.

Restrict

(RESTRICTED) Normal operation for the entity is restricted. The normal capacity or configuration is not being used because of a failure in the network. The normal capacity,

functionality or configuration of an entity may be restricted during loading or synching of data. This can occur when the Measurements Platform has not yet been enabled.

Standby

(STANDBY) The entity is currently in use and is handling its normal service function as an alternate service provider if the primary service provider failed. (SLAVE) The entity is currently in a slave state in relation to its redundant unit.

Test

(TEST) The entity is currently in a test state.

Unavail

(UNAVAILABLE) Entity service is unavailable to another entity.

Ueq

(UNEQUIPPED) The entity is not equipped.

Unblocked

(UNBLOCKED) The entity is handling its normal service function.

AST

Associated state possible values are the following:

(BLANK) The field may be left blank.

ACCESS

(ACCESSIBLE) Traffic is being carried between the local entity and an adjacent, or remote, service provider. A full connection has been completed.

ALMINH

(ALARM INH) The alarms on the entity are inhibited.

BRDG MSTR

(MASTER) The E1/T1 channel bridge is in Master mode.

BRDG SLAVE

(SLAVE) The E1/T1 channel bridge is in Slave mode when the adjacent odd-numbered channel bridge is provisioned in Master mode.

CDL

(COMMAND DRIVEN LOOPBACK) The entity is in command driven loopback state.

DB DIFF

(DATABASE DIFFERENT) The entity has a database difference.

ENET FLT

(ETHERNET FAULT) An Ethernet fault exists.

EXT BERT

(EXTENDED BERT TEST) The entity is undergoing Extended BERT.

FE LINE

(FAR END LINE LOOPBACK) The entity is in far end line loopback.

FE PAYLD

(FAR END PAYLOAD LOOPBACK) The entity is in far end payload loopback.

FLT CHK

(FAULT ISOLATION TEST) The entity is undergoing a fault isolation test.

INACCESS

(INACCESSIBLE) Traffic is not being carried from the local entity to another service provider. A breakdown in a complete circuit has been detected.

LFS

(LINK FAULT SECTIONALIZATION) The entity is in Link Fault State.

LINE

(LINE LOOPBACK) The entitty is in line loopback state.

LOCAL

(LOCAL) The entity has become locally isolated.

LXVR

(LXVR LOOPBACK) The entity is in local transceiver loopback state.

M BIP ERR

(MOTHERBOARD IDENTITY PROM) The entity has a motherboard prom error.

NOT BRDGD

(NOT BRIDGED) The E1/T1 port channel is not bridged.

OAM F5 FM

(OAM LOOPBACK) The entity is in OAM initiated loopback state.

PAYLOAD

(PAYLOAD LOOPBACK) The entity is in payload loopback state.

SLTM

(SPECIAL MAINTENANCE TEST MESSAGES) The entity is in SLTM testing state.

Point Code Formats and Conversion

Many of the commands used for database configuration use point codes. This section describes the point code formats that the system supports. If you need additional information or procedural information, refer to the *Database Administration Manual - SS7*.

The system supports four different point code formats:

- ANSI point codes
- ITU International point codes
- ITU National point codes
- ITU National 24-bit point codes

Each format is described in further detail in the following sections.

ANSI Point Codes

ANSI point codes are made up of three groups of digits called the network indicator (*ni*), network cluster (*nc*), and network cluster member (*ncm*). The values for ANSI point codes depend on the value of the pctype parameter of the `chg-sid` command, either *ansi* or *other*.

If the pctype=ansi command is entered, the range of values for an ANSI point code is as follows:

- *ni-001-255*
- *nc-001-255* (if *ni = 001-005*)
- *-000-255*, * (if *ni = 006-255*)
- *ncm-000-255*

The following rules apply to provisioning ANSI point codes if the pctype=ansi parameter is specified:

- An *ni* value of *0* is not allowed (e.g., dpc=0-1-1 and dpc=0-0-0 are not valid point codes).
- If the *ni* value is *1, 2, 3, 4*, or *5*, then the *nc* value cannot be *0* (e.g., dpc=5-0-1 is rejected).
- If the *ni* value is *1, 2, 3, 4*, or *5*, then network routing point codes are not allowed (e.g., dpc=4-*-* is rejected).

If the pctype=other parameter is specified, the ANSI point codes do not meet ANSI standards. The range of values for these ANSI point codes is as follows:

- *ni-000-255*
- *nc-000-255, **
- *ncm -000-255, **

The following rules apply to provisioning ANSI point code if the pctype=other parameter is specified:

- An *ni* value of *0* is allowed, however dpc=0-0-0 is rejected (e.g., dpc=0-1-1 is accepted).
- The *nc* value can be *0* for all values of *ni* (e.g., dpc=5-0-1 is accepted).
- Network routing point codes are allowed for all values of *ni* (e.g., dpc=4-*-* is accepted).

An ANSI point code containing all zeros (0-0-0) is not a valid point code and cannot be entered into the database.

ANSI point codes support the Private (Internal) Point Code subtype prefix (p-). The prefix can be specified before the point code subfield values to indicate a Private Point Code (i.e p-5-0-1). See *Spare and Private Point Code Subtype Prefixes*.

Note: Point codes specified by many commands, including those for site identification, routing keys, and LNP, are required to be full point codes. The asterisk values are not valid in the commands that specify these point codes. The command Dependencies sections identify the point codes that must be full point codes in the commands.

A range of values for a subfield is specified by separating the values that define the range by two ampersands (*&&*); for example, ni=025&&100 specifies all network indicators for ANSI point codes from 25 - 100.

The asterisk (*) point code value indicates a single cluster address for a cluster point code (e.g., 20-2-*) or a network routing destination (20-*-*). If * is used for the *nc* subfield, then * must be also be used for the *ncm* subfield.

A double asterisk (**) and a triple asterisk (***) can also be used for the *nc* and *ncm* subfields of the ANSI point code, but only for the `rtrv-dstn`, `rept-stat-dstn`, `rtrv-rte`, and `rept-stat-rte` commands. If *, **, or *** is used for the *nc* subfield, then *, **, or *** must be used for the *ncm* field

For examples of all of these point code values, see the `rtrv-dstn` command output.

ITU International Point Codes

The ITU international point codes are made up of three groups of digits called *zone*, *area*, and *id*. The range of varnames for ITU International point codes are:

- *zone-0-7*
- *area-000-255*
- *id-0-7*

An ITU international point code containing all zeros (*0-000-0*) is not a valid point code and cannot be entered into the database.

