

**Oracle® Communications
EAGLE**

Commands

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Chapter 1

Introduction

Topics:

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

Overview

The *Commands Manual* provides a description of all commands used in the EAGLE 5 Integrated Signaling System (ISS) and LNP. The EAGLE 5 ISS includes the IP⁷ Secure Gateway and the IP⁷ Front End. The use of the term "the system" indicates that the information is common to all of the functions of the EAGLE 5 ISS. Differences are indicated for the specific product, as appropriate.

Note: The IP⁷ Front End configuration is a stand-alone single-shelf IP⁷ Secure Gateway. When using this manual, consider IP⁷ Front End and IP⁷ Secure Gateway as functional equivalents with the IP⁷ Front End limited to a single shelf configuration.

Commands are entered at a terminal to perform system operations such as displaying the system status, administering system security, and maintaining the database. Error messages are displayed to provide information about problems encountered when a command is entered.

Scope and Audience

This manual is intended for those who maintain and do database administration on the Tekelec Signaling Products and LNP. 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.

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 loopback 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).

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	Danger: (This icon and text indicate the possibility of <i>personal injury</i> .)
 WARNING	Warning: (This icon and text indicate the possibility of <i>equipment damage</i> .)
 CAUTION	Caution: (This icon and text indicate the possibility of <i>service interruption</i> .)
 TOPPLE	Topple: (This icon and text indicate the possibility of <i>personal injury and equipment damage</i> .)

Customer Care Center

The Tekelec Customer Care Center is your initial point of contact for all product support needs. A representative takes your call or email, creates a Customer Service Request (CSR) and directs your requests to the Tekelec Technical Assistance Center (TAC). Each CSR includes an individual tracking number. Together with TAC Engineers, the representative will help you resolve your request.

The Customer Care Center is available 24 hours a day, 7 days a week, 365 days a year, and is linked to TAC Engineers around the globe.

Tekelec TAC Engineers are available to provide solutions to your technical questions and issues 7 days a week, 24 hours a day. After a CSR is issued, the TAC Engineer determines the classification of the trouble. If a critical problem exists, emergency procedures are initiated. If the problem is not critical, normal support procedures apply. A primary Technical Engineer is assigned to work on the CSR and provide a solution to the problem. The CSR is closed when the problem is resolved.

Tekelec Technical Assistance Centers are located around the globe in the following locations:

Tekelec - Global

Email (All Regions): support@tekelec.com

- **USA and Canada**

Phone:

1-888-367-8552 (toll-free, within continental USA and Canada)

1-919-460-2150 (outside continental USA and Canada)

TAC Regional Support Office Hours:

8:00 a.m. through 5:00 p.m. (GMT minus 5 hours), Monday through Friday, excluding holidays

- **Caribbean and Latin America (CALA)**

Phone:

+1-919-460-2150

TAC Regional Support Office Hours (except Brazil):

10:00 a.m. through 7:00 p.m. (GMT minus 6 hours), Monday through Friday, excluding holidays

- **Argentina**

Phone:

0-800-555-5246 (toll-free)

- **Brazil**

Phone:

0-800-891-4341 (toll-free)

TAC Regional Support Office Hours:

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1230-020-555-5468

- **Colombia**

Phone:

01-800-912-0537

- **Dominican Republic**

Phone:

1-888-367-8552

- **Mexico**

Phone:

001-888-367-8552

- **Peru**

Phone:

0800-53-087

- **Puerto Rico**
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+44 1784 467 804 (within UK)
- **Software Solutions**
Phone:
+33 3 89 33 54 00
- **Asia**
 - **India**
Phone:
+91-124-465-5098 or +1-919-460-2150
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 - **Singapore**
Phone:
+65 6796 2288
TAC Regional Support Office Hours:
9:00 a.m. through 6:00 p.m. (GMT plus 8 hours), Monday through Friday, excluding holidays

Emergency Response

In the event of a critical service situation, emergency response is offered by the Tekelec Customer Care Center 24 hours a day, 7 days a week. 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 the Tekelec Customer Care Center.

Related Publications

For information about additional publications that are related to this document, refer to the *Related Publications* document. The *Related Publications* document is published as a part of the *Release Documentation* and is also published as a separate document on the Tekelec Customer Support Site.

Documentation Availability, Packaging, and Updates

Tekelec provides documentation with each system and in accordance with contractual agreements. For General Availability (GA) releases, Tekelec publishes a complete EAGLE 5 ISS documentation set. For Limited Availability (LA) releases, Tekelec may publish a documentation subset tailored to specific feature content or hardware requirements. Documentation Bulletins announce a new or updated release.

The Tekelec EAGLE 5 ISS documentation set is released on an optical disc. This format allows for easy searches through all parts of the documentation set.

The electronic file of each manual is also available from the [Tekelec Customer Support](#) site. This site allows for 24-hour access to the most up-to-date documentation, including the latest versions of Feature Notices.

Printed documentation is available for GA releases on request only and with a lead time of six weeks. The printed documentation set includes pocket guides for commands and alarms. Pocket guides may also be ordered separately. Exceptions to printed documentation are:

- Hardware or Installation manuals are printed without the linked attachments found in the electronic version of the manuals.
- The Release Notice is available only on the Customer Support site.

Note: Customers may print a reasonable number of each manual for their own use.

Documentation is updated when significant changes are made that affect system operation. Updates resulting from Severity 1 and 2 Problem Reports (PRs) are made to existing manuals. Other changes are included in the documentation for the next scheduled release. Updates are made by re-issuing an electronic file to the customer support site. Customers with printed documentation should contact their Sales Representative for an addendum. Occasionally, changes are communicated first with a Documentation Bulletin to provide customers with an advanced notice of the issue until officially

released in the documentation. Documentation Bulletins are posted on the Customer Support site and can be viewed per product and release.

Locate Product Documentation on the Customer Support Site

Access to Tekelec's Customer Support site is restricted to current Tekelec customers only. This section describes how to log into the Tekelec Customer Support site and locate a document. Viewing the document requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the [Tekelec Customer Support](#) site.

Note: If you have not registered for this new site, click the **Register Here** link. Have your customer number available. The response time for registration requests is 24 to 48 hours.

2. Click the **Product Support** tab.
3. Use the Search field to locate a document by its part number, release number, document name, or document type. The Search field accepts both full and partial entries.
4. Click a subject folder to browse through a list of related files.
5. To download a file to your location, right-click the file name and select **Save Target As**.

Chapter 2

Using Commands

Topics:

- *Maintenance and Administration Subsystem ...17*
- *E5-based Control Cards 17*
- *Input/Output Devices 18*
- *About Commands 24*

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 5 ISS.

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 5 ISS Control Shelf.

E5-based Control Cards

The E5-based set of EAGLE 5 ISS 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 “credit card” flash drive. The removable media drive is used to install and back up customer data. The credit card drive 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 5 ISS, and distributes Shelf ID to the EAGLE 5 ISS. 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 does not contain a removable cartridge drive; drives for removable media are located on the E5-MCAP card. 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 the *Installation Manual - EAGLE 5 ISS* for backplane connection information.

Terminals and Printers

The EAGLE 5 ISS uses VT320 terminals for maintenance and database administration. The EAGLE 5 ISS 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.

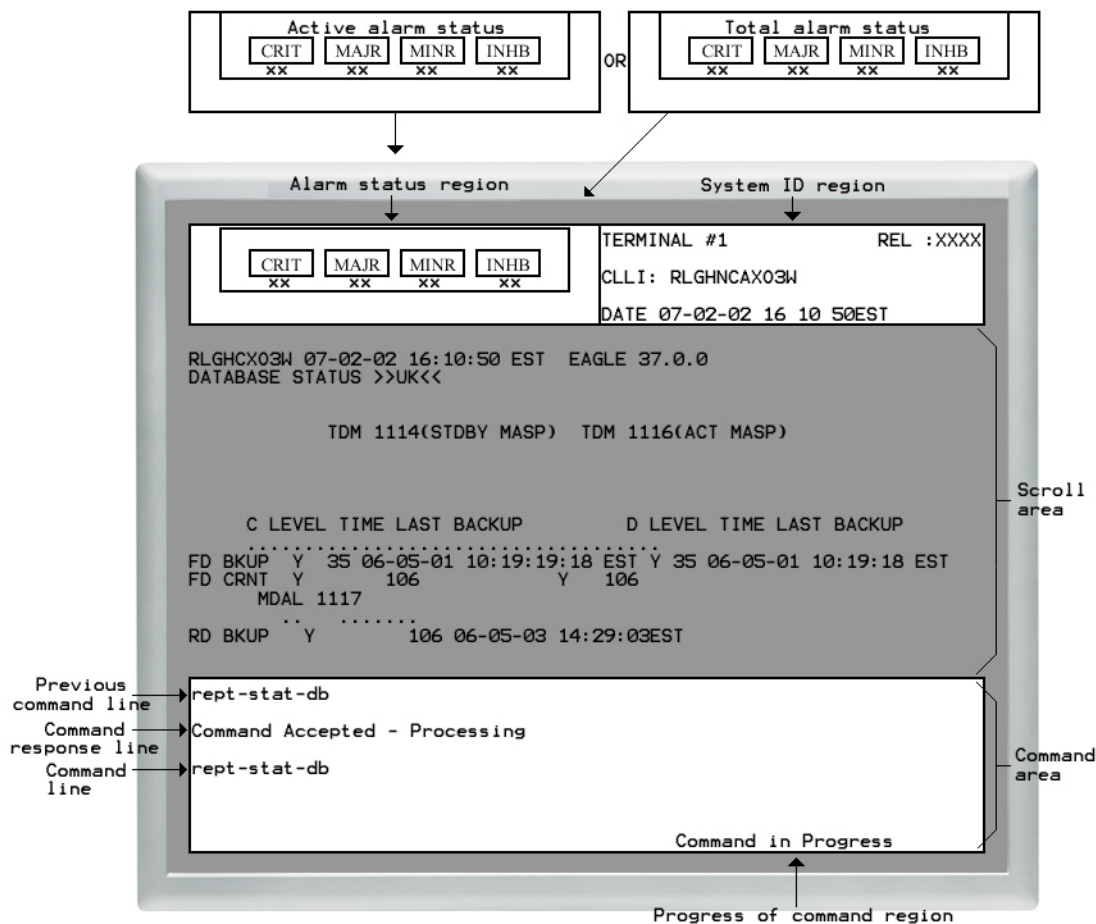


Figure 1: System Terminal User Display

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 the *Installation Manual - EAGLE 5 ISS*.

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 the *Database Administration Manual - SS7*.

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 the *Database Administration Manual - SS7*. 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 5 ISS terminal. This IP-based access provides a standard interface through which EAGLE 5 ISS commands are entered from a telnet session to the EAGLE 5 ISS. The EAGLE 5 ISS 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 5 ISS, with IP connectivity, enable telnet clients to connect from anywhere on the customer's IP LAN. The EAGLE 5 ISS 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 5 ISS welcome message appears. At this point, broadcast messages (if provisioned) will begin to appear. See [Figure 2: Telnet Terminal Selection and Login](#).

```

Telnet - [None]
Connect Edit Terminal Help
telnet 192.169.1.100

Connected..
Welcome to Eagle.

Select a terminal from the list below:
(17, 18, 19, 22, 24)
> 21
21 is not a valid selection.

Select a terminal from the list below:
(17, 18, 19, 22, 24)
> 17
Connection established as terminal 17.

eagle10110 01-10-15 09:56:00 GMT Rel 29.0.0-40.27.0
; 7630.0046 TERMINAL 17 Terminal enabled

> login:uid=eagle

Enter Password :

Command Accepted - Processing

eagle10110 01-10-15 10:00:16 GMT Rel 29.0.0-40.27.0
login:uid=eagle
Command entered at terminal #17.
;

eagle10110 01-10-15 10:00:18 GMT Rel 29.0.0-40.27.0
User logged in on terminal 17.
;

eagle10110 01-10-15 10:00:18 GMT Rel 29.0.0-40.27.0
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 01-10-15 @ 09:59:51

```

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 5 ISS 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 5 ISS command line prompt, all EAGLE 5 ISS 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, cancelled, 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 5 ISS, but the port remains assigned to the EAGLE 5 ISS 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 5 ISS. 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 introduces a TCP/IP-based interface for SEAS.

The SEAS interface constitutes the path between the EAGLE 5 ISS and a Common Channel

Signaling Message Router (CCS MR). The EAGLE 5 ISS 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 5 ISS. The IPSM card also continues to provide the EAGLE 5 ISS 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 5 ISS.

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 Alarm 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), you 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 peters

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.

peters 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 equipment 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 <code>canc - cmd</code> command with no parameters. The commands that can be interrupted by pressing F9 are listed in the description of the <code>canc-cmd</code> 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 <code>canc-cmd:trm=</code> command (see the <code>canc - cmd</code> 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 <i>sw</i> or <i>both</i> flow control (see the <code>chg-trm</code> command description for more information), this key sequence sends the XOFF character to temporarily stop sending data.
Control-Q	Control-Q	Used with the <i>sw</i> or <i>both</i> flow control (see the <code>chg-trm</code> 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 SCCS 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:

- **ommand 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.

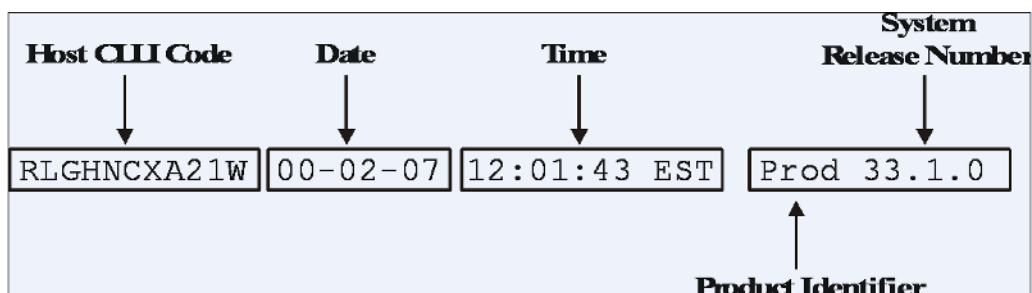


Figure 3: Output Banner Format

The following fields appear in each output banner:

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

The CLI 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 `rtv-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 5 ISS.

Rules for User ID and Password Administration

The rules for administering 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 (,), backslash (\), hyphen (-), 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 of command classes, command classes to control the set of system security commands 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:

- `xxxxxxx` 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 - df lt` 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 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

logout procedureprocedures

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, \2depending 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 ""Procedure - Your User ID and Password were not Accepted" on page 4-18.

```
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 page 4-20.

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

8. If you entered your user ID and password combination and your password has expired, \2he following message appears, go to 4-20.

```
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 4-22.

```
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, \2r 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 4-22 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 siteTM's password complexity requirements.
3. If your password does not meet your siteTM's password complexity requirements, the system displays a message based on the password violation (see page 4-22 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 page 4-23.
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.....40*](#)

This chapter contains an alphabetical list of the Tekelec Signaling Products (Eagle, STP, IP Secure Gateway, and IP Front End) 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-atinpopts
chg-atm-lps
chg-attr-seculog
chg-card
chg-clkopts
chg-cmd
chg-cmdclass
chg-csl
chg-ctrl-feat
chg-db
chg-dstn
chg-e1
chg-eisopts
chg-feat
chg-frn-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-gttset
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-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-srøsel
chg-ss7opts

D

Alphabetical List of Commands

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-dlk
dlt-dstn
dlt-e1
dlt-frn-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-gttset
dlt-gttset
dlt-gws-redirect
dlt-homern
dlt-home-smsc

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-sccp-serv
dlt-scr-aftpc
dlt-scr-blkdp
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-dlk
ent-dstn
ent-e1
ent-frn-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-gttset
ent-gttset
ent-gws-redirect
ent-homern
ent-home-smc
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-aftp
ent-scr-blkdp
ent-scr-blkopc
ent-scr-cdpa
ent-scr-cgpa

F

Alphabetical List of Commands

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-srysel
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

L

Alphabetical List of Commands

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-dlk
rept-stat-dstn
rept-stat-e1
rept-stat-enet
rept-stat-gpl
rept-stat-imt
rept-stat-ipconn
rept-stat-iptps
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-atinpopts
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-dlk
rtrv-dstn
rtrv-e1
rtrv-eisopts
rtrv-feat

rtrv-frn-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-gttset
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-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-aftp
rtrv-scr-blkdp

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-snmppopts
rtrv-spc
rtrv-srssel
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-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

A

Alphabetical List of Commands

tst-msg
tst-npp-msg
tst-slk
tst-t1

U

ublk-slk
unhb-alm
unhb-slk
unlock

Debug Commands

A

act-upgrade
act-ip-lnk

C

cdu
chg-bip-fld
chg-bip-rec
chg-tbl
chg-upgrade-config
clr-disk-stats
copy-tbl

D

dact-ip-lnk
dbg-ddb
disp-bip
disp-bp
disp-disk-dir
disp-disk-stats
disp-lba

A

disp-mem

disp-trace

dlt-bp

dlt-trace

E

ent-bp

ent-trace

R

rtrv-upgrade-config

S

send-msg

set-mem

Pass-Through Commands

A

arp

aslog

assocrtt

C

connmgr

F

ftptest

L

linkinfo

M

Alphabetical List of Commands

N

msucount

msuroute

msutrace

N

netstat

nslookup

P

pct

ping

S

sctp

sockrtt

soipdata

soiplog

T

tracert

U

ualog

Alphabetical List of Commands

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:**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 signalling 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, rtro-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-fts: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-ftp, disp-ftp-dir, dlt-ftp*

## 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, bpdcm, bpdcm2, bphcap, bphcapt, bphmux, bpmpl, bpmplt, hipr, hipr2, imtpci, and pldpmc1.*

**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=bpmpl
```

## 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 HCAP, HCAP-T, DCM, E1/T1 MIM, E5-ENET, E5-ENET-B, HC-MIM, E5-E1T1, E5-TSM, E5-IPSM, E5-MCAP, GPSM-II, MPL, or Service Module. Card locations  $xy09$  and  $xy10$  ( $x$  is the frame,  $y$  is the shelf) can be specified only for HMUX, HIPR, or HIPR2 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 an HMUX, HIPR, or HIPR2 card, then both card locations specified in the sloc and eloc parameters must contain HMUX, HIPR, or HIPR2 cards on the same IMT bus. For these cards, the bus is implicit based on the specified location. Location  $xy09$  specifies an HMUX, HIPR, or HIPR2 A Bus, and location  $xy10$  specifies an HMUX, HIPR, or HIPR2 B Bus ( $x$  is the frame and  $y$  is the shelf). For example, sloc=1109:eloc=6109 specifies all HMUX, HIPR, or HIPR2 cards on the A Bus only; sloc=1110:eloc=6110 specifies all HMUX, HIPR, or HIPR2 cards on the B Bus only. HMUX, HIPR, or HIPR2 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.

The 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).

Cards in the locations specified by the sloc and eloc parameters must be running the specified GPL. Other cards in the range of locations can be running other GPLs but will not be activated. 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.

The cards specified in the sloc and eloc location parameters must be running the specified general program load (gpl).

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

## 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=bpmpl

```
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

*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:

*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.

*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

*hipr*—Communication software used on the High Speed IMT Packet Router (HIPR) card

*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

*mcp hc*— 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 SSEDCCM cards to support the STPLAN application

#### **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=siphc:ver=134-35-0
```

## **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 `rtv-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
;
```

```
act-gpl:gpl=siphc:ver=134-35-01
```

```
tekelecstp 12-07-09 19:08:39 EST EAGLE 45.0.0
SIPHC activate to 1114 completed
SIPHC 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:appl=imt:ver=21-2-0
```

```
tekelecstp 05-04-24 06:54:39 EST EAGLE 34.0.0
IMT activate on 1114 completed
IMT activate on 1116 completed
;
tekelecstp 05-04-24 06:54:41 EST EAGLE 34.0.0
5402. 1105 SYSTEM INFO REPT-EVT:IMT GPL reloading.
1 card(s) of 25 complete.
Report Date: 05-04-24 Time: 06:54:41
;
tekelecstp 05-04-24 06:55:11 EST EAGLE 34.0.0
5403. 1106 SYSTEM INFO REPT-COND:IMT GPL reloading.
11 card(s) of 25 complete.
Report Date: 05-04-24 Time: 06:55:11
;
```

## 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

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 `cli` 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 *cli* parameters in the command. (If the *cli* 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 *cli* 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:**

**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

**cli (optional)**

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

**Range:**

*ayyyyyyyyyyy*

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, cli, rep, or lfst parameter is specified, the default is 1.

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

If the *rle*, *cli*, *rep*, or *lfst* parameter is not specified, the default is the value in the LFS database, as shown in the `rtv-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*, *cli*, 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=nl).

The card location (loc parameter) must contain a provisioned and equipped LIMDS0, LIMT1, or LIMCH (associated with an LIMT1) card running an 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.

On LIM-AINF, LIM-ILA, LIM-EILA, and MPL cards (type LIMDS0 cards), only one LFS test can be active on a card at a time.

On the following cards, up to 8 LFS tests can be active on a card at a time:

- E1/T1 MIM cards or HC-MIM cards used as T1 cards
- E1/T1 MIM cards used as LIMCH cards associated with a T1 card
- MPL-T cards (type LIMDS0)

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 LIMATM 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 E1/T1 MIM and HC-MIM 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:****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:

- E1-ATM card running the ATMITU application
- E1/T1 MIM, E5-E1T1, 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
- LIM card running the SS7ANSI or CCS7ITU application
- LIM-ATM card running the ATMANSI application

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

- *a*—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

**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 Manual - EAGLE 5 ISS* provides an illustration of card locations.

If the `blk-slk` or `act-lpo` command is issued for an IPSPG signaling link, then one of the following events occurs:

- IPSPG-M2PA signaling link—MTP3 local processor outage is initiated.
- IPSPG-M3UA signaling link—The link is prohibited from entering service by rejecting received AS-ACTIVE messages.

## 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:

### 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:

- E1-ATM card running the ATMITU application
- E1/T1 MIM, E5-E1T1, 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, IPSTG, or SS7IPGW application
- LIM card running the SS7ANSI or CCS7ITU application
- LIM-ATM card running the ATMANSI 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*—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

## Notes

The *Installation Manual - EAGLE 5 ISS* 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:

*azzzzzzzzzzzzzzzzz*

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

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

#### Range:

*appr*

Downloads the approved GPL

*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.

*inactiveprtn*

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

**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:**

*refresh*

Causes data to be reloaded to the specified card.

*persist*

Indicates that the database is not to be reloaded to the card. This parameter is used to request that the EAGLE 5 ISS perform a warm restart of the requested cards. The EAGLE 5 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.

**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 E5APPB 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.

## Notes

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

The *Installation Manual - EAGLE 5 ISS* 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 Init 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**

**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 E1/T1 MIM (type LIME1, LIMT1, or LIMCH), HC-MIM (type LIME1 or LIMT1), E5-E1T1 (LIME1 or LIMT1), or E5-ATM/E5-ATM-B card (type LIMATM or LIME1ATM) 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.

## 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:

### 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 TDM card, an MDAL card, an HMUX or HIPR card, or the cards running the OAM application.

If IPSTG-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—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- a-a1, b—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

## 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 Manual - EAGLE 5 ISS* 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](#)



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 progress", 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:**

*fixed*

static database

*ddb*

dynamic 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 evaluated.

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        | GLOBL      |
|------------|-------------------|------------|------------|------------|------------|------------|------------|
| LOC        | STATUS            | CAUSE      | IDLE       | DDB UPD    | ADDN'L     | STATUS     |            |
| H'000003e8 | 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 | H'000003e8 |
| 1202       | IN UPDATE 1 (DDB) |            | 700        | 1000       |            |            |            |
| H'000003e8 | 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 progress" 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 progress" 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 progress" 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 GLOBL**—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 progress" 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**

**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:

### 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 TDM card, an MDAL card, an HMUX or HIPR 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* —E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

## Notes

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

This command generates a minor alarm. Refer to the *Maintenance Manual* 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 Manual - EAGLE 5 ISS* 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
;
```

## 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-dcmps, rtrv-dstn, rtrv-gta, rtrv-gtt, rtrv-lbp, rtrv-log, rtrv-ls, rtrv-map, rtrv-mrn, rtrv-obit, rtrv-rte, rtrv-seculog, rtrv-secu-user, rtrv-slk, rtrv-tbl-capacity, rtrv-trbltx, rtrv-uaps, rtrv-vflx-cd, rtrv-vflx-rn, and 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 `rtv-secu log` 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-int-info, rept-stat-assoc, rept-stat-card, rept-stat-dstn, rept-stat-ls, rept-stat-rte, 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, 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:

### 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:

- E1-ATM card running the ATMITU application
- E1/T1 MIM, E5-E1T1, 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 IPSP application
- LIM card running the SS7ANSI or CCS7ITU application
- LIM-ATM card running the ATMANSI 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*—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *a-a1*, *b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

## 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 Manual - EAGLE 5 ISS* 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

**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:

### 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 TDM card, an MDAL card, an HMUX or HIPR 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*—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *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 Manual - EAGLE 5 ISS* provides an illustration of card locations.

After this command is entered, the `rept-stat-slkl` command can be entered to verify the cancellation.

## Output

`canc-slkl: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-slkl\*](#), [\*alw-slkl\*](#), [\*blk-slkl\*](#), [\*dact-slkl\*](#), [\*dlt-slkl\*](#), [\*ent-slkl\*](#), [\*inh-slkl\*](#), [\*rept-stat-slkl\*](#), [\*rtrv-slkl\*](#), [\*tst-slkl\*](#), [\*ublk-slkl\*](#), [\*unhb-slkl\*](#)

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 000000-999999999.

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*

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:drt=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 supported in the AINPQ "Return Result" response messages.

**Range:***rndn*

RN + [DIALPFX] + DN

*rn*

Routing Number

*ccrndn*

[DIALPFX] + CC + RN + DN

*rmnecdn*

RN + [DIALPFX] + NEC + DN

*homerndn*

Home Routing Number

*rnasd*

RN + ASD

*asdrn*

ASD + RN

*rnasddn*

RN + ASD + [DIALPFX] + DN

*asdrndn*

ASD + RN + [DIALPFX] + DN

*ccrnasddn*

[DIALPFX] + CC + RN + ASD + DN

*asdrnccdn*

ASD + RN + [DIALPFX] + CC + DN

*ccasdrndn*

[DIALPFX] + CC + ASD + RN + DN

*rnasdccdn*

RN + ASD + [DIALPFX] + CC + DN

*rnasdnecdn*

RN + ASD + [DIALPFX] + NEC + DN

*asdrnnecdn*

ASD + RN + [DIALPFX] + NEC + DN

*rngrn*

RN + GRN

*grnrn*

GRN + RN

*rngrndn*

RN + GRN + [DIALPFX] + DN

*grnrndn*

GRN + RN + [DIALPFX] + DN

*ccrngrndn*

[DIALPFX] + CC + RN + GRN + DN

*ccgrnrndn*

[DIALPFX] + CC + GRN + RN + DN

*grnrnccdn*

GRN + RN + [DIALPFX] + CC + DN

*rngrnccdn*

RN + GRN + [DIALPFX] + CC + DN

*rngrnnecdn*

RN + GRN + [DIALPFX] + NEC + DN

*grnrnnecdn*

GRN + RN + [DIALPFX] + NEC + DN

*grn*

GRN

*grndn*

GRN + [DIALPFX] + DN

*ccgrndn*

[DIALPFX] + CC + GRN + DN

**Default:**

No change to the current value

**System Default:***rndn***rnai (optional)**

Routing nature of address indicator

**Range:***natl*

National significant number

*intl*

International number

*frmsg*

NAI from the incoming message

**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:***unknown*

IS41 Numbering Plan Unknown

*e164*

IS41 Telephony Number

*e212*

IS41 Land Mobile Number

*priv*

IS41 Private Number

**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

*natl*

National Significant Number

*intl*

International Number

*unknown*

Unknown NAI value

*none*

NAI value none

**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:**

*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)**

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:**

*rrwdgts*

## 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*, *rngrrnnecdn*, and *grnrrnnecdn* cannot be specified for the rfmt parameter.

The S-Port feature must be enabled before the sportype 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<br>Home_System_Feature_<br>Code] | 28            | International_Call.                     |
| 5             | Double_Introducing_Pound.                      | 29            | Unrecognized_Number.                    |
| 6             | Single_Introducing_Pound.                      | 30            | Prior_Agreement.                        |
| 7             | Revertive_Call.                                | 31            | Specific_called_Party_<br>Digit_String. |
| 8             | 0_Digit.                                       | 32            | Mobile_Termination.                     |
| 9             | 1_Digit.                                       | 33            | Advanced_Termination.                   |
| 10            | 2_Digit.                                       | 34            | Location.                               |

| Decimal Value | Mnemonic  | Decimal Value | Mnemonic                                                                                    |
|---------------|-----------|---------------|---------------------------------------------------------------------------------------------|
| 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 55: 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 (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:npcfmt.i` 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-nnnnnn*, *prefix-nnnnnn-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*).

**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

**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

**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 (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*).

**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*

**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 55: 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*

*partial*

*default*

**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:opc24=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
```

## 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 IPGW 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).

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.

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.

**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 |

| Action                            | dpc | si | ssn | opc | cics | cice | ncics | ncice | split | type    |
|-----------------------------------|-----|----|-----|-----|------|------|-------|-------|-------|---------|
| Socket Name Override SI-only key  |     | X  |     |     |      |      |       |       |       | partial |
| Socket Name Override DPC-only key | X   |    |     |     |      |      |       |       |       | partial |
| 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.

## 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:

*ayyyyyyyyyyyyyyy*

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:aname=asx:mode=override
```

## Dependencies

The value specified for the aname 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:aname=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](#), [rtro-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 IPAPSOCK table).

**Range:**

aaaaaaaaaaaaaaaaaaaa

Up to 15 alphanumeric characters; the first character must be a letter.

**adapter (optional)**

Adapter layer for the association.

**Range:**

*m3ua*

*sua*

 $m2pa$ 

**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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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

**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:**

[illegible]

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:**

**Default:**

No change to the current value

**lport (optional)**

Local port. The SCTP port number for the local host.

**Range:**

1024 - 65535

**Default:**



**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:**

*primary*

primary remote address

*alternate*

alternate 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:**

*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

*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.

**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 Tekelec 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

**rtxtthr (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=m2paparameter 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
```

## 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, and bufsize 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 IPSCG 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             |  |

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, 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 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 5 ISS.

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

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.

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                                                | 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 |
|----------|------------------|-------------------|-------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------|
|          |                  |                   |                               | addresses can be present)                                                         |                                            |
| MATCH    | Y                | N                 | RHOST                         | NA                                                                                | RHOSTonly                                  |
| RELAXED  | Y                | Y                 | RHOST or ARHOST               | NA                                                                                | N                                          |
| RELAXED  | Y                | Y                 | NA                            | RHOST or ARHOST                                                                   | N                                          |
| 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.

***asddlmmmsisdn***

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.

***grndlmmmsisdn***

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 atiacrn=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 atiacrn=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 atackrn=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 atackrn=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).

***grndlmrns***

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 atackrn=rns 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*

**atiackvlnum (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).

### *rnsplmgn*

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).

### *srfimsidlmgn*

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.

***rnspsmsisdn***

- 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:**

*rnspsmsisdn*

**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 atackrn 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:**

*atisupplinfo*

**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:**

*atisupplcinfo*

**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 *rnspsmsisdn*:

```
chg-atinpqopts:atiackvlrnum=rnspsmsisdn:on=atisuppllocinfo
```

## 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-atinpopts: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

*rtro-atinpopts*

## 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 srclpset 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 -s lk` 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 -secu log` 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 IPSCG 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-EM4G or E5-SM8G-B card.

**Range:**

**dn**

only DN related data from EPAP is loaded on the card

**imsi**

only IMSI 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 Tekelec 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.

**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 IPSP configuration.

**Range:**

**enet**

the IPSP configuration is supported on an E5-ENET card

**enetb**

the IPSP 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, *xy09*, or *xy10* 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 IPSEG-hosted associations, a link and association are matched using the `aname` parameter for the `ent - slk` command.

A function returned an unknown error. An ATH is also issued.

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 Tekelec 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.

If value ELAP, or EPAP is specified for `data` parameter, 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.

data=gtt cannot specified if ip link has been configured for the card.

To provision card type= ENETB, 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](#), [rtro-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:

*primary*

primary clock

*secondary*

secondary clock

*all*

all clocks

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 hscldsrc 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**

**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:**

*rs422*

RS-422 clock source

*e1framed*

E1 Framed clock source

*e1unframed*

E1 Unframed 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:hsckll=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.

The `hsclksrc=rs422` parameter must be specified.

The `hsclksrc` parameter values *t1unframed*, *t1framed*, *e1unframed*, and *e1framed* cannot be specified if either TDM is a version that does not support the Global Timing Interface feature (both TDMs must be TDM-15 or later (including E5-TDM), with the Global Timing Interface loaded).

The `hsckll` parameter cannot be specified if either TDM is a version that does not support the Global Timing Interface feature (both TDMs must be TDM-15 or later (including E5-TDM), with the Global Timing Interface loaded).

## 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 5 ISS 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 5 ISS STP. These distributed clocks are used for various purposes depending on what types of links or features are provisioned.

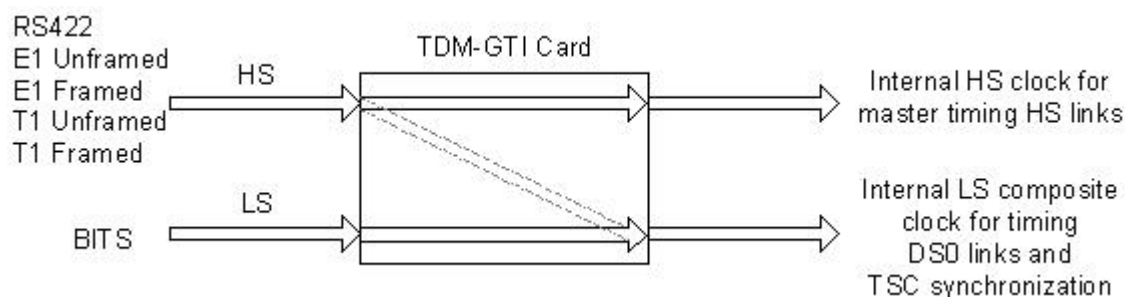


**Figure 4: Eagle Input and Internal Clocks with TDM-GTI**

The high speed clock that is distributed to the cards in the EAGLE 5 ISS 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 5 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:hscclksrc=t1framed
```

```
e5oam 09-01-01 17:25:22 MST EAGLE 5 ISS 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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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 *yyy-no* or *yyy-yes*.

*yyy-yes*-command class is allowed  
*yyy-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:**

*yyy*  
1 alphabetic character followed by 2 alphanumeric characters  
Specify the parameter value in the format *yyy-no* or *yyy-yes*.  
*yyy-yes*-command class is allowed  
*yyy-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:**

*yyy*  
1 alphabetic character followed by 2 alphanumeric characters  
Specify the parameter value in the format *yyy-no* or *yyy-yes*.  
*yyy-yes*-command class is allowed  
*yyy-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:**

*yyy*  
1 alphabetic character followed by 2 alphanumeric characters  
Specify the parameter value in the format *yyy-no* or *yyy-yes*.  
*yyy-yes*-command class is allowed  
*yyy-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

[rtro-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:





## 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

**Note:** See [Point Code Formats and Conversion](#) for a detailed description of point code formats, rules for specification, and examples.

**Note:** The p2 and scpgta parameters are used only by the Prepaid IDP Query Relay feature.

**Note:** The p1 parameter is used only by the IDP Service Key Routing feature.

**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 *skbcsn* 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 — SIP Number Portability *npbypass* list

**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:**

*azzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz*

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:

- 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

*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
- *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 Tekelec 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 Prepaid IDP Query Relay feature are:

- 0, 1—National or International for the DELPFX list, which is for Tekelec personnel use ONLY.

**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. The parameter value can be entered as a number or as the corresponding mnemonic.

**Range:**

zzzzzzzzzz

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

**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 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 *ds* parameter or a point code parameter must be specified.

#### **pci (optional)**

ITU international point code with subfields *zone-area-id*.

##### **Range:**

*zone*—0–7

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:npcfmt i` 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:

- *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

#### **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
```

## 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

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.

SIPNP feature must be enabled before changing NP prefix entries for 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](#), [rtro-csl](#), [rtro-ctrl-feat](#)

## chg-ctrl-feat

### Change Controlled Feature

Use this command for controlled features that have been purchased and 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 purchasing 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
- 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 purchased 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 SEASCLI 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

A function returned an unknown error. An ATH is also issued.

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.

MFC must be ON for turning ON the 1M System TPS feature.

HIPR2 high rate mode feature must be ON for turning ON the 1M System TPS feature. HIPR2 high rate mode feature cannot be OFF if 1M System TPS feature is turned ON.

If the System TPS is more than 750K then 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 dependant 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, rtro-ctrl-feat*

## chg-db

### Change Database

Use this command to manipulate elements of the database.



CAUTION

**Caution:** When this command is entered, all other database operations are locked out while the command executes.



CAUTION

**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

**Note:** The removable cartridge is used with legacy MDAL cards. The removable drive is used with E5-MASP hardware.

**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 cartridge, 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 cartridge or drive, or the remote FTP server to the current 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 cartridge or 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 Tekelec 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:**

yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

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 cartridge or drive

*fixed*

Restore the database from the fixed disk

*server*

Restore the database from a remote server

*usb*

Argument to be used by Tekelec 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](#).

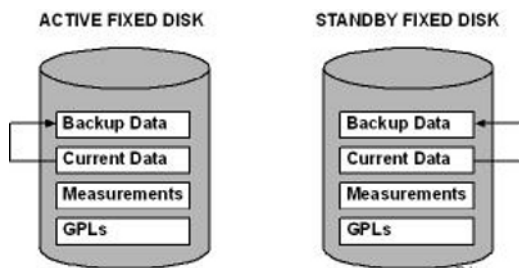


**Figure 5: chg-db:action=backup:dest=fixed**

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](#).

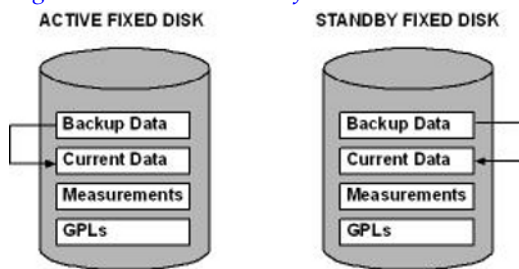


**Figure 6: chg-db:action=restore:src=fixed**

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 cartridge or drive must be coherent when 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/repair 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 a 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 credit card drive must be inserted into the Active OAM 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

For the *backup*, *restore*, and *repair* parameter values, the performance time 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 the Customer Care Center. See the "Customer Care Center" section in Chapter 1 of this manual.

If the `dest=remove` parameter is specified on the GPSM-II card, the database on the current partition of the active fixed disk is copied to the removable cartridge in the MDAL. This action is shown in [Figure 7: `chg-db:action=backup:dest=remove`](#).

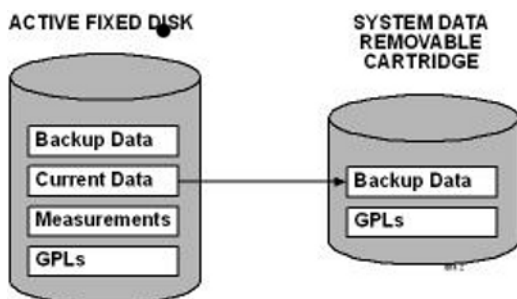


Figure 7: chg-db:action=backup:dest=remove

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](#).