ITU international point codes support the Spare Point Code subtype prefix (s-). The prefix can be specified before the point code subfield varnames to indicate a Spare Point Code (*s-5-222-1*, for example). See *Spare and Private Point Code Subtype Prefixes*.

ITU National Point Codes

The ITU national point code is a 14-bit integer. The point codes can be a single number up to five digits, or two, three, or four numbers (members) separated by dashes.

If the ITU National Duplicate Point Code (ITUDUPPC) feature is on, ITU national point codes can have group codes assigned to them. The point code is a 1- to 5-digit number. The group code is a two-character field ranging from *aa* to *zz* that is entered as the last subfield of the point code and is separated by a dash from the rest of the point code. An example is *12345-az*.

If the flexible point codes option is enabled (see the `chg-stpopts` command, `:npcfmti parameter`), an ITU national point code format consists of 2, 3, or 4 numbers separated by dashes (formatted as *m1-m2-m3-m4*). When the ITUDUPPC feature is also on, the format is *m1-m2-m3-m4-gc* with a group code. If one of the *m1, m2, m3, m4* members is set to zero bits, no value is entered for that position in the point code. For example, if the `npcfmti` parameter value is set to *3-8-3-0*, valid point codes would be *1-100-1-aa* with a group code, or *7-255-7* with no group code. See the tables in the `chg-stpopts` command description for valid member values and additional examples.

The following ranges of values are valid:

- *nnnnn016383*
- *nnnnn-gc0-16363*; group code is *aa-zz* (the ITUDUPPC feature must be on)
- *m1-m2-m3-m4*Each member represents the number of bits allowed in the corresponding position for a flexible ITU national point code. The range of each member is from 0 - 14. Each member must be specified; the member value of 0 indicates that the position is not specified in the flexible point code. The sum of the member values must equal 14.
- *m1-m2-m3-m4-gc*Each member represents the number of bits allowed in the corresponding position for a flexible ITU national point code. The range of each member is from *0* to *14*. Each member must be specified; the member value of *0* indicates that the position is not specified in the flexible point code. The sum of the member values must equal 14. Group code is *aa-zz* (the ITUDUPPC feature must be on).

An asterisk value (*) is allowed only for the `rtrv-dstn` and `rtrv-rte` commands to retrieve ITU-N DPCs if the ITUDUPPC feature is on (for point codes with group codes). The node and group code

cannot both be *. For example, `dpcn=12345-*` and `dpcn=*aa` are allowed, but `dpcn=*-*` is not allowed.

If flexible point codes are also used, all valid *m1*, *m2*, *m3*, and *m4* must all be either a number or an *. For example, *1-100-1-aa* and *-*-*-aa* are allowed, but *1-*-*-aa* is not allowed.

ITU national point codes support the Spare Point Code subtype prefix (s-). The prefix can be specified before the point code subfield values to indicate a Spare Point Code (*s-12345* or *s-1-3-5-5-gc*, for example). See *Spare and Private Point Code Subtype Prefixes*.

Converting ITU National Point Code Formats

Gateway screening only allows ITU national point codes to be provisioned in the database by the enter, delete, or change gateway screening commands, and displayed by the gateway screening retrieve commands as a single number. If a format other than a single number (14-0-0-0) for the ITU national point code has been defined by the npcfmti parameter of the chg-stpopts command, the ITU national point code must be converted into a single number so that it can be used by gateway screening.

For example, the format of the ITU national point code is 4-4-4-2 and you would like to add point code 7-7-7-1 into the allowed OPC screen. The point code 7-7-7-1 would have to be converted to a single number so that the point code can be added to the allowed OPC screen. To determine what multiple-part ITU national point code is represented by the single number ITU national point code in the gateway screening table, the single number point code must be converted to a multiple-part point code.

To convert a single number ITU national point code to a multiple-part point code, go to *Converting Single Number ITU National Point Codes*.

To convert a multiple-part ITU national point code to a single number point code, go to *Converting Multiple-Part ITU National Point Codes*.

For a definition of the different formats that can be used for ITU national point codes, see *ITU National Point Codes*.

When the ITU national point codes are converted from single numbers to multiple-part point codes, the resulting value of the multiple-part point code depends on the point code format specified by the npcfmti parameter of the chg-stpopts command. When converting the single number point code 14781 to the point code format 3-8-3-0, the resulting point code value is 7-55-5. If point code 14781 is converted to the point code format 4-4-4-2, the resulting point code value is 14-6-15-1.

Converting Single Number ITU National Point Codes

To make this conversion, you will need to know the format of the ITU national point code. This can be verified in the NPCFMTI field of the `rtrv-stpopts` command output. For this example, the ITU national point codes `14781` and `695` are converted to point codes using the `3-8-3-0` format.

Convert a single number ITU national point code to a multiple-part ITU national point code as follows.

Converting a Single Number ITU national point code to a multiple-part ITU national point code

1. Convert the point code to a binary number. This can be done with most scientific calculators.

   The number **14781** converts to the binary number 11100110111101.

   The number **695** converts to the binary number 1010110111.

Note: Make sure the binary number contains 14 digits. If it does not, add leading zeros to the binary number to bring the total number of digits in the number to 14.

In this example, the binary equivalent for the decimal number 695 (1010110111) contains 10 digits; four zeros must be added to the beginning of the binary number. The resulting binary number is now 00001010110111.

2. Divide the binary number into the number of parts required by the format of the ITU national point code. For this example, the format is `3-8-3-0`. Because the last part of the point code format is `0`, the point code format contains only three parts. Divide the point code into three parts, the first part of the point code contains the first three digits of the 14-digit binary number, the second part of the point code contains the next eight digits of the 14-digit binary number, and the third part of the point code contains the last three digits of the 14-digit binary number.

   For this example, the binary numbers would be divided like this:

   11100110111101 = 111 00110111 101

   00001010110111 = 000 01010110 111

3. Convert each part of the point code into a decimal number using the same scientific calculator used in step 1 and separate each part of the point code with dashes. The results are as follows.

   111 00110111 101 = **7-55-5**

   000 01010110 111 = **0-86-7**

Converting Multiple-Part ITU National Point Codes

To make this conversion, you will need to know the format of the ITU national point code. This can be verified in the `npcfmti` field of the `rtrv-stpopts` command output. For this example, the ITU national point codes `7-55-5` and `0-86-7`, using the `3-8-3-0` point code format, are converted into a single number.

Convert multiple-part ITU national point codes to a single number as follows.