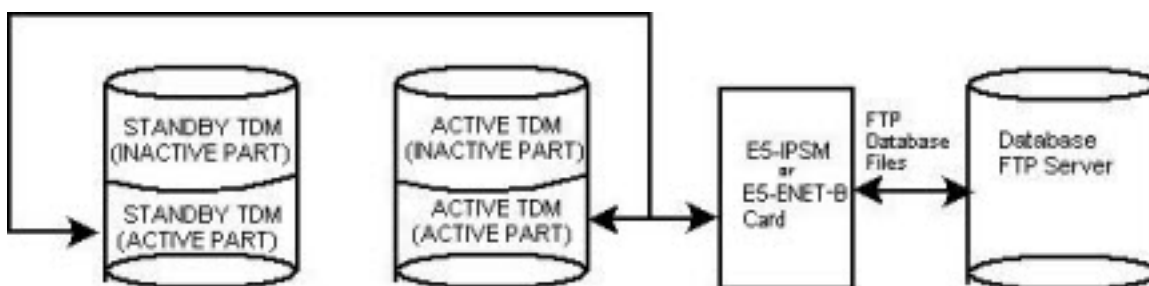


Figure 8: Remote Backup or Restore

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](#).

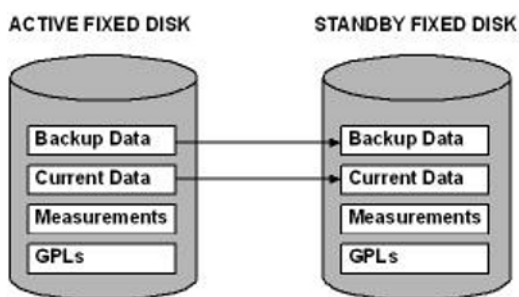


Figure 9: chg-db:action=repair

If the `src=remove` parameter is specified on the GPSM-II card, the database on the removable cartridge 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](#).

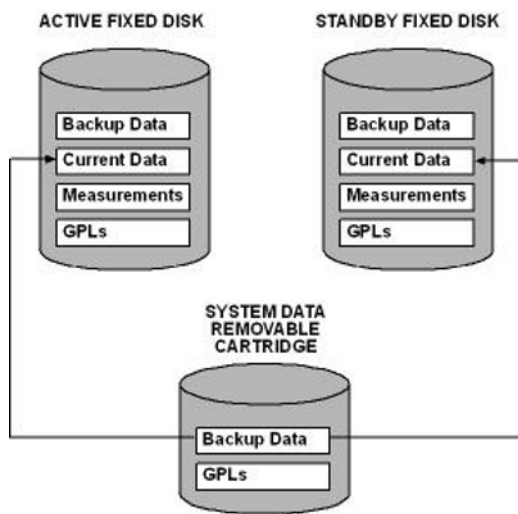


Figure 10: chg-db:action=restore:src=remove

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 slot) 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 slots. 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 latched USB slot.

## 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*

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 (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:npcfmt i` 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

**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 (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:npcfmt i` 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.

**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:**

*ayyyyyyyyyyy* 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 TIFOPTS *nptype* option value is *nm*

*on*

Set NM Bits to 00 in ITU IAM message if 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 (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:npcfmt i` 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

**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:dpc=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:npcfmt*i** 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 *thenc* subfield, the *thencm* 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 clii for the destination point code is specified, it cannot match the clii 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.

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 a 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 a 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.

## 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 command separator

### Alias Combination Matrix

Table 9: Alias Combination Matrix

|             | specified  |        |        | result |        |
|-------------|------------|--------|--------|--------|--------|
| destination | aliasN     | aliasI | aliasA | alias1 | alias2 |
| ANSI        |            | none   |        | 0      |        |
|             |            | pci    |        | pci    |        |
|             | 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      |

|  | specified  |      |      | result |       |
|--|------------|------|------|--------|-------|
|  | pcn, none  |      | pca  | 0a,n   | pcn   |
|  | pcn1, pcn2 |      | none | pcn1   | pcn2  |
|  | pcn1, pcn2 |      | pca  | E5001  |       |
|  | pcn24      |      | none | 0a     | pcn24 |
|  | 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  |       |

|      | specified |            |      | result |       |
|------|-----------|------------|------|--------|-------|
|      | pcn24     | none       | none | 0a,i   | pcn24 |
|      | pcn24     | none       | pca  | pca    | pcn   |
|      | pcn24     | pci        | none | pca    | pcn   |
|      | pcn24     | pci        | pca  | 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    |       |
|      | 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  |

|  | specified        |            |      | result |      |
|--|------------------|------------|------|--------|------|
|  | 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  |      |
|  | 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  |      |

|        | specified |            |      | result |      |
|--------|-----------|------------|------|--------|------|
|        | pcn24     | pci1, pci2 | pca  | 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  |

Legend:

**0**—clear alias if provisioned regardless of its pointcode type

**0A**—clear alias if provisioned and pointcode is ANSI

**0I**—clear alias if provisioned and pointcode is ITUI

**0N**—clear alias if provisioned and pointcode is ITUN

**0A,I**—clear alias if provisioned and pointcode is ANSI or ITUI

**0A,N**—clear alias if provisioned and pointcode is ANSI or ITUN

**0I,N**—clear alias if provisioned and pointcode is ITUI or ITUN

**0A,I,N**—clear alias if provisioned and pointcode 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 is 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:dpc=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:dpc=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
;

```

## 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 E1/T1 MIM card or an HC-MIM or E5-E1T1 card used as an E1 or SE-HSL card.

On HC-MIM and E5-E1T1 cards, 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

Ports 3 - 8 can be specified only for HC-MIM and E5-E1T1 cards.

Any 2 of the 8 ports on an HC-MIM 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 on an HC-MIM or E5-E1T1 card 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 the E1/T1 MIM card, or an HC-MIM or E5-E1T1 card used as an E1 card.

**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:minsrate=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 an E1/T1 MIM, HC-MIM or E5-E1T1 card used as an E1 card.

The chanbrdg parameter can be specified only for HC-MIM or E5-E1T1 cards used as E1 cards (not as SE-HSL cards).

The chanbrdg=on parameter cannot be specified for even-numbered E1 ports on HC-MIM or E5-E1T1 cards.

The timing source parameter e1tsel must be specified if chanbrdg=on is specified.

If the chanbrdg=on parameter is specified for an E1 port on an HC-MIM or E5-E1T1 card, then the e1tsel=line parameter cannot be specified.

The chanbrdg=on parameter must be specified for an HC-MIM or E5-E1T1 card 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 on an HC-MIM or E5-E1T1 card 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 on an HC-MIM or E5-E1T1 card, all signaling links assigned to its next higher even-numbered adjacent E1 port must be deleted (see the `dlts-lk` 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.

HIPR cards must be equipped in card locations xy09 and xy10 (x is the frame, y is the shelf) on each EAGLE 5 ISS shelf that contains one or more HC-MIM or E5-E1T1 cards.

Shelf FAN bit must be turned ON for the shelf on which HC-MIM card is being used as 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 (OAM, TDM, MDAL cards) cannot be specified as values for the loc parameter.

Locations xy09 and xy10m, where x is the shelf and y is the slot, 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 5 ISS 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:

*ipsg*

apply functionality to cards running the IPSTG GPL

*ipghc*

apply functionality to cards running the IPGHC GPL

*all*

apply functionality to cards running the IPSTG or IPGHC 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:**

*stc*

STC monitoring is performed on FC-capable cards

*fcopy*

FC monitoring is performed on FC-capable cards

*off*

Monitoring is not 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-feat

### Change Feature

Use this command to activate the optional features available on the system.

You must purchase a feature before you turn the feature on. If you are not sure whether you have purchased a feature, contact your Tekelec Sales Representative or Account Representative.



CAUTION

**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***itumtpsr (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***mtpsr (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**

**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.

Both cards that run the OAM must be GPSM-II cards before the Time Slot Counter Synchronization feature can be turned on.



### CAUTION

**Caution:** Never install or initialize MCAP cards in card slots 1113 and 1115 after GPSM-II cards are provisioned in these slots. Attempting to initialize MCAP cards after GPSM-II cards have been provisioned in slots 1113 and 1115 will cause a system outage. Before replacing an existing GPSM-II card in slot 1113 or 1115, contact Tekelec Customer Service.

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 to 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 5 ISS uses. The SPCs are used for provisioning and routing as if they were the true point code of the EAGLE 5 ISS. 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 5 ISS 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 5 ISS and the Sentinel Extended Services Platform (ESP) or the Integrated Message Feeder (IMF), to eliminate the need for cabling between each SS7 link and the ESP or 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 5 ISS 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 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

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 5 ISS.

## 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

**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:**

*meas*

## Measurements Platform application

*user*

### FTP-based Table Retrieve Application (FTRA)

 $db$ 

Database Backup\Restore application

*dist*

EAGLE 5 ISS Software Release Distribution application

**ipaddr (mandatory)**

IP Address of the FTP Server.

**Range:**

**login (optional)**

FTP Server Username (A prompt for entering a password appears on a separate line.)

**Range:**

ZZZZZZZZZZZZZZZZZZZZ

1 to 15 alphanumeric characters; mixed-case is allowed

**path (optional)**

FTP path used to locate the file that will be sent.

**Range:**

////////////////////////////////////

Up to 100 characters; mixed-case string in double quotes with valid FTP path format

**Default:**

User's home directory

**prio (optional)**

Priority of this FTP server when there is more than one FTP Server for this application.

**Range:**

1 - 10

**security(optional)**

Change the FTP server to be secure or not.

**Range:**

*on*

Change the FTP server to be secure.

*off*

Change the FTP server to be unsecure.

## Example

```
chg-ftp-serv:app=meas:ipaddr=1.255.0.102:login=ftpmeas1:path=~meas:prio=1
chg-ftp-serv:app=user:ipaddr=1.255.0.102:login=tekperson1:path=~\data:prio=1
```

## Dependencies

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 parameter 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 cartridge or drive to the destination active and standby system disks as a "trial" version. The system release identification file is uploaded from the system removable cartridge or 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 moved from "trial" to "approved" status on cartridge or drive to the disk.

#### Range:

*xyyyyyyyy*

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-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.

*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

*hipr*—Communication software used on the High Speed IMT Packet Router (HIPR) card

*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

*mcp hc*—Used by E5-MCPM-B cards for the Measurements Platform feature

*oam hc*—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.

*slan hc*—Used by E5-ENET and E5-ENET-B cards to support the STPLAN application

*ss7 hc*—Used by HC-MIM and E5-E1T1 cards. Allows the card to support up to 64 signaling links for E1 and T1 functions.

*ss7 ml*—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 SSED CM cards to support the STPLAN application

#### **src (optional)**

Source drive. The identification of the disk containing the GPL to be copied

**Range:***remove*

Removable cartridge or drive

*usb*

Argument to be used by Tekelec 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
```

## 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 credit card 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 removable cartridge or drive must be inserted into the removable cartridge drive or 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 removable cartridge.

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
;
```

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

**cgpapgts (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*

**cgpagnai (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:cdpnai=4:cdpadgts=12457896abcd:cgpnai=2:cgpdgts=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:cdpnai=4:cdpdgts=987654321:cgpnai=4
```

```
tekelecstp 09-03-02 10:46:51 EST EAGLE 40.1.0
CHG-GSM-MSG: MASP A - COMPLTD
;
```

**Related Commands**

*rtro-gsm-msg*, *tst-msg*



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 -gsm -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/npc/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:npcfmt.i* 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-GSM MAP-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*

**eigrsp (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    |

| Presence in List |   |   | EIR Response Type |            |          |
|------------------|---|---|-------------------|------------|----------|
|                  | 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*

**gflexmaplayerrrtg (optional)**

G-Flex MAP layer routing. The message parameter used in the database lookup performed during G-Flex MAP layer routing.

The gflexmaplayerrrtg parameter applies G-Flex MLR to the following MAP operations:

- updateLocation
- sendParameters
- sendAuthenticationInfo
- updateGPRSLocation
- AnyTimeInterrogation

Use the maplyrrtg 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*

**maplyrrtgooff (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, rdyfornsm, purgmobss, sriloc, all*

*all* —Turns off G-Flex MLR for all MAP operations supported by the maplyrrtgooff 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, rdyfornsm, 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

*rngnrccdn*

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*

**msrnlcn (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

**msrnp (optional)**

The numbering plan value for the MSRN.

**Note:** This parameter is mandatory if the msrnnai parameter 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:**

*eirimsichk*

*encodecug*

*encodenps*

*srismgttrtg*

*encdnpsptnone*

*encdnpsdnnnotfound*

**on (optional)**

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

**Range:**

*eirimsichk*

*encodecug*

*encodenps*

*srismgttrtg*

*encdnpsptnone*

*encdnpsdnnnotfound*

**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*

## 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=blk1st
chg-gsmopts:migrpfx=multiple
chg-gsmopts:sridnnotfound=srinack
chg-gsmopts:defmcc=214:defmnc=34
chg-gsmopts:msrndig=rnasd
chg-gsmopts:on=eirimsichk:eirrsptype=type2:eirgrsp=blk1st
chg-gsmopts:on=encodecug,encodenps,srismgrnrtg:off=eirimsichk:crptt=50
chg-gsmopts:on=encdnpsptnone,encdnpsdnotfound
chg-gsmopts:maplyrrtgon=regss,actss,sriloc:maplyrrtgooff=dactss,rstdata

```

## 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 `encdnpsdnotfound` 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`, `eirsptype`, or `eirimsichk` parameter can be specified and before the `eirimsichk` option 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 `msrnp` 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 gflexmaplayerrrtg, maplyrrtggon, or maplyrrtgoft 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 maplyrrtggon and maplyrrtgoft 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.

## Notes

The `sriddn` 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 the *Feature Manual - G-Port* 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`).

### 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.
- *encdnpsdnotfound*—Specifies whether the NPSI is included in SRI Ack messages when the DN is not found. This option has a default of OFF.

### MAP Operations Supported by the `maplyrrtgon` and `maplyrrtgoff` Parameters

The `maplyrrtgon` and `maplyrrtgoff` 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
- *rdyformsm : 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
;
```

## Related Commands

[chg-gsmsmsopts](#), [rtro-gsmopts](#), [rtro-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/npcn/npci/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:npcfmt.i` 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*-

*nnnnnn*—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:npc=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/npc/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/npc/npci/npcn/npcn24 and nssn parameters are specified with the ndfltact parameter, the ndfltact parameter must have a value of *forward*, *duplicate*, or *dupdisc*.

The npc/npc/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 npc 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/npc/npci/npcn/npcn24 parameter must be a full point code.

If the npc/npc/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/npc/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](#), [rtro-gsms-opcode](#)

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:**

*ayyyyyyyyy*

1 alphabetic character followed by up to 8 alphanumeric characters.

**Default:**

No change to the current value

**System Default:**

*none*

### **defis41smc (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*

### **igsmsrelay (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***is41smcgttsn (optional)**

IS41 SMSC GTT Set name. The GTT set where Global Title Translation lookup on default IS41 SMSC digits is performed.

**Range:***ayyyyyyyyy*

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*

signalling point

*rn*  
routing number

*sprn*  
**sp orrn**

*all*  
**sp, rn,** or DN with no entity

*nonsp*  
**rn** or 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

|                |                                                                                 |
|----------------|---------------------------------------------------------------------------------|
| <i>dn</i>      | Directory or Dialed Number                                                      |
| <i>srfimsi</i> | IMSI is encoded as the “SRFIMSI” parameter from the number portability database |
| <i>mccrndn</i> | mobile country code, routing number, and directory or dialed number             |
| <i>none</i>    | 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:**

|              |                                              |
|--------------|----------------------------------------------|
| <i>sp</i>    | signalling point                             |
| <i>rn</i>    | routing number                               |
| <i>sprn</i>  | <b>sp</b> or <b>rn</b>                       |
| <i>all</i>   | <b>sp</b> , <b>rn</b> , or DN with no entity |
| <i>nonsp</i> | <b>rn</b> or 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:mosmsgttldig=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 is41smcgttsn parameter must match the name of an existing GTT Set.

The mosmsgttldig=sccpcdpa parameter must be specified before the bpartygttsn=none parameter can be specified.

The GTT set specified for the bpartygttsn or is41smcgttsn parameter must have settype=cdgta (see the `ent-gttset` command).

If the bpartygttsn=none parameter is specified, then the mosmsgttldig=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, mtmsmstype, 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`, `mtmmsentyn`, 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 `sfill` parameter can be specified.

The MO SMS ASD, MO SMS GRN, MO-based GSM SMS NP, or Prepaid SMS Intercept Ph 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 `igsmsrelay`, `is41smcgttsn`, or `defis41smc` parameter can be specified.

If the `defis41smc=none` parameter is specified, then the `igsmsrelay=yes` parameter cannot be specified.

If the `defis41smc` parameter has a value other than *none*, then the `is41smcgttsn=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 `is41smcgttsn` 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:is41smcgttsn=set1:defis41smc=1234:igsmsrelay=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-gttset), 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:

*ayyyyyyyyy*

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:

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

1 leading alphabetic character and up to 8 following alphanumeric characters.

*none*—deletes the current value of the parameter

**cgtmod (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.

**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:npcfmt.i* 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*

### 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 start 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 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 (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:npfmt i` 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*

**ecdssn (optional)**

Subsystem number of the end called party.

**Range:**

*0 - 255*

**ecgssn (optional)**

Subsystem number of the end 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:**

*ayyyyyyyyy*

*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:**

*ayyyyyyyyy*



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:npcfmt i` 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

### 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:**

*ayyyyyyyyy*

1 leading alphabetic character and up to 8 following alphanumeric characters.

**optsn (optional)**

Optional GTT set name.

**Range:**

*ayyyyyyyyy*

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:npcfmt i` 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*

### pkgtype (optional)

The ANSI and ITU TCAP package type.

#### Range:

*ansiuni*

ANSI unidirectional

*qwp*

Query with Permission

*qwop*

Query without Permission

*resp*  
Response

*cwp*  
Conversation with Permission

*cwop*  
Conversation without Permission

*ansiabort*  
ANSI abort

*any*  
Wildcard value

*cnt*  
Continue

*end*  
End

*ituuni*  
ITU unidirectional

*ituabort*  
ITU abort

*bgn*  
Begin

**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 valueIf 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=987658321198765432112: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=df1t
```

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=df1t
```

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:
cgseid=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:cggmod=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=setcggtta: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:xltnone:mapset=1:mrnset=2
```

## 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 xltn=dpcngt parameter is specified, a new or existing ri=gt parameter must be specified.

If the ssnn parameter is specified, a new or existing xltn=dpcssn parameter must be specified.

If the xltn=dpcssn parameter is specified, the ssnn parameter must be specified.

If the pc/pca/pci/pcn/pcn24 parameter is specified, and the point code is the STP true point code, then the value of the new or existing xltn parameter must be *dpcssn*, and the new or existing value of the ri parameter must be *ssnn*.

If the pc/pca/pci/pcn/pcn24 parameter, ssnn parameter, or both, are specified, and the point code is the STP true point code, the ssnn value must exist in the SS-APPL table.

If the pc/pca/pci/pcn/pcn24 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=ssnn and xltn=dpc parameters are specified, and the pc/pca/pci/pcn/pcn24 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=ssnn, xltn=dpc, and pc/pca/pci/pcn/pcn24 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 a new or existing ri=gt parameter is specified, a new or existing ccgt=no parameter must be specified.

If the new or existing pc/pca/pci/pcn/pcn24 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/cgpcac/cgpci/cgpcn/cgpcn24, opc/opca/opci/opcn/opcn24, cgssn /cdssn, opcode/acn/pkgtype, opcode/family/pkgtype, or dpc/dpca/dpci/dpcn/dpcn24 parameter must be specified.

The FLOBR feature must be turned on before the cgssn, opcsn, optsn, and cgseid parameters can be specified in the same command.

The pc/pca/pci/pcn/pcn24, cgpc/cgpcac/cgpci/cgpcn/cgpcn24, opc/opca/opci/opcn/opcn24, and dpc/dpca/dpci/dpcn/dpcn24 parameters must have values within the valid range for each subfield.

The value specified for the ecgssn/ecdssn 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`, `opc/opca/opci/opcn/opcn24`, 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` parameter must be specified if the GTTSN set type has a value of `cgpc`. The `cgpc/cgpca/cgpci/cgpcn/cgpcn24` parameter cannot be specified for other set types.

The `opc/opca/opci/opcn/opcn24` parameter must be specified if the GTTSN set type has a value of `opc`. The `opc/opca/opci/opcn/opcn24` 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`, `opci/opcn/opcn24`, and `dpci/dpcn/dpcn24` 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`, `pc/pca/pci/pcn/pcn24`, or `opc/opca/opci/opcn/opcn24`) 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 `cgtselid` parameter.

The OBSR feature must be enabled or the FLOBR feature must be turned on before the `cgtselid` 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 of 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`, `cgtselid`, 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 `cgcnsn` 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.

Failure while reading the GTT Action Set table.

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` parameter must be specified. If the GTT set has a set type other than *dpc*, then the `dpc/dpca/dpci/dpcn/dpcn24` 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`, `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.

## 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 for the following reasons:

- A database was upgraded from a release prior to EAGLE 5 ISS 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 at (888) FOR-TKLC.

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.

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/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 OPCS. For

CdPA GTA and CdPA SSN translations, if an OPTSN GTTSET/SELID is provisioned apart from an OPCS, then the OPTSN GTTSET/SELID takes precedence over the OPCS.

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 OPCS parameter can not be configured for DPC translations.

## Output

chg-gta:gttsn=set2:xl=at=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*, *rtro-gta*

## chg-gtcnv

### Change Global Title Conversion

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/npsd 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=itoe entry's current TTA value to 11, and changes or adds NPDD and NPDS values:

```
chg-gtcnv:dir=itoe:tta=11:tti=7:npdd=3:npds=123
```

This example changes a dir=itoe entry's TTA value to 12, and changes or adds NSDD and NSDS values:

```
chg-gtcnv:dir=itoe: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=itoe entry's current TTI value to 17, and changes or adds NPDD and NPDS values:

```
chg-gtcnv:dir=itoe: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=itoe parameter is specified, then a value of \* must be specified for the tti, np, and nai parameters.

If the dir=itoe 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:***ayyyyyyyyy*

1 alphabetic character followed by up to 8 alphanumeric characters

**cgpasn (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:***ayyyyyyyyy*

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:**

*px*

*sfx*

**Default:**

*px*-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 gtmodid 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](#), [rtro-gtmod](#)

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-gttset), 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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyy*

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:npcfmt.i` 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-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*

*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:***ayyyyyyyyy*

1 alphabetic character followed by up to 8 alphanumeric characters

**Default:**

No translation name is given

**type/typea/typeei/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 typeei 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 5 ISS 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:cggmod=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 already exist in the database.

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 new or existing pc or ssn combination must exist as a mated application.

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=dpccsn 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=dpccsn and ri=gt parameters are specified, then the ssn parameter must be specified.

The xlat=dpccsn parameter must be specified before the ssn parameter can be specified.

If the xlat=dpngt 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 cggmod 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-gtt sel 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-gttset` command, or if the GTT set name of an entry is changed using the `chg-gttset` command, then the corresponding GTT entry cannot be updated.

## Output

chg-gtt:gta=981234:type=4:cggmod=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:

*ayyyyyyyyy*

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

*tcaperr*

discard message that has a specified TCAP error

*udts*

discard message and send UDTS/XUDTS

*fwd*

route the original message to a specified forward node instead of the destination indicated by the GTT / DB data

**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:**

*aaaaaaaa*

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

**cggmodid (optional)**

Calling party global title modification identifier.

**Range:**

*aaaaaaaa*

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:npcfmt.i` 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 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-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*

*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 data in the GTT Action

**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:** *ayyyyyyyyy*

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:**

*ayyyyyyy*

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:npcfmt i` 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-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*

*msa*—000-255

*ssa*—000-255

*sp*—000-255

#### 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

**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:cggmodid=none
```

```
chg-gttact:act=dup:actid=dup5:cggmodid=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
```

## Dependencies

A value of *dup* or *fwd* must be specified for the *act* parameter before the *pc/pca/pci/pcn/pcn24*, *cgpc/cgpcac/cgpci/cgpcn/cgpcn24*, *cgpcogmsg*, *cdgtmodid*, *cggmodid*, *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.

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 can be specified.

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 parameter must be specified.

If the cgpcogmsg=provcgpc parameter is specified, then the cgpc/cgpca/cgpci/cgpcn/cgpcn24 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 parameter must be a full point code.

The value specified for the , pc/pca/pci/pcn/pcn24 parameter must already exist as a destination in the Route table.

If the value specified for the pc/pca/pci/pcn/pcn24 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, 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 and cgpc/cgpca/cgpci/cgpcn/cgpcn24 parameters must be within the range specified by the parameter definition.

A value of *disc*, *udts*, or *tcaperr* must be specified for the defactid parameter.

If 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 parameter must be associated with a valid route.

If the value specified for the pc/pca/pci/pcn/pcn24 parameter is the STP true point code, then the ri=ssn parameter must be specified.

The values specified for the cdgtmodid and cggmodid parameters must already exist in the GTMOD table.

The AMGTT or AMGTT CgPA Upgrade feature must be turned on before the cggmodid parameter can be specified.

The GTT Action ID specified by the defactid parameter must already exist.

The pc/pca/pci/pcn/pcn24 and cgpc/cgpca/cgpci/cgpcn/cgpcn24 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.

## 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

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
;
```

## Related Commands

*dlt-gttact*, *ent-gttact*, *rtrv-gttact*

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*.

**cggtsn (optional)**

GTT set name (CGPA type).

**Range:**

*ayyyyyyyyy*

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

**ngttn (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

**opgtsn (optional)**

GTT set name (Opcode type).

**Range:**

*ayyyyyyyyy*

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

|                                                             |                                 |
|-------------------------------------------------------------|---------------------------------|
| <i>resp</i>                                                 | Response                        |
| <i>cwp</i>                                                  | Conversation with Permission    |
| <i>cwop</i>                                                 | Conversation without Permission |
| <i>any</i>                                                  | Wildcard value                  |
| <i>bgn</i>                                                  | Begin                           |
| <i>end</i>                                                  | End                             |
| <i>cnt</i>                                                  | Continue                        |
| <i>ituabort</i>                                             | ITU abort                       |
| <i>ansiabort</i>                                            | ANSI abort                      |
| <i>ansiuni</i>                                              | ANSI unidirectional             |
| <b>ANSI TCAP Package Types</b>                              |                                 |
| <i>ansiuni, qwop, qwop, resp, cwp, cwop, ansiabort, any</i> |                                 |
| <b>ITU TCAP Package Types</b>                               |                                 |
| <i>bgn, ituabort, ituuni, any, end, cnt</i>                 |                                 |

## Example

```
chg-gttapath:gtttn=path1:opgttsn=opsn2:acn=1-1-1-1-1-1-1:opcode=123:pkgtype=ituuni
chg-gttapath:gtttn=path1:cggtsn=cgsn2:cggta=45673
chg-gttapath:gtttn=path1:ngttn=path2
```

## Dependencies

If the family parameter is specified, then a value of *ansiuni*, *qwop*, *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, cggtsn, 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 + cggtta)/(cdgttsn + cdgta) parameters must exist.

At least one GTT set-value combination must be specified.

The GTT set name specified by the opgttsn, cggtsn, or cdgttsn parameter must match an existing GTT set name.

The GTT set name specified by the opgttsn, cggtsn, and cdgttsn parameters must have set types of opcode, cggtta, and cdgta, respectively.

The GTA value specified by the cggtta 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:cggtsn=cgsn2:cggtta=45673

```
tekelecstp 10-02-04 18:29:41 EST EAGLE 42.0.0
chg-gttapath:gttpn=path2:cggtsn=cgsn2:cggtta=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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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
```

## 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*, or *tcaperr*.

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*, or *fwd*.

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*, 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-gttset:actsn=asetdup1:actid1=dup2:on=testmode
```

```
tekelecstp 10-02-04 18:29:41 EST EAGLE 42.0.0
chg-gttset: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-gttset*, *ent-gttset*, *rtrv-gttset*

## chg-gttset

### 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-gttset), 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

### gti/gtia/gtii/gtin/gtin24/gtiis/gtins (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), and GTINS (ITU national spare).

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*=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.

**cdgttsn (optional)**

CdPA GTT set name.

**Range:**

*ayyyyyyyyy*

1 leading alphabetic and up to 8 following alphanumeric characters.

*none*—Set names do not point to the CdPA GTT set.

**cgtasn (optional)**

CgPA GTA GTT set name.

**Range:**

*ayyyyyyyyy*

1 leading alphabetic character and up to 8 following alphanumeric characters.

*none*—Set names do not point to the CgGTA set.

**cgttsn (optional)**

CgPA GTT set name.

**Range:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

1 leading alphabetic character and up to 8 following alphanumeric characters.

**lsn (optional)**

Linkset name. The linkset used in GTT routing.

**Range:**

*ayyyyyyyyyyy*

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-gttset:gtii=2:tt=40:cdgtasn=setcggtta:cgpcsn=none:cgssn=10:selid=12
```

```
chg-gttset:gtia=2:tt=253:gttsn=newansi
```

```
chg-gttset: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-gttset:gtii=4:tt=5:npv=1:naiv=2:gttsn=ansi2
```

```
chg-gttset:gtin=4:tt=60:npv=5:naiv=5:cgpcsn=setcgpc:selid=100:cgssn=10
```

```
chg-gttset:gtia=2:tt=21:cggttsn=setcgpc:cdgttsn=setcdgta:cgssn=20:selid=1:lsn=ls10
```

```
chg-gttset:gtia=2:tt=2:cdgttsn=setcdgta:lsn=ls1010
```

```
chg-gttset:gtia=2:tt=2:cdgttsn=setcdgta:eaglegen=yes
```

```
chg-gttset:gtins=4:cdgttsn=setitu004:tt=4:np=e164:nai=intl
```

```
chg-gttset:gti=0:cdgttsn=setansi0
```

## 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=2` parameter is specified, then the `np/npv` and `nai/naiv` parameter combinations cannot be specified.

If the `gtii/gtin/gtin24/gtiis/gtins=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`, `cggtsn`, `cggtsn`, `cggtsn`, or `cgpcsn` parameter.

The OBSR feature must be enabled before the `cdgtasn`, `cggtsn`, `cgpcsn`, or `cgssn` parameter can be specified.

The GTT set specified by the `cdgttsn`, `cggtsn`, or `cgpcsn` parameter must already exist in the GTT Set table.

The network domain of the CgPA GTT Set specified by the `cggtsn`, `cggtsn`, or `cgpcsn` parameter must match the domain indicated by the `gti(x)` parameter.

The set type specified by the `cggtsn` or `cgpcsn` parameter must match the set type of the corresponding entry in the GTT set table. For example, the `cggtsn` parameter should have a set type of *cggta*, and the `cgpcsn` parameter should have a set type of *cggpc*.

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`, `cggtsn`, 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 `lsn`, `eaglegen`, `cdgttsn`, and `cggtsn` parameters can be specified.

At least one GTT set name parameter must be specified. These parameters include:

- `cdgtasn`, `cggtsn`, or `cgpcsn` if the OBSR feature is enabled
- `cdgttsn` or `cggtsn` 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 `cggtsn` parameter must be specified.

The `cggtsn`, `cgpcsn`, and `cggtsn` 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 cggtsn parameter is specified, then the cgssn parameter must be specified.

If the eaglegen=yes parameter is specified, then the lsn, selid, gttsn, cdgtasn, cgssn, cggtsn, cggtasn, and cgpcsn parameters cannot be specified.

If the np=dflt or nai=dflt parameter is specified, then the cggtasn, cggtsn, 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.

## Output

chg-gttset:gti=0:cdgttsn=setansi0

```
tekelecstp 10-04-28 13:02:49 EST Eagle 42.0.0
chg-gttset:gti=0:cdgttsn=setansi0
Command entered at terminal #4.
CHG-GTTSEL: MASP A - COMPLTD
;
```

## Related Commands

[dlt-gttset](#), [ent-gttset](#), [rtro-gttset](#)

## 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:

ayyyyyyyyy



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:** The *netdom* parameter 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:**

*ayyyyyyyyy*

1 alphabetic character followed by up to 8 alphanumeric characters.

## Example

```
chg-gttset:gtttn=lidb:netdom=cross
```

```
chg-gttset:gtttn=setxyz:netdom=cross:ndgt=10
```

```
chg-gttset:gtttn=acdgt:ngttn=acdgt1
```

## Dependencies

The (n)gtn=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 *gtn* 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:gtttn=acdgtan:ngtttn=acdgtan

```
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

[rtro-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**

**Caution:** Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gws=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.

**actid (mandatory)**

The identification number of the GWS stop action set.

**Range:**

4 - 16

**act1 (optional)**

Stop action 1.

**Range:**

*cncf*

*copy*

*none*

*rdct*

*tlnp*

*tinp*

*tif*

*tif2*

*tif3*

*sccp*

**Default:**

No change to the current value

**act2 (optional)**

Stop action 2.

**Range:**

*cncf*

*copy*

*none*

*rdct*

*tlnp*

*tinp*

*tif*

*tif2*

*tif3*

*sccp*

**Default:**

No change to the current value

**act3 (optional)**

Stop action 3.

**Range:**

*cncf*

*copy*

*none*

*rdct*

*tlnp*

*tinp*

*tif*

*tif2*

*tif3*

*sccp*

**Default:**

No change to the current value

**act4 (optional)**

Stop action 4.

**Range:**

*cncf*

*copy*

*none*

*rdct*

*tlnp*

*tinp*

*tif*

*tif2*

*tif3*

*sccp*

**Default:**

No change to the current value

**act5 (optional)**

Stop action 5.

**Range:**

*cncf*  
*copy*  
*none*  
*rdct*  
*tlnp*  
*tinp*  
*tif*  
*tif2*  
*tif3*  
*sccp*

**Default:**

No change to the current value

**act6 (optional)**

Stop action 6.

**Range:**

*cncf*  
*copy*  
*none*  
*rdct*  
*tlnp*  
*tinp*  
*tif*  
*tif2*  
*tif3*  
*sccp*

**Default:**

No change to the current value

**act7 (optional)**

Stop action 7.

**Range:**

*cncf*  
*copy*  
*none*

*rdct**tlnp**tinp**tif**tif2**tif3**sccp***Default:**

No change to the current value

**act8 (optional)**

Stop action 8.

**Range:***cncf**copy**none**rdct**tlnp**tinp**tif**tif2**tif3**sccp***Default:**

No change to the current value

**act9 (optional)**

Stop action 9.

**Range:***cncf**copy**none**rdct**tlnp**tinp**tif*

*tif2*

*tif3*

*sccp*

**Default:**

No change to the current value

**act10 (optional)**

Stop action 10.

**Range:**

*cncf*

*copy*

*none*

*rdct*

*tlnp*

*tinp*

*tif*

*tif2*

*tif3*

*sccp*

**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
```

## 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 or RDCT 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.

## 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
- *none*—No action is performed on the MSU
- *rdct*—Redirect the MSU for the DTA feature
- *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 5 ISS 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 5 ISS 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.
- *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.

## 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
;
```

## Related Commands

[rtro-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 (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:npcfmt i` 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.

**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
```

## Dependencies

At least one optional parameter must be specified.

The dpc/dpca/dpci/dpcn/dpcn24 parameter must be defined in the Destination table or defined as the STP site point code.

If the dpc/dpca/dpci/dpcn/dpcn24 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.

### cdpnai (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

### cdpnpx (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

*rmnecdn*

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

**ncdnpfx (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 5 ISS 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:cdpnpx=fac:dltplx=yes
chg-inpopts:dranp=f69:dranai=sub:dra=rndn:cdpnpx=200
chg-inpopts:dranp=f69:dranai=sub:dra=rndn:cdpnpx=200:ncdpnpx=3abcdef:dltplx=yes
chg-inpopts:dranp=f69:dranai=sub:dra=rndn:cdpnpx=3abcdef:ncdpnpx=none
chg-inpopts:dranp=f69:dranai=sub:dra=rndn:cdpnpx=fed123:dltplx=no
chg-inpopts:dra=rn:dranp=e164:dranai=intl:cdpnpx=fac:dltplx=no:cdpnai=1
:snai=none
chg-inpopts:sprestype=connect
chg-inpopts:dra=rnnecdn:nec=abcd1
chg-inpopts:dra=asdrnccdn:dranp=e164:dranai=intl:cdpnpx=fac:dltplx=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:cdpnpx=2a3b4c5d6e7f
chg-inpopts:cdpnai=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 ncdpnpx or dltplx parameter is specified, the cdpnpx parameter must be specified.

A value of *none* cannot be specified for the cdpnpx 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 `cdpnai` 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 `cdpnai` 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`, `rnsdnecdn`, `rnecdn`, `rngrnnecdn`, and `grnrrnnecdn` 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

[rtro-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

**dnss (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

**dnssb (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

**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*

**sctpsum (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:sctpsum=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
```

## Dependencies

At least one optional parameter must be specified.

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 defrouter IP address 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, or if a DSM card is provisioned in the system, 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:sctpcsum=percard command must be entered before the sctpcsum parameter can be specified in the chg-ip-card command.

## Notes

The Domain Name has a 120 character limitation.

## 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
;
```

## Related Commands

*chg-sg-opts*, *rtrv-ip-card*

## chg-ip-conn

### Change IP Connection

Use this command to enable or disable a particular SIP connection to receive SIP traffic. The IPCONN table supports the provisioning information related to the SIP connections.

## Parameters

### cname (mandatory)

Connection name. This parameter specifies the unique logical name assigned to each SIP connection.

#### Range:

zzzzzzzzzzzzzzzzzzzz

A string of alphanumeric characters, beginning with a letter and upto 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 connection to receive SIP traffic.

#### Range:

*yes*

allow the SIP connection to receive SIP traffic.

*no*

prohibit the SIP connection to receive SIP traffic.

#### 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.

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.

**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.

**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

**Range:**

*10*

*100*

**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 13: 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=1211:port=A

**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 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 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 current or new local host has open connections (the open parameter set to yes with the chg-ip-conn command).

An IP address cannot be configured for the card if the card is provisioned as a GTT card.