Converting Multiple-Part ITU National Point Codes to a Single Number

Converting Multiple-Part ITU National Point Codes to a Single Number

1. Convert each part of the point code into a binary number using a scientific calculator. The results are as follows.

   7-55-5 = 111 00110111 101

   0-86-7 = 000 01010110 111

2. Combine each part of the point code into a single binary number as follows.

   111 00110111 101 = 11100110111101

   000 01010110 111 = 00001010110111

   Note: If the binary number has any zeros at the beginning of the number, remove these zeros as they are not necessary.

In this example, the binary equivalent for the point code **0-86-7** (00001010110111) contains four zeros at the beginning of the binary number. When the leading zeros are removed from the binary number, the resulting binary number is now 1010110111.

3. Convert the binary number to a decimal number using the same scientific calculator used in step 1.

   The binary number 11100110111101 converts to the decimal number `14781`.

   The binary number 1010110111 converts to the decimal number `695`.

24-bit ITU-National Point Codes

The 24-bit ITU national point codes are made up of three groups of digits called *main signaling area*, *sub signaling area*, and *signaling point*. The valid values for 24-bit ITU national point codes are:

- *main signaling area-000-255*
- *sub signaling area-000-255*
- *signaling point-000-255*

24-bit ITU national point codes support the Private (Internal) Point Code subtype prefix (p-). The prefix can be specified before the point code field values to indicate a Private Point Code (*p-2055-222-2011*, for example). See *Spare and Private Point Code Subtype Prefixes*.

Spare and Private Point Code Subtype Prefixes

The Spare Point Code Support feature and the Internal Point Code Support feature provide optional point code subtype prefixes. The Spare Point Code feature must be enabled before a point code subtype prefix can be specified for a point code.

Note: The SEAS interface does not support point code subtype prefixes.

The values *p-*, *s-*, and *ps-* are valid point code subtype prefixes. The dash- separates the point code subtype prefix from the remainder of the point code. The prefixes are displayed in lower case. The syntax for the remainder of the point code remains the same.

The Spare Point Code prefix (*s-*) applies only to ITU-I and ITU-N point code domains (ITU-N24 point codes do not support the Spare Point Code prefix), to allows the EAGLE to fully support ITU National and International Spare Point Codes. *Table 55: Commands that support the Spare Point Code Prefix* lists the commands that support the Spare Point Code subtype prefix.

The Private (Internal) Point Code prefix (*p-*) applies to all point code domain types (including ITU-N24 point codes), to allow messages destined to the End Office Node to be routed from the inbound LIM to the outbound IPGWx. *Table 56: Commands that support the Private Point Code Prefix* lists the commands that support the Private Point Code subtype prefix.

The subtype prefix *ps-* can be specified when the point code parameter supports both the spare and private point code prefixes.

Table 55: Commands that support the Spare Point Code Prefix

Command	Description	Applicable Point Code Parameters
`alm`	Alarm	*dpci* and *dpcn*
`appl-rtkey`	Application Route Key	*dpci* and *dpcn*; *opci* and *opcn*
`cspc`	Concerned Signaling Point Code	*pci* and *pcn*
`dstn`	Destination	*spci* and *spcn*; *dpci* and *dpcn*; and Alias combinations.
`ent-trace`	Enter Trace	*dpci* and *dpcn*; *opci* and *opcn*
`gsmmap-scrn`	GSM MAP Screening	*npci* and *npcn*
`gsmopts`	GSM Options	*ppsmspci1*, *ppsmspci2*, *ppsmspcn1*, *ppsmspcn2*
`gsms-opcode`	GSM Short Message Services OP-Code	pci and pcn
`gtt/gta`	Global Title Translation/Global Title Address	*pci* and *pcn*
`ls`	Linkset	*apci* and *apcn*
`map`	Mated Application	*pci* and *pcn*; *mpci* and *mpcn*
`mrn`	Mated Relay Node	pci and pcn; *pci1* and *pcn1*; *pci2* and *pcn2*; *pci3* and *pcn3*; *pci4* and *pcn4*
`na`	Network Appearance	*type=ituis*, *type=ituns*
`pass`	Pass Commands	Syntax for routing keys
`rmt-appl`	Remote Application	*ipci* and *ipcn*
`rte`	Route	*dpci* and *dpcn*
`scr-aftpc`	Gateway Screening Allowed Affected Point Code	*pcst* and *pctype*
`scr-blkdpc`	Gateway Screening Blocked Destination Point Code	*pcst* and *pctype*
`scr-blkopc`	Gateway Screening Blocked Origination Point Code	*pcst* and *pctype*

Command	Description	Applicable Point Code Parameters
scr-cdpa	Gateway Screening Called Party (CDPA PC Destination) Point Code	*pcst* and *pctype*
scr-cgpa	Gateway Screening Calling Party (Origination) Point Code	*pcst* and *pctype*
scr-destfld	Gateway Screening Affected Destination (Concerned) Point Code	*pcst* and *pctype*
scr-dpc	Gateway Screening Destination Point Code	*pcst* and *pctype*
scr-opc	Gateway Screening Origination Point Code	*pcst* and *pctype*
sid	Site ID	True *pci* and *pcn*; *cpci* and *cpcn*; *ncpci* and *ncpcn*.
spc	Secondary Point Code	*spci* and *spcn*

Table 56: Commands that support the Private Point Code Prefix

Command	Description	Applicable Point Code Parameters
dstn	Destination	*spci* and *spcn*; *dpc, dpca, dpci,*, and *dpcn* Does not apply to Aliases
ls	Linkset	If *ipgwapc=yes*, *apc*, *apcn*, *apci*, and *apcn*
gtt/gta	Global Title Translation	*pc*, *pca*, *pci*, and *pcn*
inh/unhb-alm	Destination alarm inhibit	*dpc*, *dpca*, *dpci*, and *dpcn*
rept-stat-cluster	Report Cluster Status	*dpc* and *dpca*
rept-stat-dstn	Report Destination Status	*dpc*, *dpca*, *dpci*, and *dpcn*
rmt-appl	Remote Application	*ipc*, *ipca*, *ipci*, and *ipcn*
rst-dstn	Restore Destination	*dpc* and *dpca*
rte	Route	*dpc*, *dpca*, *dpci*, and *dpcn*

Valid CIC Ranges for SI and MSU Types in Routing Key Static Entries

Table 57: Valid CIC Ranges for SI and MSU Types lists the valid CIC ranges for use with SI and MSU types in Routing Key table static entries.