## Notes

None

## Output

chg-ip-lnk:loc=1211:port=a

```
rlghncxa03w 04-01-17 15:35:05 EST EAGLE 31.3.0
CHG-IP-LNK: MASP A - 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*

**cdpnpn (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*

**cgpapgts (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*

**cgpagnai (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 the on and off parameters 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 be 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 *cgpri=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 Party 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 5 ISS node basis.

**Range:***ccrndn*

Country Code + RN + DN

*hrrrndn*

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.

*tendellhomern*

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 5 ISS 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=mnps* 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:**

*ccrnda*

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
|              | Country code, routing number, and national directory number     |
| <i>frmsg</i> | Incoming message value                                          |
| <i>intl</i>  | International number                                            |
| <i>natl</i>  | National number                                                 |
| <i>rnidn</i> | Routing number prefix and international dialed/directory number |
| <i>rnmdn</i> | Routing number prefix and national dialed/directory number      |
| <i>rnsdn</i> | Routing number prefix and subscriber dialed/directory number    |
| <i>sub</i>   | Subscriber number                                               |

**Default:***frmsg***Example**

```
chg-is41opts:ieci=12345:neci=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.
- *locreqrmhrrn*—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-IS410PTS: 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:**

*ayyyyyyyyy*

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*

signalling 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***mtmsdigtype (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 mtmsparm=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*

signalling point

*rn*

routing number

*sprn*

**sp or rn**

*all*

**sp, rn, or DN with no entity**

*nonsp*

**rn or 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:mosmsac len=3
```

This example sets the IS41 SMS options when the MT-based IS41 SMS NP feature is enabled:

```
chg-is41smsopts:mtsmdltr=no:mtsmparm=digit
```

```
chg-is41smsopts:mtsmdltrv=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:mosmsgtttdig=mapbparty
```

```
chg-is41smsopts:mtsmdnfmt=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:mosmsac len=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:mosmsac len=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:mosmsac len=5
```

## Dependencies

At least one parameter must be specified.

The mtsmdltrv parameter must be specified before a value of prern or postrn can be specified for the mtsmdltr parameter.

The value specified for the bpartygttsn parameter must match the name of an existing GTT Set.

The mosmsgtttdig=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 mosmsgtttdig=mapbparty parameter cannot be specified.

The MT-Based IS41 SMS NP feature must be enabled before the mtsmdnfmt, mtsmstype, mtsmparm, mtsmdltr, mtsmdltrv, mtsmsackn, mtsmsesn, mtmssssn, 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 mosmsgtttdig 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*

**cgpnecat (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:cgpn dgts=987654321:cdpn dgts=923487:cdpn nai=125
chg-isup-msg:msgn=6:cgpn cat=200:cdpn nai=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-l2t

### Change Level 2 Timers

Use this command to change the values of the SS7 MTP level 2 timers. The timers are organized in 35 timer sets of 9 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, 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 35 different timer sets can be defined. A signaling link can be assigned to any of the timer sets.

#### **Range:**

*1 - 35*

**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

### **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 5 ISS 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*

**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*

**t2 (optional)**

Timer 2—Not aligned

**Range:**

*5000 - 150000 (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*

**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

**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

**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

**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

**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

**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

**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

**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

**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*

**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*

**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*

**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

## 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
```

## Dependencies

At least one optional parameter must be specified.

The value specified for the timer must be within the range for that domain.

## Notes

ANSI timer defaults are within the Telcordia recommended ranges.

ITU timer defaults are within ITU 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*

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 `trv - 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.

### **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*

## 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.

## 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:

### 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

**cli (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:**

*ayyyyyyyyyyy*

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 LIMDS0, LIMT1, or LIMCH (associated to a LIMT1) card configured with either an 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=nl 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:

*ayyyyyyyyy*

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*

*lidx*

*cnam*

*isvm*

*lnpqs*

*wsmc*

*udf1*

*udf2*

*udf3*

*udf4*

*lnqqt*

**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*  
*lidx*  
*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=lidx:ntt=22:ndv=tcap:nttn=mrldx
```

```
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 EGT 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=wsmc` 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 *wsmc*, *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 `thentt`, `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*, *wsmc*, *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=gtrqd` 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

**gtrqd**—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

**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:wsmc10dig=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 wsmc10dig parameter can be specified.

The LNP 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.

## 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 (ninc-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

### 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 (ninc-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:npcfnti** 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*

**npc2 (optional)**

ANSI new point code 2 with subfields *network indicator-network cluster-network cluster member (ninc-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:npcfmt.i` 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*

### pc1 (optional)

ANSI point code 1 with subfields *network indicator-network cluster-network cluster member* (*ninc-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:npcfmt.i* 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

### pc2 (optional)

ANSI point code 2 with subfields *network indicator*-*network cluster*-*network cluster member* (*ninc-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:npcfmt.i` 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

### rpcl (optional)

ANSI replacing point code list with subfields *network indicator-network cluster-network cluster member* (*ninc-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:npcfmt.i* 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

## 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
```

## 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.

## 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 a 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 (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:npcfmt i* 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*

*nnnnnn*—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

**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 IPSP 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

**cggmtmod (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:**

*ayyyyyyyyyyy*

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

*fcgfc*

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*

**gwsn (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 27: Incoming SLS Bit Rotation for ITU* shows how the rotation affect the four bits of the ITU SLS during linkset selection.

*Table 28: Incoming SLS Bit Rotation for ANSI* shows how the rotation affect 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

**mtpsrse (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:**

*aaaaaaaaaa*

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 Manual - SS7, 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 IPSP-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 (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:npcfmt i` 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 IPSP Linkset. The capacity guaranteed for each link in the linkset.

**Note:** This parameter is required for each link in an IPSP linkset and cannot be specified for links in non-IPSP linksets.

**Note:** The sum of guaranteed capacities for the links hosted by an IPSP card cannot exceed the IPSP 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 IPSP card that is used and whether the E5-ENET-B IPSP High Throughput feature is turned on:

- E5-ENET card-5000 TPS
- E5-ENET-B card when the E5-ENET-B IPSP High Throughput feature is turned off-6500 TPS
- E5-ENET-B card when the E5-ENET-B IPSP 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 14: slsocbit example \(chg-ls\)](#) shows a received CIC where bit 9 is the other CIC bit (slsocbit=9). The new SLS is 0100:

**Table 14: 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

**slrsb (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 30: 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 (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:npcfmt.i` 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.

**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 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

**tpsalmttype (optional)**

IPSG IPTPS threshold alarm type. The IPTPS threshold that can be alarmed.

**Range:**

*rsvdsltktps*

the SLKTPS/RSVDSLKTPS threshold is alarmed

*maxslktps*

the MAXSLKTPS threshold is alarmed

**Default:**

No change to the current value

**System Default:**

*rsvdsltktps*

## 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:gwsn=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:gmscrn=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:cggmod=yes

Changes the linkset's SPC value.

chg-ls:lsn=ls1:spc=100-23-48

Changes the adapter of a specified IPSP linkset.

chg-ls:lsn=ls2:adapter=m2pa

Changes the AS notification status and routing context value for an IPSP-M3UA linkset.

chg-ls:lsn=m3ua33:rcontext=9999:action=add

Converts the linkset to IPSP.

chg-ls:lsn=m2pa33:ipsp=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

## 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, gwsn, 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

**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 theactname parameter of the screen set is performed at the end of the screening process.

The mtpsrse parameter can be specified only if the MTP restart feature, MTPRS (for ANSI), or ITUMTPRS (for ITU), is turned on. The `rt rv-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 mtpsrse=yes parameter cannot be specified.

The mtpsrse=yes parameter is not valid for IPGWx and IPSG-M3UA signaling links.

The clii and apc/apca/apci/apcn/apcn24 parameters must be specified together in the command.

The value of the clii parameter must match the clii 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 slrsb parameter is valid only for ITU linksets.

The GSM Map Screening feature must be turned on before the gmscrn parameter can be specified.

The Enhanced GSM Map Screening feature must be turned on before the gmscrn=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-NAPC/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 mtrprse 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 *acdc*, *cgacdc*, *acdcg*, *acdcg*, *cg*, *cdg*, 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 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 npcfmt 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 pointcode parameter must be 6 or greater when the cluster value is 0.

The value of the apc/apca/apci/apcn/apcn24 or sapc/sapca/sapci/sapcn/sapcn24 parameter cannot be assigned to more than one linkset.

The new apc/apca/apci/apcn/apcn24 parameter must have the same point code type as the apc/apca/apci/apcn/apcn24 parameter currently specified for the linkset.

The value of the apc/apca/apci/apcn/apcn24 parameter must exist in the Point Code table.

The lsn 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, 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 has been exceeded.

The value of the specified lsn parameter already exists in the database.

The specified matelsn parameter be already 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.

A failure occurred when trying to read the SPC table.

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 IPSP 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 maximum of 6 of any other linksets are allowed between any APC and the EAGLE 5 ISS.

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/rsvdsstktps` 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 IPSP links, then the `ipsg=no` parameter cannot be specified.

A function returned an unknown error. An ATH is also issued.

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/rsvdsstktps` 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 *fed*, *fcg*, *fcgfcg*, 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/rsvdsstktps` 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.

## 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 `slsrbs/slsrbsb` values.



### CAUTION

**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 `slsrbs` 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 CCS7/ITU links or IPLIM M2PA links, if the APC is a 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=ls1: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*, *dlt-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:

*ayyyyyyyyyyy*

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 IPSPG-M3UA linkset to transition from the Restricted or Prohibited state to the Allowed state.

**Note:** When the number of IS-NR links in an IPSPG-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 IPSPG-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 IPSPG-M3UA linkset to transition from the Restricted or Allowed state to the Prohibited state.

**Note:** When the number of IS-NR links in an IPSPG-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 IPSPG-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 IPSPG-M3UA linkset to transition from the Allowed state to the Restricted state.

When the number of IS-NR links in an IPSPG-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 IPSPG-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 IPSP-M3UA linkset.

```
chg-lsopts:lsn=lsn3ual: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=ls1: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 IPSPG-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 IPSPG-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 15: NI Mapping Rules](#) shows the relationship between the parameters for a linkset.

**Table 15: 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 16: Incoming SLS Bit Rotation for ANSI Linksets](#) summarizes the cases in which rotation is done on the Incoming ANSI SLS bits:



Table 16: 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-`ls`opts: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.

## Notes

None

## Output

chg-m2pa-tset:tset=1:t1=20000:ver=d6

```
r lghncxa03w 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 [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 (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:npcfmt.i` 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*

#### **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 *srn*, *mrc*, or *wt* parameter in the same command.

Modification of the *srn*, *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 *srn*, *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 5 ISS 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 (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*

**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*

**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 (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 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 i` 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

**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

**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 5 ISS 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
```

## 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 or ANSI 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), the srm=yes parameter cannot be specified.

The apca and pcn24 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 CSPP 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 5 ISS 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, *therc*, *wt*, *mrc*, *srn*, *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.

GPSPM-II cards must be used to run the OAM when the XMAP feature is enabled.

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 will 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 (ANSI41 AIQ and LNP), 4 (ANSI41 AIQ, ATINPQ, V-FLEX, and EIR)
- 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.

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 *mpc* 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 *srn*, *mrc*, or *wt* parameter.

The *force* parameter can be used only to specify the *rc* parameter and the *srn*, *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:npcfmt i* command.

D45MPC/MSSN must be defined for given value of MULT.

PC and SSN are not primary applications.

Failed reading SS APPL table.

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, or EIR 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

The value specified for the mrnpc parameter must already exist in the specified MRN Set.

If the mrnset parameter is specified, then the mrnpc/mrnpc24/mrnpci/mrnpcn/mrnpc24 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.

## 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 5 ISS 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 5 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](#)

Use this command to change both the report and collecting status of the EOAM 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. 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.

If there are no configured links, then the `collect=on` parameter cannot be 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.

The *Maintenance Manual* 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

**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`, `compsectpasoc`, `compsectpcard`, `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*

**compctpasoc (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

**compctpcard (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*  
*compsctpasc*  
*compsctpcard*  
*compua*  
*gtwylnkset*  
*gtwylsdestni*  
*gtwylsonismt*  
*gtwylsorigni*  
*gtwyorigni*  
*gtwyorigninc*  
*gtwystp*  
*nmlink*  
*nmlnkset*  
*nmstp*  
*systotidpr*  
*systotsip*  
*systotstp*  
*systotstplan*  
*systotstt*  
*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*  
*compsctpasc*  
*compsctpcard*  
*compua*  
*gtwylnkset*  
*gtwylsdestni*  
*gtwylsonismt*  
*gtwylsorigni*  
*gtwyorigni*  
*gtwyorigninc*  
*gtwystp*  
*nmlink*  
*nmlnkset*  
*nmstp*  
*oamhcmeas*  
*platformenable*  
*systotidpr*  
*systotsip*  
*systotstp*  
*systotstplan*  
*systotstt*  
*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 be 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 configured link must exist before the platformenable=on or oamhcmeas=on parameter can be 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 5 ISS 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 5 ISS 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 `oamhcmear` 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.
- *complinkset*—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.
- *nmlnk*—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.
- *oamhcm meas*—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.
- *systotstt*—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:complnk=on:complnkset=on:systotstt=off:systotstp=off

```
tekelecstp 08-06-01 14:31:25 EST EAGLE 44.0.0
CHG-MEASOPTS: MASP A - COMPLTD
;
```

chg-measopts:on=systotidpr,systotstt,complnkset,complnk: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

**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 `thrtv-sccp-serv` command output 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 (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:npcfmt i` 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

**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 (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:npcfmt.i` 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*

**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 (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:npcfmt i` 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:npcfmt i` 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:npcfmt i** 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:npcfmt i** 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 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=df1t: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
```

## Dependencies

The Intermediate Global Title Translation Load Sharing feature must be turned on before this command can be entered.

The apca and pcn24 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 5 ISS 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.

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 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—ITU-I, ITU-N, ITU-I spare, ITU-N-spare
- ANSI—ANSI
- ITUN-24—ITUN-24

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 5 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 45.0, the *mtcdaiq*, *mtcdatinpq*, *mtcdeir*, *mtcdgttpath*, *mtcdlink*, *mtcdlnkset*, *mtcdlnp*, *mtcdmap*, *mtcdnp*, *mtcdsctpasoc*, *mtcdsctpcard*, *mtcdsip*, *mtcdstp*, *mtcdstplan*, *mtcdua*, *mtcdvflex*, *mtchaiq*, *mtchatinpq*, *mtcheir*, *mtchgttpath*, *mtchlmp*, *mtchmap*, *mtchnp*, and *mtchvflex* 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 Analyzed Information 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 maintenance measurement report for Equipment Identity Register (EIR).

**Range:**

*on*

*off*

**Default:**

No change to the current value

**System Default:**

*off*

**mtcdgttpath (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*

**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*

**mtchgttpath (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*

*mtcdeir*

*mtcdgttpath*

*mtcdlink*

*mtcdlnkset*

*mtcdlnp*

*mtcdmap*

*mtcdnp*

*mtcdsctpasoc*

*mtcdsctpcard*

*mtcdsip*

*mtcdstp*

*mtcdstplan*

*mtcdua*

*mtcdvflex*

*mtchaiq*

*mtchatinpq*

*mtcheir*

*mtchgttpath*

*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**mtcdeir**mtcdgttpath**mtcdlink**mtcdlnkset**mtcdlnp**mtcdmap**mtcdnp**mtcdsctpasoc**mtcdsctpcard**mtcdsip**mtcdstp**mtcdstplan**mtcdua**mtcdvflex**mtchaiq**mtchatinpq**mtcheir**mtchgttpath**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,
mtcdgttpath,mtcdlink,mtcdlnkset,mtcdlnp,mtcdmap
chg-mtc-measopts:off=mtcdsctpcard,mtcdstp,mtcdstplan,
mtcdua,mtcdvflex,mtchaiq:on=mtchlnp,mtchmap
chg-mtc-measopts:mtcdsip=on

```

## 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 mtchgttpath=on or mtcdgttpath=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.

## 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 *Maintenance Manual* 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 Analyzed Information 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.

***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.

***mtcdgttpath***

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 Analyzed Information 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.

#### *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.

#### *mtchgttpath*

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:mtchgttpath=on:mtcdgttpath=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,
mtcdgttpath,mtcdlink:off=mtcheir,mtchgttpath,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.
;
```

## 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

**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 5 ISS. 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 5 ISS 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 IPSC 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 IPSC 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 5 ISS applications. An AS is a collection of NPP Conditioning Actions (CAs), Service Actions (SAs), and Formatting Actions (FAs).

## Parameters

**Note:** As of Release 45.0, the individual CA, SA, and FA parameters are obsolete. CAs, FAs, and SAs must be specified using the comma-separated list (ca, fa, and sa parameters). The ca1, fa1, and sa1 parameters are shown at the end of the parameter list in their obsolete status. For readability purposes, the remaining CA, SA, and FA parameters are not shown.

**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 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 and TIF Subscriber CgPN Blacklist 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:

*ayyyyyyyyyyy*

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, fpx, 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, fpx, grn, grnother, orig, pfxa, pfxb, pfxc, pfxd, pfxe, pfxf, rn, rnospodn, rnosposn, rnospozsn, 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, blklstly, blnfnrls, blrls, cdial, ccncchk, cdpnnp, cgpnasdrqd, cgpngrnrqd, cgpnp, cgpnrtd, cgpnsocrqd, crp, fpxrls, fraudchk, fwdscs, grnlkup, inprtg, lacck, migrate, nocgpnrls, npnrls, nprelay, nprls, nscgpn, nscdpn, pprelay, rtdbtrn, rtdbtsp, rtdbtrns, 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

**sa7dgt (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

**sa8dgt (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

**ca1 (obsolete)**

Conditioning action 1. The first CA that can be applied to an incoming digit string.

**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, fpx, 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*

#### fa1 (obsolete)

Formatting action 1. The first FA that can be applied to the outgoing digit string.

**Range:** *ac, asd, asdoth, cc, dlma, dlmb, dlmc, dlmd, dlme, dlmf, dlmg, dlmh, dlmi, dlmj, dlmk, dlml, dlmm, dlmn, dlmo, dlmp, dn, fpx, grn, grnoth, orig, pfxa, pfxb, pfxc, pfxd, pfxe, pfxf, rn, rnospodn, rnosposn, rnospoz, sn, sp, sfrimsi, vmid, zn*

#### sa1 (obsolete)

Service action 1. The first SA that can be applied to an incoming digit string.

**Range:** *asdlkup, blklstqry, blklstly, blnfndrls, blrls, cdial, ccncchk, cdpnnp, cgpnasdrqd, cgpngrnqd, cgpnp, cgpnr, cgpnsvcqd, crp, fpxrls, fraudchk, fwdscs, grnlkup, inprt, lacck, migrate, nocgpnr, npnr, nprelay, nprls, nscgpn, nscdpn, pprelay, rtdbtrn, rtdbtsp, rtdbtrns, skgtartg, sncgpn, none*

*none* —Deletes all SAs from the Action Set.

## 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=inprt=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=fascrd

## 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 5 ISS 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 *gsmmsopts: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:svn=nppt:status=on
```

```
chg-npp-serv:svn=nppt:status=on:nai3=6:intl=15:natl=50
```

```
chg-npp-serv:svn=nppt:status=on:nai3=6:intl=15
```

```
chg-npp-serv:svn=tif:dlma=1234567890abcdef:
```

```
dlmb=aaaaabbbbbcccccd:dlmc=102030405
```

## Dependencies

The service specified by the svn parameter must have associated rules before the status=on parameter can be specified.

If the service specified by the svn parameter references any NPP rules, then the intl, natl, nai1, nai2, and nai3 parameters cannot have a value of *none*.

## Output

```
chg-npp-serv:svrn=nppt:status=on:nai3=6:intl=15:natl=50
```

```
tekelecstp 08-05-17 15:55:35 EAGLE 39.0.0
chg-npp-serv:svrn=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](#), [rtro-npp-serv](#), [rtro-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.

**fpx (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.

**srtn (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:svrn=nppt:fpfx=a:fdl=16:fnai=intl:asn=asn3

chg-npp-srs:svrn=tif:fnai=intl:fpfx=9090:fdl=:asn=set1:invkserv=tifcgpn

chg-npp-srs:svrn=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`, `fpx`, 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 CPGNASDRQD 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 CPGNASDRQD 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 Conditioning 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 containing 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 servn=*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 *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 *iarcgpn* 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 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*, *tifcgpn2*, 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 *tifcgn2* 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.

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 1-FF.

## 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

[r\\_ent\\_npp\\_as.xml#r\\_ent\\_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:npcfmt i` 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 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:**

abcdefghijklmnopqrstuvwxyz

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

1-3

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
```

**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:

- 3 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.

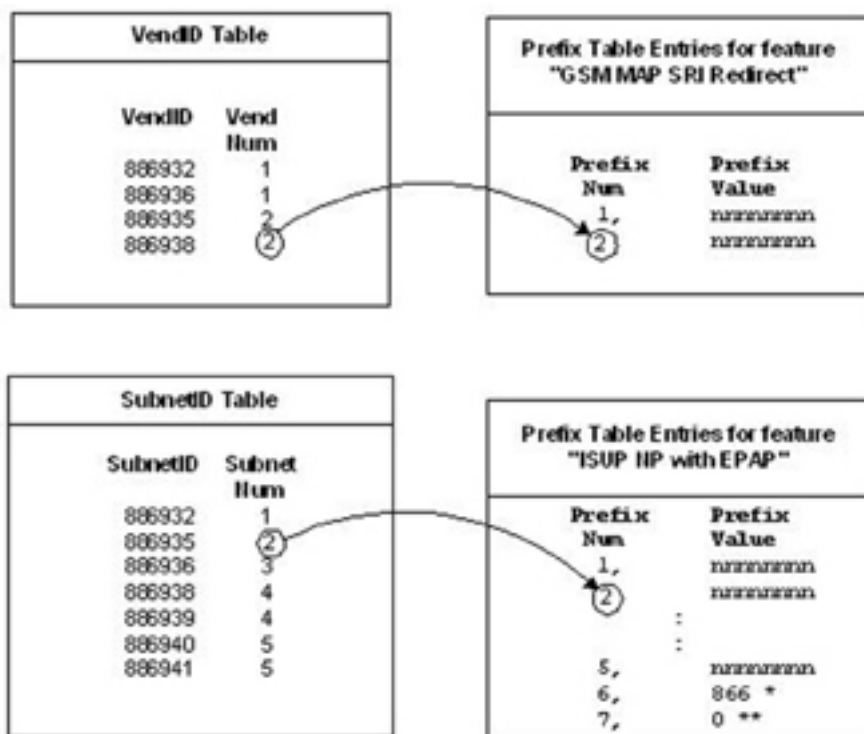


**Figure 11: Prefix Table References**

\* 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
;
```

## Related Commands

[dlt-prefix](#), [rtro-ctrl-feat](#), [rtro-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:

*ayyyyyyyyyy*

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 (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:npcfmt.i* 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

**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
```

## 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 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:npcfmt1` 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, then *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.

The adjacent point code must match the destination point code type (Obsolete in IP7 3.0)

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. (obsolete in IP7 4.0)

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](#), [rtro-dstn](#), [rtro-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 (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:npcfmt i` 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*, *subsignaling 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

### **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 (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:npcfmt.i` 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-subsignaling 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

**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
```

Searching rtx table on disk - please wait...

## Dependencies

Only one of the *opc*, *ilsn*, *cic*, or *si* parameters can be specified for a 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 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 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 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 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 opc/opca/opci/opcn/opcn24 parameters cannot be the same as the adjacent point code of the linkset specified by the lsn parameter.

## 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:npcfmt i` 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

#### **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***cгнаiv (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:npcfmt1` 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*

### **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 (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:npcfmt.i` 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*

**eaglegen (optional)**

This parameter specifies whether the message is an EAGLE 5 ISS generated message.

**Range:**

*no*

the message is not an EAGLE 5 ISS generated message

*yes*

the message is an EAGLE 5 ISS 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:npcfmt i` 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 subfield *smain 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, noneprefix—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.

**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                        |
| <i>cwp</i>                                            | Conversation with Permission    |
| <i>cwop</i>                                           | Conversation without Permission |
| <i>bgn</i>                                            | Begin                           |
| <i>end</i>                                            | End                             |
| <i>cnt</i>                                            | Continue                        |
| <i>ituabort</i>                                       | ITU abort                       |
| <i>ansiabort</i>                                      | ANSI abort                      |
| <i>ansiuni</i>                                        | ANSI unidirectional             |
| <b>ANSI TCAP Package Types—</b>                       |                                 |
| <i>ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort</i> |                                 |
| <b>ITU TCAP Package Types—</b>                        |                                 |
| <i>bgn, ituabort, ituuni, end, cnt</i>                |                                 |

**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
```

**Dependencies**

At least one optional parameter must be specified.



The cdpn and cdpnv parameters and the cgnp and cgnpv parameters cannot be specified together in the command.

The cdnai and cdnaiv parameters and the cgnai and cгнаiv 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.

## Notes

None

## 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:npcfmt i** 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:npcfmt i** 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:npcfmt i` 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:npcfmt i` 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=mnps, 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=mnps 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\*](#), [\*rtro-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 during SCCP conversion when global title translation routes the message to the ITU national network.

**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*

**cnvglitu (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 5 ISS when performing GTT.

**Range:**

|                |                                       |
|----------------|---------------------------------------|
| <i>acdcd</i>   | Advanced CdPA GTT, CdPA GTT           |
| <i>acdcdcg</i> | Advanced CdPA GTT, CgPA GTT, CdPA GTT |
| <i>acdcdcg</i> | Advanced CdPA GTT, CdPA GTT, CgPA GTT |
| <i>cd</i>      | CdPA GTT only                         |
| <i>cdcg</i>    | CdPA GTT, CgPA GTT                    |
| <i>cg</i>      | CgPA GTT only                         |
| <i>cgcd</i>    | CgPA GTT, CdPA GTT                    |
| <i>cgacdcd</i> | CgPA GTT, Advanced CdPA GTT, CdPA GTT |
| <i>fcd</i>     | FLOBR CdPA only                       |
| <i>fcg</i>     | FLOBR CgPA only                       |
| <i>fcgfc</i>   | FLOBR CgPA, FLOBR CdPA                |
| <i>fcdfcg</i>  | 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:**

|            |                                                                    |
|------------|--------------------------------------------------------------------|
| <i>on</i>  | Enables GSM Map Screening for TCAP_Continue and TCAP_End messages  |
| <i>off</i> | 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 (ccgpn) conditioning.

**Range:***no**yes***Default:**

No change to the current value

**System Default:***no***mobrscppopc (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-dpcsn". 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 5 ISS 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*

**mtprgttfailbk (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*

**subdfn (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*

**tgtxudtkey (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:mobrscpopc=sccp
chg-sccpopts:tgtt0=udt
chg-sccpopts:tgtt1=xudt
chg-sccpopts:tgttudtkey=mtp
chg-sccpopts:tgtxudtkey=sccp
chg-sccpopts:cclen=1:acclen=3
chg-sccpopts:dfltallback=yes
chg-sccpopts:dfltgttmode=fcd
chg-sccpopts:mprgttfallbk=gttfail
chg-sccpopts:unqgttsel=exactmatch
chg-sccpopts:gttdist=dn
chg-sccpopts:gttdist=epap
```

## Dependencies

At least one optional parameter must be specified.

The Origin-based MTP Routing feature must be turned on before the mobrscpopc 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*, *acdcdcg*, *acdcdcg*, *cgcd*, *cdcg*, or *cg*.

The Transaction-based GTT Loadsharing feature must be enabled before the *tgtt0*, *tgtt1*, *tgttudtkey*, or *tgtxudtkey* parameters can be specified.

The GSM Map Screening feature must be turned on before the *gmstcapce* parameter can be specified.

The FLOBR feature must be turned on before the *dfltgttmode* parameter can have a value of *fcd*, *fcg*, *fcgfcg*, or *fcdfcg* and before the *dfltallback* parameter can be specified.

The MTP routed messages for SCCP Applications feature or the GWS Stop Action SCCP feature must be enabled before the `mtprggt` or `mtprgttfallbk` parameter can be specified.

The S-Port Subscriber Differentiation feature must be enabled and turned on before the `subdfn` 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.

## Notes

None.

## Output

`chg-sccpopts:mtprggt=usemtppc`

```
tekelecstp 10-02-10 20:09:11 EST EAGLE 42.0.0
chg-sccpopts:mtprggt=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-aftp

### 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:**

*ayyyyyy*

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

**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

**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.

**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

**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

**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*

**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

### 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
```

## Dependencies



### CAUTION

**Caution:** Even though gateway screening is in the screen test mode, as defined by the parameters *gwsa=off* and *gwsn=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 four point code parameter combinations: *ni-nc-ncm*, *zone-area-id*, *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 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 *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, 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, 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 ). The pcst and npcst parameters cannot be specified for ANSI and ITU-N24 point codes.

The affected point code and subsystem number to be changed must already exist in the affected point code entity set.

## 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 - scr set 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.

## 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:

*ayyyyyy*

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

**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

**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

**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

**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. *z* 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*

**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



**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=wr2
```

```
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
```

**Dependencies****CAUTION**

**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 theactname 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 362,700 rules.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, 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, 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, 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, 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 `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 `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`, 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 `nncm` 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`, and `npc` 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`) or for 24-bit ITU national point codes (parameters `msa`, `ssa`, `sp`). The `pcst` and `npcst` parameters cannot be specified for ANSI and ITU-N24 point codes.

If the `ssa=*` parameter is specified, then the `sp=*` 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 or zone-area-id or msa-ssa-sp 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, 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.

## 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, 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, 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.

## 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

**msa (optional)**

24-bit ITU-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

**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.

**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

### **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

**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*

**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

#### 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=wrld
```

```
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
```

## Dependencies



### CAUTION

**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*, 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*, 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`, 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`, 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 `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`.

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`, 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`, and `npc` parameters cannot have a value of `c`.

If the values specified for `ni-nc-ncm`, `zone-area-id`, or `msa-ssa-sp` 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`, 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`, 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.

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`). The `pcst` and `npcst` parameters cannot be specified for ANSI and ITU-N24 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`, 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`, 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`.

## 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, 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, 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.

## 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:**

*ayyyyyy*

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

**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

**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.

**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

**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

**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

**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

**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
```

## Dependencies



**Caution:** Even though gateway screening is in the screen test mode, as defined by the parameters gwsa=off and gwsn=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 four point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, 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 nncm 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). The pcst and npcst parameters cannot be specified for ANSI and ITU-N24 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.

## 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.

## 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:**

*ayyyyyy*

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

**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

**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.

**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

**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

**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*

**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

**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
```

## Dependencies



### CAUTION

**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 four point code parameter combinations: ni-nc-ncm, zone-area-id, 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 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). The pcst and npcst parameters cannot be specified for ANSI and ITU-N24 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.

## 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.

## 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

### 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

**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

**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

**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

**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*

**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

**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`**Dependencies****CAUTION**

**Caution:** Even though gateway screening is in the screen test mode, as defined by the `gwsa=off` and `gws=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`, 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`, 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`, 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 ssa=\* parameter is specified, then the sp=\* 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 , 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). The pcst and npcst parameters cannot be specified for ANSI and ITU-N24 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, and npc parameters cannot have a value of c.

## 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.

## 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

**msa (optional)**

24-bit ITU-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

**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.

**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

**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

**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*

**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

**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
```

## Dependencies



**Caution:** Even though gateway screening is in the screen test mode, as defined by the `gwsa=off` and `gws=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`, 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`, 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`, 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`, 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.

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 nncm 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). The pcst and npcst parameters cannot be specified for ANSI and ITU-N24 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, and npc parameters cannot have a value of c.

## 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.

## 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:**

*ayyyyyy*

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.

## 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 screening 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

**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

**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.

**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

**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

**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*

**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

**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=wr2
```

```
chg-scr-opc:sr=opc1:npc=128:nsfi=fail:pcst=s:npcst=none
```

## Dependencies



**CAUTION**

**Caution:** Even though gateway screening is in the screen test mode, as defined by the *gwsa=off* and *gwsn=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*, 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*, 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*, 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*, 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.

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`). The `pcst` parameter cannot be specified for ANSI and ITU-N24 point codes.

## 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.

## 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 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.

**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 `gwsn=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 17: Supported chg-scr-sio Parameter Combinations](#) to determine additional acceptable combinations of specified parameter values

**Table 17: 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      | *         |

| si value:                                                                                                                                                  | nic value | pri value | h0 value: | h1 value: |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|
| 1, 2                                                                                                                                                       | s, *      | s, *, r   | s         | s, *, r   |
| 1, 2                                                                                                                                                       | s, *      | s, *, r   | *, r      | *         |
| 3-15                                                                                                                                                       | s, *      | s, *, r   | u         | u         |
| <b>Legend</b> <ul style="list-style-type: none"> <li>• s = single value</li> <li>• r = range</li> <li>• * = asterisk</li> <li>• u = unspecified</li> </ul> |           |           |           |           |

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.

## 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:

*ayyyy*

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:

*ayyyyyy*

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.

## 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*

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.

**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.

## 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](#)

Use this command to configure information for the CCS Message Router (CCS MR) in the EAGLE 5 ISS 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 5 ISS.

**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:**

*zzzzzzzzzzzzzzzzzzzz*

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 5 ISS.

#### **Range:**

*zzzzzzzzzzzzzzzzzzzz*

1-15 alphanumeric characters.

### **port (optional)**

The port number of the CCS MR.

#### **Range:**

*1024 - 5000*

**seascli (optional)**

The SEASCLI portion of the EAGLE 5 ISS node name that is sent in SR-5129 messages.

**Note:** This value is different from the EAGLE 5 ISS CLI value that is configured with the `chg-sid` command.

The corresponding SEASCLI 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:**

*axxxxxxxxx*

1 alphabetic character followed by up to 10 alphanumeric characters

**Example**

```
chg-seas-config:seascli=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 seascli, 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:seascli=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 5 ISS
- 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:**

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:clrwrtx=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="* *"
```

```
chq-secu-dflt:wrnln=8:wrntx="* today's happy message: go with tekelec!!*"
```

```
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:clwrntx=all
```

```
chg-secu-dflt:clrwrtx=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 wrnl and wrntx parameters must be specified together in this command.

If the clwrntx=yes parameter is specified, then the wrnl parameter must be specified.

If the clwrntx=all parameter is specified, then the wrnl and wrntx parameters cannot be specified.

If the wrnl parameter is specified, then the wrntx parameter or the clwrntx=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 `clwrntx=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 clwrntx=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 Tekelec!!
*"
```

```
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 Tekelec!! *

```

```

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

```

 rlgncxa03w 04-01-15 12:30:04 EST EAGLE 31.3.0
Command entered at terminal #13.

 rlgncxa03w 04-01-15 12:30:07 EST EAGLE 31.3.0
CHG-SECU-TRM: MASP A - COMPLTD
;

```

## Related Commands

*rtrv-secu-trm*

Use this command to change the IP7 Secure Gateway protocol options.

## Parameters

**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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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

**sctpchecksum (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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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:**

[illegible]

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:**

////////////////////////////////////

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
```

## 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.

## Output

chg-sg-opts:sctpcsum=percard

```
tekelecstp 08-02-22 17:56:31 EST EAGLE 38.0.0
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 (*xyz*z, where *x*=frame and *y*=shelf; *zz* is always 00 for this command).

The specified shelf location must have been configured previously.

The Shelf table is corrupt or cannot be found by the system.

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*



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:

*ayyyyyyyyyyy*

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 (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:npcfmt i` 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

**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 5 ISS

*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 AnalyzedInformation 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 (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:npcfmt.i` 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.

**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:npcfmt i` 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 (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:npcfmt i` 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

**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
```

```
chg-sid:pca=111-111-111:pci=1-234-5:pcn24=233-255-255
```

To change or add new node true point codes simultaneously, for ITU-I spare and ITU-N spare point code types.

```
chg-sid:pc(x)=xxxx:npc(x)=none
```

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:cpcn=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

## 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 npcpc/ncpca/ncpci/ncpcn/npcn24 parameter is specified, a corresponding existing cpc/cpca/cpci/cpcn/cpcn24 parameter must be specified.

If the npcpci or npcnc 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 parameter must be specified.

If the cpctype parameter is specified, an npcpc/ncpca/ncpci/ncpcn/npcn24 parameter cannot be specified in the command.

The values of the pc/pcn/pci/pcn24, cpc/cpca/cpci/cpcn/cpcn24, and npc/npcn/ncpci/ncpcn/npcn24 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.

If the cpctype=inp parameter is specified, the cpc parameter and the cpca parameter cannot be specified for the point code. An ANSI point code cannot be specified.

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 npc/ncpca/ncpci/ncpcn/npcn24 parameters can be specified.

If the pcn, npcnc, cpcn, or npcnc parameter is specified, the format must match the format that was assigned with the chg-stpopts:npcfmt*i* 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 npc 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 npc=none or npc=none parameter (respectively) cannot be specified.

A value of none cannot be specified for the cpc/cpca/cpci/cpcn/cpcn24 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.

If the npc/npcn/npci/npcn/npcn24 parameter is specified, then the cpc/cpca/cpci/cpcn/cpcn24 must be specified.

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=mnpp 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, npc/npcn/npci/npcn, npc/npcn/npci/npcn, and pc/pca/pci/pcn parameters cannot be the same as any Emulated Point Code value in the PCT table.

## Notes

If one of the pc/pca/pci/pcn/pcn24 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/cpa 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 5 ISS 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 5 ISS CLLI value. The following warning message appears:

CAUTION: System CLI 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 5 ISS 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

chq-sid:pc=10-20-30

```
rlghncxa03w 04-01-07 09:17:40 EST EAGLE 31.3.0
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:**

[illegible]

A string of 1 to 64 characters. Valid values are (0-9, A-Z), +, \*, #, .(period), @ or DFLT (default).

**pfx (mandatory)**

Prefix

**Range:***zzzzzzzzzzzzzzzz*

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:***zzzzzzzzzzzzzzzz*

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:***zzzzzzzzzzzzzzzz*

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.

PHCTXID 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*

**nprspfnt (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:**

[illegible]

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=inc ludenpdi
```

```
chg-sipopts:nprspfmrndn: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

[\*rtro-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:**

*aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa*

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.





**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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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-snmppopts:on=snmpuim:getcomm="my.getcomm.str"
```

## Dependencies

The SNMP feature must be enabled before an SNMP Option can be changed.

## Notes

None.

## Output

```
chg-snmppopts:on=snmpuim:getcomm=my.getcomm.str
```

```
tekelecstp 12-06-13 15:27:34 EST 45.0.0-64.66.0
chg-snmppopts:on=snmpuim:getcomm=my.getcomm.str
Command entered at terminal #4.
CHG-SNMPOPTS: MASP A - COMPLTD
;
```

## Related Commands

[rtro-snmppopts](#)

## 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.

### **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:**

*ayyyyyyyyy*

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 AnalyzedInformation 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

*rnmdn*

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=inpqr 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*, *inpq*, or *gport* 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* or *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=mnpr` parameter can be specified.

If a DSM4G card is active in the system, then the `on=gtrqd` parameter cannot be specified.

The `ndfltact`, `ngttselid`, `on=gtrqd`, and `off=gtrqd` 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*, *falltogg*, 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 Dual ExAP Config feature must be ON before the `nrqdtblnop` parameter can be specified.

The `nrqdtblnop=gtr` parameter cannot be specified if:

- an existing service record for the INPQ, VFLEX, ATINP, 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

## Notes

### on/off options

- *gtrqd* —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-srssel*, *ent-srssel*, *rtrv-srssel*

## 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*

*atinq*

*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=atinq: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*, *rtro-ss-appl*

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 dynamic database audit

**Default:**

No change to the current value

**System Default:**

*10*

### **discardtfc (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 5 ISS 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 `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 Manual - SS7, 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:slanpcorgopc=on
chg-ss7opts:slsreplace=yes
chg-ss7opts:ddbbaudtimer=5
chg-ss7opts:ddbbaudtimer=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 slanpcorgopc or slanlsn parameter can be specified.

## Notes

None

## Output

```
chg-ss7opts:slanpcorgopc=on
```

```
tekelecstp 08-09-26 15:22:38 EST EAGLE 39.2.0
CHG-SS7OPTS: MASP B - COMPLTD
;
```

## Related Commands

[\*rtrv-ss7opts\*](#)

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 5 ISS 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***criticalminh (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 5 ISS 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*

**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*

**gtcnvdfilt (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*, *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 18: NPCFMTI Parameter - ITU National Point Code Values](#) defines the values of the parts of the ITU national point code.

Table 18: 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 19: 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*

*archbl did*

*cnvcgda*

*cnvcgdi*

*cnvcgdn*

*cnvcgdn24*

*gtcnvdf1t*  
*critalminh*  
*dispactalms*  
*mtplprst*  
*mtplti*  
*mtprsi*  
*rptlnpmrssi*  
*rstrdev*  
*uimrd*  
*mfc*

**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*  
*archblid*  
*cnvcgda*  
*cnvcgdi*  
*cnvcgdn*  
*cnvcgdn24*  
*gtcnvdf1t*  
*critalminh*  
*dispactalms*  
*mtplprst*  
*mtplti*  
*mtprsi*  
*rptlnpmrssi*  
*rstrdev*  
*uimrd*  
*mfc*

**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 `slrsb` 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 `slrsb` 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 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 `slrsb` (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 `slrsb` 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 `slrsb` parameter.

When `randsls=perls` is specified, `randsls` parameter needs to be individually enabled on outgoing linkset for ITU traffic and on incoming linkset 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 &amp; 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*

**rptlnpmrssl (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 (rptlnpmrssl=yes) or suppressed (rptlnpmrssl=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

**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***secscpcscmg (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*

## 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:hscldsrc=t1framed
chg-stpopts:hscldsrc=e1unframed:force=yes
chg-stpopts:hscldll=shorthaul
chg-stpopts:cnvcgda=yes
chg-stpopts:randsls=perls
chg-stpopts:pct=on
chg-stpopts:mtpdpcq=10000
chg-stpopts:on=mfc
```

## 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 base feature to co-exist, E5-SM4G Throughput Cap quantity key for 6800 must be enabled

The ansigflex option cannot be enabled DSM is equipped in the system AND one or more following feature is 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 mtpsrst 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 `gsmdecerr` parameter can be specified.