Table 57: Valid CIC Ranges for SI and MSU Types

SI	MSU for ANSI DPC	MSU for ITU DPC	Comments
4 (TUP)	N/A	CIC is 12 bits. Range is 0-4095.	The TUP protocol is used only in ITU networks.
5 (ISUP)	CIC is 14 bits. Range is 0-16383.	CIC is 12 bits. Range is 0-4095.	
13 (QBICC)	CIC is 32 bits. Range is 0-4294967295.		

DRANAIV/DRANAI Mapping

Table 58: DRANAIV/DRANAI Mapping shows the mapping between the *drainaiv* and *dranai* parameters.

Table 58: DRANAIV/DRANAI Mapping

DRAINAIV	DRANAI	Description
1	sub	Subscriber Number
2	unknown	Unknown
3	natl	National significant number
4	intl	International number
5	ntwk	Network

DRANPV/DRANP Mapping

Table 59: DRANPV/DRANP Mapping shows the mapping between the *dranpv* and *dranp* parameters.

Table 59: DRANPV/DRANP Mapping

DRANPV	DRANP	Description
1	E164	ISDN/telephony numbering plan
3	X121	Data numbering plan
4	F69	Telex Numbering Plan

NAIV/NAI Mapping

Table 60: NAIV/NAI Mapping shows the mapping between the *naiv* and the *nai* parameters.

Table 60: NAIV/NAI Mapping

NAIV	NAI	Description
0	–	Unknown
1	Sub	Subscriber Number
2	Rsvd	Reserved for national use
3	Natl	National significant number
4	Intl	International number
5–127	–	Spare

NPV/NP Mapping

Table 61: NPV/NP Mapping shows the mapping between the *npv* and the *np* parameters.

Table 61: NPV/NP Mapping

NPV	NP	Description
0	–	Unknown
1	E164	ISDN/telephony numbering plan
2	Generic	Generic numbering plan
3	X121	Data numbering plan
4	F69	Telex numbering plan
5	E210	Maritime mobile numbering plan
6	E212	Land mobile numbering plan
7	E214	ISDN/mobile numbering plan
8	Private	Private network or network-specific numbering plan
9-15	-	Spare

Cards that use the ent-card Command

Table 62: Valid Card Applications and Types contains information about cards that use the `ent-card` command for provisioning.

Table 62: Valid Card Applications and Types

Card Name (as shown on card label)	Part Number	Card Type (:*type*)	Application Type (:*appl*)	Maximum Cards in the Database
E5-APP-B	870-3096-01	e5appb	epap elap	2 2
E5-APP-B	870-3096-02	e5appb	lsms nas imf	2 1 255
E5-ATM	870-1872-01 (R) 870-1872-02 (R)	limatm lime1atm	atmansi atmitu	180 if only one link is provisioned per card. A maximum of 180 links for either application can exist in the system.
E5-ATM-B	870-2972-01 (R)	limatm lime1atm	atmansi atmitu	180 if only one link is provisioned per card. A maximum of 180 links for either application can exist in the system.
E5-E1T1††	870-1873-02 870-1873-03 (R) 870-1873-04 (R)	lime1 limt1	ss7ansi ccs7itu	250 for each application
E5-E1T1-B††	870-2970-01	lime1 limt1	ss7ansi ccs7itu	250 for each application
E5-ENET	870-2212-02 870-2212-03 (R) 870-2212-04 (R) 870-2212-05 (R)	dcm enet stc	ss7ipgw ipgwi iplim iplimi stplan	125 for IPGWx 125 for IPLIMx 100 for ipsg 32 for stplan 32 for eroute

Card Name (as shown on card label)	Part Number	Card Type (:*type*)	Application Type (:*appl*)	Maximum Cards in the Database
			eroute ipsg	
E5-ENET-B	870-2971-01 (R)	dcm enet enetb ipsm stc	ss7ipgw ipgwi iplim iplimi stplan eroute ips ipsg	125 for IPGWx 125 for IPLIMx 100 for ipsg 32 for stplan 32 for eroute
E5-IPSM	870-2877-01 (R) 870-2877-02 (R)	ipsm	ips	3
E5-MCPM-B*	870-3089-01 (R)	mcpm	mcp	250
E5-SM4G***	870-2860-01 (R) 870-2860-02 (R)	dsm	vsccp	18 for use with ELAP 32 for use with EPAP
E5-SM8G-B***	870-2990-01 (R)	dsm	vsccp	18 for use with ELAP 32 for use with EPAP
E5-SM8G-B***	870-2990-01 (R)	dsm	siphc deirhc enumhc	16 of the E5-SM8G-B cards connected to ELAP or EPAP for siphc and deirhc 16 of the E5-SM8G-B cards connected to EPAP for enumhc
E5-TSM	870-2943-03 (R)	tsm	gls	8
HC-MIM††	870-2671-01 870-2671-02	lime1 limt1	ss7ansi ccs7itu	125 for each application

Card Name (as shown on card label)	Part Number	Card Type (:*type*)	Application Type (:*appl*)	Maximum Cards in the Database
	870-2671-03 (R)			
TELCO	870-2904-01	telco	switch	136

* Though the system allows 250 MCPM cards, practical usage is 2.

*** If any MPS-based features are running in the system, up to 25 Service Modules are allowed in the system. If only GTT is running, up to 32 Service Modules can be used in the system with the 50,000 GTT feature.

†† For the E1 or T1 interface, either SS7 application (SS7ANSI or CCS7ITU) can be assigned to these cards. For more information on the E1 or T1 interface go to Appendix A "E1 Interface" or Appendix B "T1 Interface" in the *Database Administration - SS7 User's Guide*.

Part numbers followed by (R) are ROHS numbers. These numbers are equivalent to the non-ROHS numbers that they are paired with.

***Connectivity to a TekServer 3 (T1200) with EPAP 13.0 or higher or connectivity to an E5-APP-B card with EPAP 15.0 or higher is required for more than 25 Service Module cards.

Summary of Loopback Testing Commands and Functions

Table 63: Loopback Testing Commands and Functions and *Figure 12: ATM Loopback Tests* summarize the loopback testing commands and functions in the system.

The `tst-slk` command provides several methods for testing signaling links. The `loopback` parameter provides the ability to select *lxvr* (local transceiver), *oam*, *line*, *payload*, and *sltc* loopback tests. The command will be rejected if a loopback test is not compatible with the link type.