The Network Security Enhancements feature must be turned on before the `secmtpmate`, `secmtpsid`, `secmtpsnm`, and `secscpcscmg` 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 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 Customer Care Center for assistance in turning off Message Flow Control.

If the EPAP Data Split feature is enabled or the Dual ExAP Config feature is enabled, then the MFC option cannot be turned off.

After the MFC option is modified, it cannot be modified again until 10 seconds elapse.

If the SIPNP feature is turned on, then the `defcc=none` parameter cannot be specified.

If the MFC option is turned on, the following cards are not supported except during migration to the B-series cards:

- DCM card (870-1945-xx)



- DSM card (870-1984-xx)
- EDCM card (870-2372-xx) used for SLAN or STC functionality
- EDCM-A card (870-2508-xx) used for SLAN or STC functionality

MFC cannot be turned OFF if 1M System TPS feature is ON.

## Notes

If the database contains ITU national point codes of a particular format, and the format is changed with the `npcfmt` parameter, the format of the ITU national point codes in the database will be changed to the new format.

The format defined by the `npcfmt` 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 `disptalms` 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 is 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.

**on/off options**

- *ansigflex*—Enables/Disables ANSI G-Flex to execute at 1700 TPS per DSM card
- *archbldid*—Archive build ID. Enables/Disables specifies that the database archive file name contains the EAGLE 5 ISS 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.
- *disptalms* —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
- *gtcnvdfld*—Enables/Disables routing of SCCP messages using system defaults when an appropriate entry is not found in the Default GT Conversion Table
- *mfc*—Enables/Disables Message Flow Control (MFC) functionality and disables/enables Group Ticket Voucher (TVG) functionality.
- *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

As of Release 44.0, EPM-B based cards refer to E5-ENET-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 E1/T1 MIM cards or HC-MIM or E5-E1T1 cards used as T1 or ST-HSL-A cards.

On HC-MIM and E5-E1T1 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

Ports 3 - 8 can be specified only for HC-MIM and E5-E1T1 cards.

Any 2 of the 8 ports on an HC-MIM 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 on an HC-MIM or E5-E1T1 card 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.

**Range:**

*sf, esf, esfperf*

*esfperf-esf* framing format with performance monitoring

**Default:**

No change to the current value

**ll (optional)**

T1 cable length in feet between the EAGLE 5 ISS 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:minsrate=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 on an HC-MIM or E5-E1T1 card 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 on the HC-MIM or E5-E1T1 card is channel-bridged master.

The force=yes parameter must be specified to provision an odd-numbered T1 port to channel bridging mode on an HC-MIM or E5-E1T1 card 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) on an HC-MIM or E5-E1T1 card 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 HC-MIM card is provisioned and present. The system checks the shelf FAN bit when an HC-MIM card is present in the specified odd card location (loc parameter) and the chanbrdg=on parameter is specified

HIPR cards must be equipped in card locations xy09 and xy10 (x is the frame, y is the shelf) on each EAGLE 5 ISS shelf that contains one or more HC-MIM or E5-E1T1 cards. The system checks for HIPR cards when the chanbrdg=on parameter is specified for HC-MIM or E5-E1T1 cards.

The following card locations cannot be specified in the loc parameter: 1113 - 1118 (OAM, TDM, MDAL cards), or xy09 and xy10 where x is the shelf and y is the slot (HMUX or HIPR cards).

The chanbrdg parameter can be specified only for HC-MIM or E5-E1T1 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) on the HC-MIM or E5-E1T1 card 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 on an HC-MIM or E5-E1T1 card 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 on an HC-MIM or E5-E1T1 card 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 5 ISS 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

**cgpagnai (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'*. [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:cgpnai=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:cgpnai=4
```

```
tekelecstp 09-07-07 15:58:08 EST EAGLE 41.1.0
CHG-TATR-MSG: MASP A - COMPLTD
;
```

## Related Commands

[rtro-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

*rns*

*rn* or *sp*

*anymatch*

*rn*, *sp*, or no match with any entity

***always***

Lookup is always considered successful

***rnspd***

*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*

**cgntype (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

***rnspd***

*rn*, *sp*, or *dn*

If the *cgntype=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 *rns* is specified for the *cdn*type or *cgnt*type 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

[rtro-tatropts](#)

## chg-th-alm

### Change Alarm Thresholds

Use this command to change the alarm thresholds and associated values.

## Parameters

**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*

**imtbustl1 (optional)**

The percentage for the IMT Bus Combined utilization level 1 Threshold Alarm (reported on IMT System).

**Range:**

*35 - 70*

**Default:**

*70*

**imtbustl2 (optional)**

The percentage for the IMT Bus Combined utilization level 2 Threshold Alarm (reported on IMT System).

**Range:**

*40 - 80*

**Default:**

*80*

**imtcongestl1 (optional)**

The percentage for the IMT Bus Congestion level 1 Threshold Alarm (reported on HIPR2 card).

**Range:**

*35 - 70*

**Default:**

*70*

**imtcongestl2 (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 imtcongestl1 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***sccpcalcmtld (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***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:sccpalcmtld=nplus1
chg-th-alm:gttserlvlv1=25:gttserlvlv2=28
chg-th-alm:sccpthlv1intvl=20:sccpthlv2intvl=50
chg-th-alm:nongttserlvlv1=30:nongttserlvlv2=60
```

## 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 `rtv-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. `Thermallv1` and `thrmallv2` 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, 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
;
```

## Related Commands

[rept-stat-sccp](#), [rtv-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` -`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

### condecgpn (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 signalling 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.
- rnsprd*  
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.

***rnsprd***

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.

***rnsprd***

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 *rcase* parameter as the release cause in REL messages.

**Default:**

*off*

**rnrd (optional)**

This parameter specifies whether the redirection number is included in the release message when release handling is indicated.

**Range:**

*yes*

*no*

**Default:**

*yes*

**snsdgnpndflt (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 *defltn* 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 NPDELAY 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

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

[rtro-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*

recieve 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=emsa1m 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=scs` 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 5 ISS.
- 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 the *Maintenance Manual* 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 groups 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:

*ayyyyyyyyyy*

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

**cdpnai (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

**cgpapgts (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

**cgpagnai (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

**lacdgt (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:tcapttype=INAP:cdpnai=4:cdpadgts=12457896abcd:cgpnnai=4
chg-ttr-msg:msgn=1:cdpnai=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 tcapttype 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:tcapttype=CAP:cdpnai=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-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

*rnsdccdn*

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)

**cdnrnsrsp (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*

**cgdnnnotfndrsp (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

*grnrncdn*

GRN + RN + CC + DN

*rngrncdn*

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

*rns*

*rn* or *sp*

*anymatch*

*rn*, *sp*, or no match with any entity

*always*

Lookup is always considered successful

*rnsdn*

*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:**

*rns*

**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*

**cgreldcause (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 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 *rnsf* 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***drnai (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

*rns**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:**

*cdcnr*

*cgcnr*

**on (optional)**

This parameter turns on the specified options. Up to 8 comma-separated unique options can be specified.

**Range:**

*cdcnr*

*cgcnr*

**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 RN 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:cdnrsp=continue
```

```
chg-ttropts:cddra=grndn:on=cdcn:off=cgcn
```

```
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

- *cdnp* —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.
- *cgnp* —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 20: TON2NAI Mapping Default Values**

| TON              | NAI |      |
|------------------|-----|------|
| 1                | 4   | INTL |
| 2                | 3   | NATL |
| 0                | 2   | UNKN |
| All other values | 2   | -    |

Table 21: 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:cdnrns=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

[rtro-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 22: Valid and Default UAPS Parameter Values](#) for the pvalue parameter to be used for the specified parm parameter.

**Table 22: Valid and Default UAPS Parameter Values**

| Parameter (parm)                                                                                                                            | To Turn On Only Bit(s) | Decimal pvalue | Hexadecimal pvalue | System Default |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------|--------------------|----------------|
| 1. ASP SNM Options<br>Bit 0= Broadcast<br>Bit 1= Response Method<br>Bit 6 = Broadcast Congestion Status Change<br>Bits 2-5 and 7-31= Unused | 0                      | 1              | h'1                |                |
|                                                                                                                                             | 1                      | 2              | h'2                |                |
|                                                                                                                                             | 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               |                |

| Parameter (parm)                                                                                                                                                  | To Turn On Only Bit(s) | Decimal pvalue | Hexadecimal pvalue | System Default |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------|--------------------|----------------|
| 2. <i>ASP/AS Notification Options</i><br>Bit 0= ASP ACTIVE Notifications<br>Bit 1= ASP INACTIVE Notifications<br>Bit 2 = ASP AS State Query<br>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. <i>UA Serviceability Options</i><br>Bit 0 = UA Heartbeats<br>Bit 1 = UA Graceful Shutdown<br>Bits 2-31 = Unused                                                | 0                      | 1              | h'1                | Off            |
|                                                                                                                                                                   | 1                      | 2              | h'2                | Off            |
|                                                                                                                                                                   | 0,1                    | 3              | h'3                | Off            |
|                                                                                                                                                                   |                        |                |                    |                |
| 4. <i>SCTP Payload Protocol Indicator Option</i><br>Bit 0 = Payload Protocol Indicator<br>Bits 1-31 = Unused                                                      | 0                      | 1              | h'1                | Off            |
|                                                                                                                                                                   |                        |                |                    |                |

**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 IPSP 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 IPSP 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 IPSP 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](#)

Use this command to change user access to commands, change user ID's, and change passwords.

## Parameters

**Note:** All cc(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:**

*azzzzzzzzzzzzzzzzz*

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 *yyy-no* or *yyy-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:**

*yyy*

Specify the parameter value in the format *yyy-no* or *yyy-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:**

*yyy*

Specify the parameter value in the format *yyy-no* or *yyy-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:**

*yyy*

Specify the parameter value in the format *yyy-no* or *yyy-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:**

*yyy*

Specify the parameter value in the format *yyy-no* or *yyy-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:**

*yyy*

Specify the parameter value in the format *yyy-no* or *yyy-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:**

*azzzzzzzzzzzzzzzzz* 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](#)

## chg-vflx-cd

### Change V-Flex Call Decision Entry

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

**nrndix (optional)**

New routing number index. A new routing number index associated 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:nrndix=7
```

The following command specifies a new call decision entry name and new routing number index.

```
chg-vflx-cd:cdn=cdn1:ncdn=cdn3:nrndix=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, nrndix, 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:nrndix=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

### 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:rname=rn01:nrname=rn04
```

This example changes the routing number digits for a specified routing number name.

```
chg-vflx-rn:rname=rn01:nrn=122345BC8
```

This example changes the routing number digits and the routing number name.

```
chg-vflx-rn:rname=rn01:nrn=1223EAB68:nrname=rn03
```

## Dependencies

The value specified for the rname 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 nrname parameter cannot already exist in the Routing Number table.

The nrn or nrname parameter must be specified in the command.

The value specified for the nrname 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:rname=rn01:nrn=122345CE8:nrname=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:**

*ayyyyyyyy*

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:**

*ayyyyyyyy*

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:**

*ayyyyyyyy*

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:**

*ayyyyyyyy*

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:**

*aaaaaaaa*

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:**

*aaaaaaaa*

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 rname 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 IMT Switch, HMUX, or HIPR cards
- All IMT, HMUX, and HIPR 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, HMUX, and HIPR 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 Manual - EAGLE 5 ISS* 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 HMUX, and HIPR statistics. The shelf location of the last shelf in the range. (HMUX and HIPR 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 Manual* 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 HMUX, and HIPR statistics. This parameter specifies the shelf location of the first shelf in the range. (HMUX, and HIPR 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` parameter or `sloc` 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 HMUX and HIPR cards to be cleared.

The `s` and `e` parameters will not clear HMUX and HIPR cards.

The `sshelf` and `eshelf` parameters clear HMUX and HIPR 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.

## 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 TDM boots continuously, insert a removable disk with the same release as the fixed disks in the MDAL. The standby MASP should successfully boot off the removable disk. After the 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**

**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 EOAM 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.

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...
```

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 the Customer Care Center. See the "Customer Care Center" 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-fts

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

**1117**

The removable cartridge drive

**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

**1117**

The removable cartridge drive

**1113**



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 1117 location is used by MDAL cards. The 1113 and 1115 locations are used by E5-MCAP cards. The 1114 and 1116 locations are used by TDM or 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.

## 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-fts:stbl=1:dfile="2F1.OUT":sloc=1114:dloc=1114

```
rlghncxa03w 04-01-05 14:59:10 EST EAGLE 31.3.0
copy-fts:stbl=1:dfile="2F1.OUT":sloc=1114:dloc=1114
Command entered at terminal #1.
;
rlghncxa03w 04-01-05 14:59:26 EST EAGLE 31.3.0
Copied Table 1 successfully from FIXED to F1.OUT in FTA.
;
rlghncxa03w 04-01-05 15:00:49 EST EAGLE 31.3.0
copy-fts:sfile=dms.cfg:dtbl=0:sloc=1114:dloc=1117:drv=remove
Command entered at terminal #1.
;
rlghncxa03w 04-01-05 15:01:12 EST EAGLE 31.3.0
Copied DMS.CFG successfully from FTA to Table 0 on REMOVABLE.
;
```

## Related Commands

[act-file-trns](#), [disp-fts-dir](#), [dlt-fts](#)

## 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 cartridge or drive, or from the removable cartridge or 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 cartridge or drive

*usb*

Argument to be used by Tekelec personnel only.

**dloc (optional)**

The destination location of the the GPLs to be copied.

**Range:**

*1114*

The TDM

*1116*

The TDM

*1117*

The removable cartridge drive

*1113*

The latched USB port

*1115*

The latched USB port

**Default:**

*1117*

**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 Tekelec personnel only.

**sloc (optional)**

The source location of the GPLs to be copied.

**Range:**

*1114*

|             |                               |
|-------------|-------------------------------|
|             | The TDM                       |
| <b>1116</b> | The TDM                       |
| <b>1117</b> | The removable cartridge drive |
| <b>1113</b> | The latched USB port          |
| <b>1115</b> | The latched USB port          |

**Default:**

The location of the active TDM

**Example**

```
copy-gpl
copy-gpl:sloc=1117:dloc=1116
copy-gpl:sloc=1116
```

**Dependencies**

While this command is executing, the `act/chg-gpl` commands cannot be entered.

The destination disk needs to be formatted.

The GPLs can be copied only from the fixed disk on the active TDM (sloc=1114 or sloc=1116) to the removable cartridge (dloc=1117), or from the removable cartridge (sloc=1117) 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 1117 location is used by MDAL cards. The 1113 and 1115 locations are used by E5-MCAP cards. The 1114 and 1116 locations can be used by TDM or 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 credit card drive must be accessible in the Active OAM credit card USB port.

The specified disk type does not 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 cartridge.

`copy-gpl:sloc=1114:dloc=1117`

```
rlghncxa03w 04-01-07 00:57:31 EST EAGLE 31.3.0
COPY GPL: MASP A - COPY STARTS ON ACTIVE MASP
COPY GPL: MASP A - COPY TO REMOVABLE CARTRIDGE COMPLETE
;
```

Copying the GPLs from the removable cartridge to the fixed disk on the standby TDM (card location 1116).

`copy-gpl:sloc=1117: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 cartridge. 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 cartridge or 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 Manual* provides a description of all measurement report parameters.

To copy the raw measurements data from the active fixed disk to the measurements removable cartridge requires approximately 2 minutes. This period is the minimum time and is dependent on system activity.

The removable cartridge or 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 *yymmda.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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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.

GPSPM-II and E5-MCAP cards cannot be provisioned in the system at the same time.



## 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 (Copies t) as in this example: Copies t.

Any scroll area failure message that can be produced by the `copy - fta` command can be produced also by the `copy - secu log` 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 - secu log`

```
rlghncxa03w 04-01-04 15:59:06 EST EAGLE 31.3.0
Security log on TDM 1114 copied to file 960104a.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 - secu log: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 - secu log:slog=stb`

```
rlghncxa03w 04-01-04 15:59:06 EST EAGLE 31.3.0
Security log on TDM 1114 copied to file 960104s.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 - secu log: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 - secu log: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:**

**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-secu-log, 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-secu log` 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:

### 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 a LIMDS0, LIMT1, LIMCH (associated with a LIMT1 ) card configured with an 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 is not found, and the max number of allowed LFS or signaling link tests are already 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

```

 rlgncxa03w 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*, *rtro-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:

*ayyyyyyyyyy*

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:

### 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

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:

- E1 ATM card running the ATMITU application
- E1/T1 MIM, E5-E1T1 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 IPSP application
- LIM card running the SS7ANSI or CCS7ITU application
- LIM ATM card running the ATMANSI 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*—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

## Notes

The *Installation Manual – EAGLE 5 ISS* 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

This command cannot be entered during an IMT Fault Isolation Test. The card cannot be isolated from both IMT busses.

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:**

3-10 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](#), [rtro-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:**

*aaaaaaaaaaaaaaaa*

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:**

**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:**

**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 (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:npcfmt i` 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

#### **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 (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:npcfmt i` 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*

### **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
```

## 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.

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:

*aaaaaaaaaaaaaaaa*

Up to 15 alphanumeric characters; the first character must be a letter.

### asname (mandatory)

Application Server assigned to the routing key.

**Range:**

*aaaaaaaaaaaaaaaa*

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:**



*aaaaaaaaaaaaaaaa*

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 IPSPG card is referenced by a signaling link, then the association cannot be deleted.

## 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, 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 location must be 11xx, 12xx, 13xx, 21xx, 22xx, 23xx, 31xx, 32xx, 33xx, 41xx, 42xx, 43xx, 51xx, 52xx, 53xx, 61xx, 62xx, or 63xx.

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 or an E1/T1 MIM card used as an E1 card can be deleted, any E1 interfaces assigned to the card must be deleted.

Before an E1/T1 MIM card that is used as 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.

## 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, rtro-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:** See [Point Code Formats and Conversion](#) for a detailed description of point code formats, rules for specification, and examples.

**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 — SIP Number Portability npbypass list

[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:

aaaaaaaaaaaaaaaaaaaaaaaaaaaa

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:

- IDP Screening for Prepaid
- Info Analyzed Relay Base
- Prepaid IDP Query Relay
- IDP Service Key Routing
- SIP Number Portability
- 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

*insl*

In Network Subscriber List

*npbypass*

SIP NPBYPASS List

*skbcm*

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
- *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 Tekelec 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.

### **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:npfmt i* 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:

- 893015501—IDP Screening for Prepaid
- 893016001—Prepaid IDP Query Relay
- 893034201—Info Analyzed Relay Base
- 893016701—VFLEX
- 893040601— SIP Number Portability

## 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="SIP NUMBER PORTABILITY":list=npbypass:ds=000036
```

## 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=skbcsn—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.

SIPNP feature must be enabled before deleting NP prefix entries for NPBYPASS list.