- For low-speed links, the *lxvr* and *sltc* tests are allowed.
- For high-speed links (ATM, E5-ATM, E5-ATM-B), the *lxvr*, *oam*, *line*, *payload*, and *sltc* tests are allowed.
- For SS7IPGW and IPGWI DCMs, the `tst-slk` command is not supported.
- For IPLIMx DCMs, only the *loopback=sltc* test is allowed, and is allowed only for links having IPLIML2 type of M2PA.
- For LIME1 or LIMT1 cards, or for the E5-ENET or E5-ENET-B cards running the IPSG application, only the *loopback=sltc* test is allowed.
- The E5-E1T1, E5-E1T1-B, and HC-MIM cards can function as either an E1 MIM card or a T1 MIM card, depending on how the card is provisioned. The *loopback=sltc* test is allowed.

The `act-lbp` command activates test on one or more loopback points for testing data signaling link elements in one CCS7 transmission path. The maximum number of loopback points is 32.

For a single loopback point test, the parameters can be entered on the command line. If the parameters are not entered at the command line, the LFS database is used. For multiple loopback point tests, the LFS database must be used.

The `ent-lbp` command is used to create the loopback points in the LFS database. The LBPs may be entered in any order.

See the command descriptions in this manual for details on entering parameters and using the commands.

Table 63: Loopback Testing Commands and Functions

Command/Function	Card Supported	Testing limits
`act/dact-cdl` *NETWORK payload low-level loopback test*. Link State-Down Equipment tested-All links on the T1 port Purpose-tests connectivity between 2 nodes at the T1 level with some isolation for the LIU and/or framer Description-Tests near-end card for line, lxvr, and network payload loopback and far-end card for line and payload loopback. Typical use-Tests connectivity	• HC-MIM • E5-E1T1 • E5-E1T1-B • E5-ATM • E5-ATM-B	1024 concurrent tests per system
`ent-lbp` OAM *Database for Multiple LFS points per LFS tests* No impact on link behavior other than allowing multiple points	• HC-MIM (T1 mode) (channelized) • E5-E1T1 (T1 mode) (channelized) • E5-E1T1-B (T1 mode) (channelized)	32 points per card no limit on # of cards
`act/dact-lbp` *EAGLE initiated Level 1 DS0 LFS tests* Link State-Down Equipment tested-Level 1 element(s) in a signaling path Purpose-Test the error rates of a signaling path Description-Sends loopback code to establish loopback, then performs BERT test for a specified period of timed Typical use-Validates signaling path has acceptable error rate	• HC-MIM (T1 mode) (channelized) • E5-E1T1 (T1 mode) (channelized) • E5-E1T1-B (T1 mode) (channelized)	1024 concurrent tests per system

Command/Function	Card Supported	Testing limits
Remote Loopback *FAR END initiated DS0 LFS Test* Link State-Up or down Equipment tested-Near end hardware up to level 2 and far end hardware level 1 interface Purpose-Auto-Loopback a BERT test to the far end Description-When receiving a loopback code, deactivate the link and go into loopback Typical use-Remotely tests the far end with standard DS0 BERT tests	• HC-MIM (T1 mode) (channelized) • E5-E1T1 (channelized) • E5-E1T1-B (channelized)	no limit on # of cards
`tst-slk` SLTC *EAGLE initiated Level 3 SS7 SLT* Link State-Up Equipment tested-Near and far end up to Level 3 Purpose-Test the entire path to the far end at Level 3 Description-Sends an SLTM out and expects an SLTA back Typical use-Validates connectivity of a signaling path	• HC-MIM • E5-E1T1 • E5-E1T1-B • IPLIM (not M3UA) • IPGW • E5-ATM • E5-ATM-B	1024 concurrent link tests per system
`tst-slk` *OAM EAGLE initiated Level 1 ATM test* Link State-Down Equipment tested-Near and far end level 1 software and hardware including all hardware on the cards Purpose-Test the entire near and far end level 1 hardware by exchanging ATM cells Description-Sends OAM cells out to far end for 60 seconds if no errors, or 2 minutes if errors are received	• E5-ATM • E5-ATM-B	1024 concurrent link tests per system

Command/Function	Card Supported	Testing limits
Typical use-Verifies ATM cells can be exchanged between 2 signaling points		
`tst-slk` LINE *EAGLE initiated Level 1-2 ATM test* Link State-Down Equipment tested-Near end hardware up to level 2 and far end hardware level 1 interface Purpose-Hardware continuity check between near and far end Description-The following steps occur: **1.** Device under test (DUT) sends T1 Payload bit-oriented code (BOC) to remote device **2.** Remote device receives BOC and programs hardware **3.** DUT attempts level 2 alignment **4.** If link aligns (level 2), test passes, else test fails **5.** DUT sends BOC to remote device to remove loopback **6.** Remote device receives BOC and re-programs hardware **Note:** If the DUT boots in the middle of sequence, activate or de-activate the link, and the remote device returns to the original programming. Typical use-Checks continuity from the near end level 2 hardware to the level 1 interface at the far end for a link in line timing	• E5-ATM (T1 mode) • E5-ATM-B (T1 mode)	1024 concurrent link tests per system
`tst-slk` PAYLOAD *EAGLE initiated Level 1-2 ATM test* Link State-Down Equipment tested-Near end hardware up to level 2 and far end hardware level 1 interface	• E5-ATM (T1 mode) • E5-ATM-B (T1 mode)	1024 concurrent link tests per system

Command/Function	Card Supported	Testing limits
Purpose-Hardware continuity check between near and far end Description-The following steps occur: **1.** Device under test (DUT) sends T1 Payload bit oriented code (BOC) to remote device **2.** Remote device receives BOC and programs hardware **3.** DUT attempts level 2 alignment **4.** If link aligns (level 2), test passes, else test fails **5.** DUT sends BOC to remote device to remove loopback **6.** Remote device receives BOC and re-programs hardware **Note:** If the DUT boots in the middle of sequence, activate or de-activate the link, and the remote device returns to the original programming. Typical use-Checks continuity from the near end level 2 hardware to the level 1 interface at the far end for a link in master timing		
`tst-slk` LXVR (DS1 loop) *EAGLE initiated Level 1 Internal card loopback* Link State-Down Equipment tested-Local card Purpose-Test the near end card only Description-Test the near end card up through level 2. Typical use-Validates the card on the Eagle as good	• HC-MIM • E5-E1T1 • E5-E1T1-B • E5-ATM • E5-ATM-B	1024 concurrent link tests per system
`tst-e1` LINE, LXVR (DS1 loop), PAYLOAD *EAGLE Initiated E1 Port test* Link State-Down	• E5-E1T1 • E5-E1T1-B • HC-MIM	1024 concurrent tests per system

Command/Function	Card Supported	Testing limits
Equipment tested-All links on the E1 port Purpose-Tests connectivity between 2 nodes at the E1 level with some isolation for the LIU and/or framer Description-Tests near-end card for line, lxvr, and payload loopback Typical use-Tests connectivity		
`tst-t1` LINE, LXVR (DS1 loop), PAYLOAD, FELINE, FEPAYLOAD *EAGLE initiated T1 port test* **Note:** FELINE and FEPAYLOAD are not supported for HC-MIM cards. Link State-Down Equipment tested-All links on the T1 port Purpose-Tests connectivity between 2 nodes at the T1 level with some isolation for the LIU and/or framer Description-Tests near-end card for line, lxvr, and payload loopback and far end card for line and payload loopback Typical use-Tests connectivity	• E5-E1T1 (T1 mode) • E5-E1T1-B (T1 mode) • HC-MIM	1024 concurrent tests per system

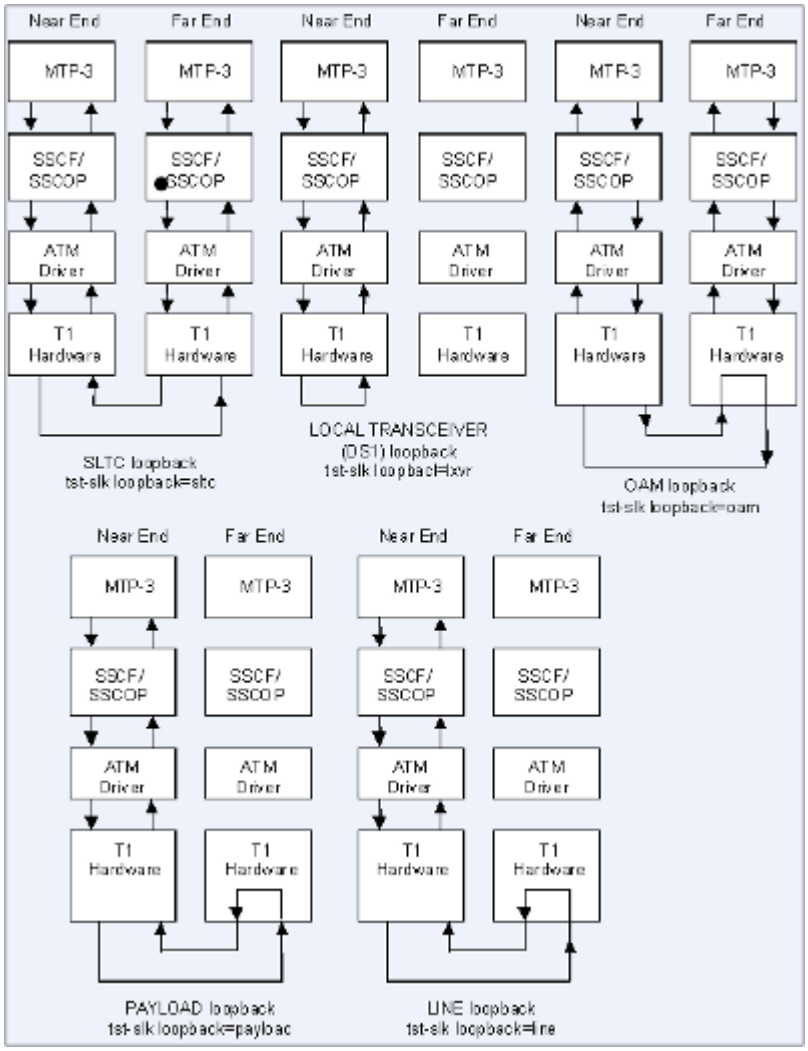

Figure 12: ATM Loopback Tests

Appendix B

Acronyms and Abbreviations

Topics:

- *Acronyms and Abbreviations.....3177*

Acronyms and Abbreviations

A-Port
ANSI-41 Mobile Number Portability

AINPQ
ANSI-41 INP Query

AAL
ATM Adaptation Layer

AAL5
ATM Adaptation Layer 5

AAL5CP
ATM Adaptation Layer 5 Common Port

AATM
ATM Applique

ACG
Automatic Call Gapping

ACM
Application Communications Module

ADJ DPC
Adjacent Destination Point Code

AI
Address Indicator

AIN
Advanced Intelligent Network

AINF
Application Interface Applique

ANSI
American National Standards Institute

AP
Application Processor

APC
Adjacent Point Code

ARP
Address Resolution Protocol

AS
Application Server; a logical entity serving a specific Routing Key

ASM

Application Services Module

ASP

Application Server Process

ATI

Any Time Interrogation

ATM

Asynchronous Transfer Mode

ATMANSI

The application software for the ATM (high-speed) SS7 signaling links

ATM HSL

Asynchronous Transfer Mode High Speed Link

ATMM

ATM Layer Management

AVL

Availability Measurements report

AVLD

Daily Availability measurements report

AVLDTH

Day-to-Hour Availability measurements report

BCSM

Basic Call State Model

BIP

Board Identification PROM

BITS

Building Integrated Timing System

BLM

Bulk Load Module

BPHCAP

The application software used by the application processor and the IMT processor of the LIMATM

BPDCM

The application software for flash memory management on the DCM card.

BSD

Berkeley Software Distribution

BSN

Backward Sequence Number

CAS

Channel Associated Signaling

CCM
Command Class Management

CCS
Common Channel Signaling

CCS7
Common Channel Signaling System #7

CCS7ITU
The application software for the ITU SS7 signaling links

CDPA
Called Party Address

CDPN
Called Party Number

CGPA
Calling Party Address

CF
Control Frame

CIC
Circuit Identification Code

CLLI
Common Language Location Identifier

CLU
Network Cluster

CM
Cluster Management

CNCF
Calling Name Conversion Facility

CP
Communication Processor

CPU
Central Processing Unit

CRC
Cyclic Redundancy Check

CRMD
Cluster Routing and Management Diversity

CRP
Circular Route Prevention

CSL

Common Screening List

CSPC
Concerned Signaling Point Code Group

CSU
Channel Service Unit

DB
Database

DCM
Database Communications Module

DIP
Dual In-Line Package

DIX
Digital/Intel/Xerox de facto standard for Ethernet Media Access Control Type

DN
Dialed or Directory Number

DPC
Destination Point Code

DRAM
Dynamic Random Access Memory

DS0
Digital Signal Level - 0

DSM
Database Services Module

DSU
Data Service Unit

DTA
Database Transport Access

E5-E1T1
EPM-based E1/T1 Multi-Channel Interface Module

E5-ENET
EPM-based Ethernet card

E5IS
Eagle 5 Integrated Monitoring Support

EBDA
Enhanced Bulk Download and Audit

EDR
Efficient Data Representation

EF
Extension Frame

EGTT
Enhanced Global Title Translation

EIA
Electronic Industries Association

EILA
Enhanced Integrated LIM Applique

EIR
Equipment Identity Register

ELAP
Eagle LNP Application Processor

EMP
Eagle Monitoring Protocol

EMSALM
Element Management System Alarm Monitor

ENET
Ethernet

EOAM
Enhanced Operations, Administration, and Maintenance

EOAP
Enhanced OSS Application Process

EPAP
Eagle Provisioning Application Processor

EPM
Embedded Processor Module (E5-E1T1 and E5-ENET cards are EPM-based cards)

EPROM
Erasable PROM

ESP
Extended Services Platform

FAK
Feature Access Key

FAP
Fuse and Alarm Panel

FAS
Frame Alignment Signal

FISU

Fill In Signal Unit

FPBA

Frame Power Budget Alarm

FPCR

Full Point Code Routing

FPT

Frame Power Threshold

FSN

Forward Sequence Number

FTA

File Transfer Area

FTP

File Transfer Protocol

FTRA

FTP-based Table Retrieve Application

GDB

GSM Real-Time Database

G-Flex

GSM Flexible Numbering

G-Port

GSM Mobile Number Portability

GLS

Generic Loading Service

GMSC

Gateway MSC

GPL

Generic Program Load

GPSM

General Purpose Service Module

GSL

Generic Software Load

GSM

Global System for Mobile Communications

GTA

Global Title Address

GTI

Global Title Indicator

GTT
Global Title Translation

GTWY
Gateway Administration measurements report

GWS
Gateway Screening

GWSA
Gateway Screening Application

GWSM
Gateway Screening Messages

HC-MIM
High Capacity Multi-Channel Interface Module

HDB3
High Density Bipolar 3 encoding

HIPR
High Speed IMT Packet Router

HLR
Home Location Register

HOMERN
Home Network Routing Number Prefix

HMUX
High-Speed Multiplexer

HRN
Home Routing Number

HSL
High-Speed Links

IAM
Initial Address Message

IC
Integrated Circuit

ICMP
Internet Control Message Protocol

ID
Identity

IDP
Initial Detection Point

IEC

International Escape Code

IETF

Internet Engineering Task Force

IGM

IS41 GSM Migration

IGTTLS

Intermediate Global Title Translation Load Sharing

IL

Incremental loading

ILA

Integrated LIM Applique

IMEI

International Mobile Equipment Identifier

IMF

Integrated Message Feeder

IMSI

International Mobile Station Identifier

IMT

Inter-processor Message Transport

IN

Intelligent Network

INAP

Intelligent Network Application Part

INET

Internet

INH

Inhibit

INP

INAP-based Number Portability

INSL

In-Network Subscriber List

IP

Internet Protocol

IPGWI

An ITU version of SS7IPGW

IPGWx

Point to multi-point IP Transport GPL, referring to SS7IPGW (ANSI) and IPGWI (ITU)

IPLIM

The application software used by the DCM card for TCP/IP point-to-point connectivity for ANSI point codes.

IPLIMI

The application software used by the DCM card for TCP/IP point-to-point connectivity for ITU point codes.

IPLIMx

Point to point IP Transport GPL, referring to IPLIM (ANSI) and IPLIMI (ITU)

IPMX

IMT Power and Multiplexer

IPS

Internet Protocol Services

IPSM

Internet Protocol Services Module

IS-41

Interim Standard 41, same as and interchangeable with ANSI-41

IS-ANR

In Service - Abnormal

ISDN

Integrated Services Digital Network

IS-NR

In Service - Normal

ISUP

ISDN User Part

ITU

International Telecommunications Union

ITUDUPPC

ITU National Duplicate Point Code

JIP

Jurisdiction Indicator Parameter

LAN

Local Area Network

LB

Load Balancing

LBP

Loop Back Point

LC

Logical channel

LED
Light Emitting Diode

LFS
Link Fault Sectionalization

LIM
Link Interface Module

LIM-AINF
Link Interface Module with the AINF interface

LIM-ATM
LIM with ATM interface

LIM-DS0
LIM with DS0 Applique

LIM-E1
LIM with E1 Applique

LIM-OCU
LIM with Office Channel Unit Applique

LIM-V35
LIM with V35 Interface

LNP
Local Number Portability

LNPMR
LNP Message Relay

LNPQS
LNP Query Service

LNP SMS
LNP Short Message Service

LPE
Logical Processing Element

LPO
Link Processor Outage

LRN
Location Routing Number

LS
Link Set

LSA
Link Status Alignment

LSB

Least Significant Bit (bit 1)

LSL

Low-Speed Link

LSMS

Local Service Management System

LSN

Link Set Name

LSO

Link Status out of Service

LSPE

Link Status Proving Emergency

LSPN

Link Status Proving Normal

LSR

Link Status Ready

LSSU

Link Status Signal Unit

M2PA

SS7 MTP2-User Peer-to-Peer Adaptation Layer

M3UA

SS7 MTP3-User Adaptation Layer

MAAL

Management ATM Adaptation Layer

MAP

Mobile Application Part

MAPSCRN

GSM MAP Screening measurements report

MCAP

MAS Communication Application Processor Card

MCC

Mobile Country Code

MCM

Maintenance Communication Module

MCP

Measurement Collection Processor

MCPM

Measurement Collection and Polling Module

MDAL
Maintenance Disk and Alarm (card)

MDN
Mobile Dialed Number

MGT
Mobile Global Title

MGTT
Modified Global Title Translation

MF
Miscellaneous Frame

MIM
Multi-Channel Interface Module

MIN
Mobile Identification Number

MLPRST
MTP Low Priority Route Set

MNP
Mobile Number Portability

MNP SMS
Portability Check for Mobile Originated SMS

MNP-SRF
Signaling Relay Function for support of Mobile Number Portability

MOBR
Origin-based MTP Routing feature

MPC
Multiple Point Code feature

MPL
Multi-port LIM

MPS
Multi-Purpose Server

MR
Message Relay

MRN
Mated Relay Node

MRN
Message Reference Number

MS

Mobile Station

MSB

Most Significant Bit

MSC

Mobile Switching Center

MSAR

Memory space accounting reporting

MSISDN

Mobile Station ISDN Number or Mobile Switching ISDN Number

MSRN

Mobile Station Roaming Number

MSU

Message Signal Unit

MTCD

Maintenance Daily measurements report

MTCDTH

Maintenance Day-to-Hour measurements report

MTCH

Maintenance Hourly (marginal) measurements report

MTCS

Maintenance Status (link/link set) measurements report

MTP

Message Transfer Part

MTP2

Message Transfer Part, Level 2

NAI

Nature of Address Indicator

NCAI

Nested Cluster Allowed Indicator

NCR

Nested Cluster Routing

NEC

National Escape Code

NFAS

Non-Frame Alignment Signal

NI

Network Indicator

NIC
Network Information Center

NID
Network Identification

NM
Network Management

NP
Number Plan

NPA
Numbering Plan Area

NPAC
Number Portability Administration Center

NPANXX
Numbering Plan Area and Exchange

NRT
Network Routing

NSAP
Network Service Access Point

NSE
Network Security Enhancement

NSFI
Next Screening Function Indicator

NSP
Network Services Part

NSPC
New Secondary Point Code

OAM
Operations, Administration, and Maintenance

OAP
Operation System Support Application Processor

OAMP
Operations, Administration and Maintenance Part

OBSR
Origin-based SCCP Routing feature

OCU
Office Channel Unit

OOS-MA

Out of Service - Memory Administration

OOS-MT

Out of Service - Maintenance

OOS-MT-DSBLD

Out of Service - Maintenance Disabled

OPC

Origination Point Code

OPCODE

Operation Code

OPNAME

Operation Name

OSI

Open Systems Interconnection

OSS

Operations Systems Support

PC

Point Code

PCR

Preventive Cyclic Retransmission

PCS

Personal Communications Service (North American GSM)

PDBA

Provisioning Database Application

PDBI

Provisioning Database Interface

PDN

Packet Data Network

PDS

Persistent Device States

PLNP

PCS 1900 LNP

PLNPQS

LNPQS support provided for PLNP

PPSMS

Prepaid Short Message Service Intercept

PROM

Programmable Read-Only Memory

PSEL
Presentation Selector

PST
Primary State for Maintenance

PSTN
Public Switched Telephone Network

PVC
Permanent Virtual Circuit

PVN
Private Virtual Network

Q3
Q.3 Protocol

RAM
Random Access Memory

RBASE
Record Base measurements report

RC
Relative Cost

RI
Routing Indicator

RFC
Request for Comments

RMC
Remote Maintenance Center

RMTP
Reliable Multicast Transport Protocol

RN
Routing Number

RTDB
DSM Real-time database

RTT
Round Trip Time

SAAL
Signaling ATM Adaptation Layer

SAPC
Secondary Adjacent Point Code

SCCP

Signaling Connection Control Part

SCM

System Configuration Manager

SCMG

SCCP Management

SCP

Service Control Point

SCRSET

Screen Set

SCSI

Small Computer System Interface

SCTP

Stream Control Transmission Protocol

SE-HSL

Synchronous E1 High Speed Link

SEAS

Signaling Engineering and Administration System

SIB

Status Indication “Busy”

SIE

Status Indication “Emergency” Alignment

SIN

Status Indication “Normal Alignment”

SIO

Service Information Octet

SIO

Status Indication “Out of Alignment”

SIOS

Status Indication “Out of Service”

SK

Service Key

SKTS

Service Key/TeleService List

SLK

Signaling Link

SLS

Signaling Link Selection

SLSCI
Signaling Link Conversion Indicator

SLTA
Signaling Link Test Acknowledgement

SLTM
Signaling Link Test Message

SMS
Short Message Service

SMSC
Short Message Service Center

SMSMR
Prepaid Short Message Service

SNAI
Service Nature of Address Indicator

SNM
Signaling Network Management

SNR
Subsystem Normal Routing

SOR
Support for Optimal Routing

SORP
Socket Option Registration Primitive

SPC
Secondary Point Code Signaling Point Code

SRF
Signaling Relay Function

SRI
Send Routing Information

SRVSEL
Service Selector

SS7
Signaling System #7

SS7ANSI
The application software for the ANSI SS7 signaling links

SS7GX25
The application software for the X.25/SS7 gateway feature

SS7IPGW

The application software used by the DCM card for TCP/IP point-to-multipoint capability

SSA

Subsystem Allowed (An SCCP management message)

SSEL

Session Selector

SSN

SS7 Subsystem Number

SSP

Service Switching Point

SSU

Status Signal Unit

ST

Stop Digit—BCD value 15 (0xF)—used to indicate the end of dialing in some applications

STC

Signaling Transport Card

STP

Signal Transfer Point

STP LAN

The application software for the STP LAN feature

SUA

SS7 SCCP-User Adaptation Layer

SVC

Switched Virtual Circuit

TALI

Transport Adapter Layer Interface (RFC 3094)

TCP

Transmission Control Protocol

TCAP

Transaction Capabilities Application Part

TDM

Terminal Disk Module

TFA

Transfer Allowed

TFC

Transfer Congested (traffic)

TFP

Transfer Prohibited

TFR
Transfer Restricted

TLNP
Triggerless LNP

TOS
Type of Service

TPS
Transactions Per Second

TRA
Traffic Restarting Allowed

TRBL
Trouble

TRW
Traffic Restarting Waiting

TSC
Time Slot Counter Synchronization

TSM
Translation Services Module

TT
Translation Type

TUP
Telephone User Part

TV
Ticket Voucher

TVG
Group Ticket Voucher

UA
IETF User Adaptation Layers

UAM
Unsolicited Alarm Message

UART
Universal Asynchronous Receiver - Transmit

UDP
User Datagram Protocol

UDTS
Unit Data Transfer Service

UI

User Interface

UID

User ID

UIM

Unsolicited Informational Message

UPD

Update

VGTT

Variable Length GTT

VLR

Visitor Location Register

VMSC

Voice Mail Service Center Visited Mobile Switching Center

VSCCP

VxWorks Signaling Connection Control Part

WNP

Wireless Number Portability

WNPQS

Wireless Number Portability Query Service

X.25 DE

X.25 Destination Entity

XGTT

Expanded GTT (GTT Table Expansion)

XMAP

Expanded MAP Table