The DS (Digit String) must be 1 - 15 digits in length for SIPNP Feature.

## 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 (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:npcfmt i` 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*

## Example

```
dlt-cspc:grp=grp01:pc=144-201-001
```

```
dlt-cspc:grp=grp01:pci=s-144-201-001
```

```
dlt-cspc:grp=grp01:all=yes
```

## 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-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 (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:npcfmt i` 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

## **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:npcfmt i` 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, rtro-dstn, rtro-rte*

## dlt-e1

### Delete E1 Interface

Use this command to delete an interface for E1/T1 MIM cards or HC-MIM, or E5-E1T1 cards used as E1 or SE-HSL cards.

On an HC-MIM or E5-E1T1 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 slave port interface is automatically deleted with the command that deletes its master port interface.

## Parameters

**e1port (mandatory)**

E1 port number.

**Range:**

1 - 8

Ports 3 - 8 can be specified only for HC MIM cards and E5-E1T1 cards.

**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 on an HC-MIM or E5-E1T1 card 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 (OAM, TDM, MDAL 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-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



**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-ftp-serv: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-ftp](#), [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 5 ISS 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 5 ISS 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:npcfmt.i* 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-GSM MAP-SCRN: MASP A - COMPLTD
;
```

## Related Commands

[chg-gsmmap-scrn](#), [ent-gsmmap-scrn](#), [rtro-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 GSM 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-gttset*), 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:

*ayyyyyyyyy*

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:npcfmt.i` 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

**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 (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:npcfmt.i** 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*

**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:npcfmt i` 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

**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:cgpc=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
```

## 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/cgpc/cgpci/cgpcn/cgpcn24, opc/opca/opci/opcn/opcn24, cgssn, gta, cdssn, opcode/acn/pkgtype, opcode/family/pkgtype, or dpc/dpca/dpci/dpcn/dpcn24 parameter must be specified.

The cgpc/cgpc/cgpci/cgpcn/cgpcn24, opc/opca/opci/opcn/opcn24 and dpc/dpca/dpci/dpcn/dpcn24 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`, `opc/opca/opci/opcn/opcn24`, 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` 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` 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`, `opci/opcn/opcn24`, and `dpci/dpcn/dpcn24` 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`, `pc/pca/pci/pcn/pcn24`, or `opc/opca/opci/opcn/opcn24` 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` parameter must be specified. If the set type has a value other than `dpc`, then the `dpc\dpca\dpci\dpcn\dpcn24` 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 5 ISS 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 required 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=ittoa: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=ittoa: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:**

*ayyyyyyyyy*

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-gttset`), 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:**

*ayyyyyyyyy*

1 alphabetic character followed by up to 8 alphanumeric characters

#### **Default:**

No translation name is given

### **type/typea/typeei/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 typeei 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 5 ISS 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:ttt=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 be 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*, *rtro-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:**

*ayyyyyyyyy*

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*.

## 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](#), [rtro-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:**

*ayyyyyyyyy*

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-gttset

### 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-gttset*), 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

**gti/gtia/gtii/gtin/gtin24/gtiis/gtins (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), and **gtins** (ITU national spare).

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=0, 2, 4

**cgssn (optional)**

CgPA subsystem number.

**Range:**

0 - 255

**eaglegen (optional)**

This parameter specifies whether the selector is used by EAGLE 5 ISS generated messages.

**Range:**

*yes*

used by EAGLE 5 ISS 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-gtttsel:gti=2:tt=10
```

```
dlt-gtttsel:gtin=4:tt=0:np=dflt:nai=dflt
```

```
dlt-gtttsel:gtia=2:tt=21:cgssn=20:selid=1:lsn=ls10
```

```
dlt-gtttsel:gtia=2:tt=2:eaglegen=yes
```

```
dlt-gtttsel:gti=0:selid=2
```

```
dlt-gtttsel:gtiis=0
```

```
dlt-gtttsel:gtins=0
```

## 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=2 parameter is specified, then the np/npv and nai/naiv parameters cannot be specified.

If the gtii/gtin/gtin24/gtiis/gtins=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

None

## Output

dlt-gttset:gti=0

```
tekelecstp 10-02-05 16:35:13 EST Eagle 42.0.0
dlt-gttset:gti=0
Command entered at terminal #4.
DLT-GTTSEL: MASP A - COMPLTD
;
```

## Related Commands

*chg-gttset, ent-gttset, rtrv-gttset*

## 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-gttset), 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:

*ayyyyyyyyy*

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:smc=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.

## Notes

None

## Output

```
dlt-home-smc:smc=552611646
```

```
rlghncxa03w 04-02-28 08:50:12 EST EAGLE 31.3.0
DLT-HOME-SMSC: MASP A - COMPLTD
;
```

## Related Commands

[ent-home-smc](#), [rtv-home-smc](#)

## 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.

## 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 connection information. The IPCONN table supports the provisioning information related to the SIP connections.

## Parameters

**cname (mandatory)**

Connection name. This parameter specifies the unique logical name assigned to each SIP connection.

**Range:**

zzzzzzzzzzzzzzzzzzzz



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.

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.



## 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 `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

**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-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:

### loc (mandatory)

Card location. The unique identifier of a 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 a LIMDS0, LIMT1, or LIMCH (associated to a LIMT1) card with an 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](#), [rtro-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*  
*lidx*  
*cnam*  
*isvm*  
*lnpqs*  
*wsmsc*  
*udf1*  
*udf2*  
*udf3*  
*udf4*  
*lrnqt*

**alias (optional)**

Alias translation type.

**Range:**

000 - 255

## Example

```
dlt-lnp-serv:serv=lidx: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](#), [rtro-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

**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
```

**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 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.

## 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:pc1=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.

## 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

**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 (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

#### **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
```

**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:npcfmt*i* 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 tables 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:npcfmt.i` command.

PC and SSN are not primary applications.

The GTT LS ARI feature must be enabled before the mrnset parameter can be specified.

If the mrnset and the mapset=dflt parameters are specified, then the ssn parameter must 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 5 ISS 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

**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 (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:npcfmt i* 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-nnnnnn, prefix-nnnnnn-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

### **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 (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)**

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:npcfmt1` 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-nnnnnn*, *prefix-nnnnnn-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-*

*nnnnnn—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:npcfmt.i* 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-nnnnnn*, *prefix-nnnnnn-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-*

*nnnnnn—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:npcfmt.i` 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:npcfmt i` 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**

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=df lt
```

```
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=df1t:pc=1-1-1:mapset=123
```

This example deletes the entry from the MRN set:

```
dlt-mrn:mrnset=1:pc=1-1-1
```

## 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 5 ISS 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*

**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*, 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](#), [rtro-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 specifies the name of the AS.

### Range:

*ayyyyyyyyyyy*

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:svrn=nppt:fpfx=a:fdl=10:fnai=intl
dlt-npp-srs:svrn=idprcdpn4:fnai=intl:fdl=12:fpfx=91
```

**Dependencies**

The NPP Rule must exist in the NPP Rule table.

**Notes**

None

**Output**

```
dlt-npp-srs:svrn=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:npcfmt.i` 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:npcfmt i` 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:npcfmt.i** 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:**

*abcdefghijklmnopqrstuvwxyz*

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 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 (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:npcfmt.i* 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*

#### **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 parameter 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
```

## **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](#), [rtro-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 or cic parameter must be specified. If the dpc/dpca/dpci/dpcn/dpcn24 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 (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:npcfmt.i* 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*

**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
```

## Dependencies

The dpc/dpca/dpci/dpcn/dpcn24 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:npcfmt.i` 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 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/dpci/dpcn/dpcn24 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 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.

## 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](#), [rtro-dstn](#), [rtro-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 (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:npcfmt.i` 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*

#### **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 (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:npcfmt.i` 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**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-\*-\*

**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 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:npcfmt i` 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:npcfmt i` 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:npcfmt i` 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:npcfmt i` 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

### 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.

**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*

**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, \*

**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
```

## Dependencies

A complete point code must be specified, and must be one, and only one of the four point code parameter combinations: *ni-nc-ncm*, *zone-area-id*, *msa-ssa-sp*, or *npc*.

The affected point code or point code range (given by *ni-nc-ncm/ssn*, *zone-area-id*, *msa-ssa-sp*, 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 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, 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). The pcst parameter cannot be specified for ANSI and ITU-N24 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.

## 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 *ied* 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

### 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.

**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*

**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

**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
```

## 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`, 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`, 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 screen reference. The last screen reference to be deleted must have `ni`, `zone`, `msa`, 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 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 `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 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`). The `pcst` parameter cannot be specified for ANSI and 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`.

## 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`, 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`, 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*, 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

**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.

#### **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*

### **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

#### 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
```

## Dependencies

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, msa-ssa-sp, or npc combination unless a value of *c* is specified.

The blocked OPC specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, 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 screen reference. The last screen reference to be deleted must have ni, zone, msa, 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 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). The pcst parameter cannot be specified for ANSI and 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.

## 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, or msa-ssa-sp equal to c-c-c or npc=c. If more than one entry exists, ni-nc-ncm, zone-area-id, 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 *ied* 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* 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

**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.

**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

**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

**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-cgpa:sr=cgpa:zone=1:area=2:id=3:ssn=1:sccpmt=9:ri=:pcst=s`**Dependencies**

A complete point code must be specified, and must be one and only one of the four point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, 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). The pcst parameter cannot be specified for ANSI and ITU-N24 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.

**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

**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 member 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.

**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*

**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

**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
```

## Dependencies

A complete point code must be specified, and must be one, and only one of the four point code parameter combinations: ni-nc-ncm, zone-area-id, 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 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). The pcst parameter cannot be specified for ANSI and ITU-N24 point codes.

A CGPA screening reference (sr) cannot be deleted if it is referenced by an entity in another screening set.

## 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 *ied* 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

### 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.

**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*

**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

**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
```

## Dependencies

A complete point code must be specified, using the *ni-nc-ncm*, *zone-area-id*, *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.

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 *msa*=\* parameter is specified, then the *ssa*=\* and the *sp*=\* 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*, 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*). The *pcst* parameter cannot be specified for ANSI and ITU-N24 point codes.

If the *nsfi=fail* parameter is specified, then the *nni*, *nc*, *nncm*, *narea*, *nzone*, *nid*, *nmsa*, *nssa*, *nsp*, and *npc* parameters cannot have a value of *c*.

## 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=iec: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

### 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.

**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*

**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

#### 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
```

## Dependencies

A complete point code must be specified, using the *ni-nc-ncm*, *zone-area-id*, *msa-ssa-sp*, or *npc* combination unless a value of *c* is specified.

The DPC specified by *ni-nc-ncm*, *zone-area-id*, *msa-ssa-sp*, 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*). The *pcst* parameter cannot be specified for ANSI and ITU-N24 point codes.

If the *nsfi=fail* parameter is specified, then the *nni*, *nc*, *nncm*, *narea*, *nzone*, *nid*, *nmsa*, *nssa*, *nsp*, and *npc* parameters cannot have a value of *c*.

## 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.

## 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](#), [rtro-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

### 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.

**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*

**sp (optional)**

24-bit ITU national signaling point. The *spin* 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

**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
```

## Dependencies

A complete point code must be specified, using the *ni-nc-ncm*, *zone-area-id*, *msa-ssa-sp*, 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*, 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`). The `pcst` parameter cannot be specified for ANSI and ITU-N24 point codes.

If the `nsfi=fail` parameter is specified, then the `nni`, `nc`, `nncm`, `narea`, `nzone`, `nid`, `nmsa`, `nssa`, `nsp`, and `npc` parameters cannot have a value of `c`.

## 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=iec: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.

## 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.

## 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.

## 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 (xyz, where *x*=frame and *y*=shelf; *z* 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 the *Database Administration Manual - System Management* for more information on shelf removal.

Refer to the *Installation - EAGLE 5 ISS* manual 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
;
```



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.
PHCTXID 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:

### 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 IPSEG-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 `tftcabmlq` parameter (see the `chg-ls` command), then the link cannot be deleted.

## 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 -s lk` (or `canc -s lk`) 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.

The *Installation Manual – EAGLE 5 ISS* 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-isopts, 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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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-snmpp-host:host=snmpmgr
```

```
dlt-snmpp-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-snmpp-host:ipaddr=10.25.55.25
```

```
tekelecstp 12-06-13 11:08:11 EST 45.0.0-64.66.0
dlt-snmpp-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-snmpp-host, chg-snmpp-host, rtrv-snmpp-host*

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/pcn24 (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-*

*nnnnnn*—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

**Example**

dlt-spc:spc=10-20-30

dlt-spc:spcn24=98-98-98

dlt-spc:spcn=s-12345

**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
;
```

## 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.

## 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=inp 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 E1/T1 MIM cards or HC-MIM or E5-E1T1 cards used as T1 or ST-HSL-A cards.

On HC-MIM and E5-E1T1 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*

Ports 3-8 are valid only for HC-MIM and E5-E1T1 cards.

**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 an 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 on an HC-MIM or E5-E1T1 card cannot be specified in the t1port parameter. To delete channel bridged port interfaces, specify the master (odd-numbered) port in the t1port parameter. The slave port interface is automatically deleted when its master port interface is deleted.

Card locations 1113 - 1118 (OAM, TDM, MDAL cards) cannot be specified as values for the loc parameter.

**Notes**

None.

**Output**

```
dlt-tt: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-gttset*), 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:

ayyyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

#### Default:

No translation name is given

### type/typea/typeei/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 typeei 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 5 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 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-gttset` 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-gttset` command, or if the GTTSN of an entry is changed using the `chg-gttset` 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](#), [rtro-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*

## dlt-uim-acthresh

Delete Activity Level Threshold for STP UIM Activity Reporting

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:**

*azzzzzzzzzzzzzzzzz*

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](#), [rtro-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:

*ayyyyyyyy*

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 has purchased.

**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:

*aaaaaaaaaaaaaaaa*

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=xxxxxxxxxxxxxx
```

## Dependencies



**Caution:** Never install or initialize MCAP cards in card slots 1113 and 1115 after GPSM-II cards are provisioned in these slots. Attempting to initialize MCAP cards after GPSM-II cards have been provisioned in slots 1113 and 1115 will cause a system outage. Before

replacing an existing GPSM-II card in slot 1113 or slot 1115, contact the Customer Care Center.

The phrase "Service Module cards" refers to DSM, 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.

Dual ExAP Config feature cannot be enabled before 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 purchased 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.

Both cards that run the OAM application in the system must be GPSM-II cards before the XMAP (Expanded MAP Table) feature can be enabled.

Both cards that run the OAM application in the system must be GPSM-II cards before the 6000 Routesets 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.

A card with unknown hardware is detected in system (possibly in the process of loading, or a loading error has occurred).

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 DSM cards with a minimum of 2GB of memory.

The LNP feature for 36 million TNs requires all DSM 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 DSM cards with a minimum of 4GB of memory.

The 150,000 LNP LRNs feature requires all Service Module cards; any DSM cards must have a minimum of 2GB of memory.

The 300,000 LNP NPANXXs feature requires all Service Module cards; any DSM cards must have 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 5 ISS.

- 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 5 ISS 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
- 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 5 ISS.

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.

E5-SM4G and E5-SM8G-B cards do not support LNP ported TNs quantities of 204-228 million numbers. DSM cards are required.

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 5 ISS 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-ENET
- E5-ENET-B
- E5-IPSM
- E5-OAM
- E5-SM4G
- E5-SM8G-B
- E5-TSM
- HC-MIM
- HIPR
- HIPR2
- MCPM

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.

If any of the following cards running in the system Dual ExAP Config feature cannot be enabled: DSM, MPL, E1T1MM, LIMATM, LIME1ATM.

If any of the following cards running in the system then the EPAP Data Split feature cannot be enabled: DSM, MPL, E1T1MIM, LIMATM, LIME1ATM.

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 cannot be enabled if a DSM card is present in the system. 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.

## 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 numbers of unchannelized signaling links that can be assigned to HC-MIM and E5-E1T1 cards in the system when 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

#### LNP 384 Million TNs, LNP 300,000 NPANXXs, LNP 150,000 LRNs, and LNP ELAP Configuration Features

*Table 23: Minimum Hardware Required for LNP Quantity Features* lists the types and memory capacity for the Service Module cards required by each LNP quantity feature. Quantities of 204-228 million TNs require DSM cards and do not support E5-SM4G or E5-SM8G-B cards. Quantities of 240-384 million TNs require E5-SM4G or E5-SM8G-B cards.

**Table 23: Minimum Hardware Required for LNP Quantity Features**

| Object / Capacity | Minimum Hardware         | Part Number |
|-------------------|--------------------------|-------------|
| 24 Million TNs    | 2 GB DSM                 | 893-0110-06 |
| 36 Million TNs    | 3 GB DSM                 | 893-0110-07 |
| 48 Million TNs    | 4 GB Service Module card | 893-0110-08 |
| 60 Million TNs    | 4 GB Service Module card | 893-0110-09 |
| 72 Million TNs    | 4 GB Service Module card | 893-0110-10 |
| 84 Million TNs    | 4 GB Service Module card | 893-0110-11 |
| 96 Million TNs    | 4 GB Service Module card | 893-0110-12 |
| 108 Million TNs   | 4 GB Service Module card | 893-0110-13 |
| 120 Million TNs   | 4 GB Service Module card | 893-0110-14 |
| 132 Million TNs   | 4 GB Service Module card | 893-0110-15 |
| 144 Million TNs   | 4 GB Service Module card | 893-0110-16 |
| 156 Million TNs   | 4 GB Service Module card | 893-0110-17 |
| 168 Million TNs   | 4 GB Service Module card | 893-0110-18 |
| 180 Million TNs   | 4 GB Service Module card | 893-0110-19 |
| 192 Million TNs   | 4 GB Service Module card | 893-0110-20 |
| 204 Million TNs   | 4 GB DSM                 | 893-0110-21 |



| Object / Capacity | Minimum Hardware  | Part Number |
|-------------------|-------------------|-------------|
| 216 Million TNs   | 4 GB DSM          | 893-0110-22 |
| 228 Million TNs   | 4 GB DSM          | 893-0110-23 |
| 240 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-24 |
| 252 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-25 |
| 264 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-26 |
| 276 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-27 |
| 288 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-28 |
| 300 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-29 |
| 312 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-30 |
| 324 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-31 |
| 336 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-32 |
| 348 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-33 |
| 360 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-34 |
| 372 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-35 |
| 384 Million TNs   | E5-SM4G/E5-SM8G-B | 893-0110-36 |
| 150,000 NPANXXs   | 1 GB DSM          | 893-0094-01 |
| 300,000 NPANXXs   | 2 GB DSM          | 893-0094-02 |
| 100,000 LRNs      | 1 GB DSM          | 893-0105-05 |
| 150,000 LRNs      | 2 GB DSM          | 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 5 ISS 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 24: TPS Capacities* displays the TPS capacities for each E5-SM4G Throughput Capacity Quantity

Table 24: 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+1 cards<br>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<br>40,000 TPS (if one or more ELAP-based features is enabled) with 8+1 cards<br>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<br>163,200 TPS with one or more EPAP-based features and 24+1 cards<br>54,400 TPS with ELAP and 8+1 cards<br>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<br>240,000 TPS with one or more EPAP-related features and 24+1 cards<br>80,000 TPS with ELAP and 8+1 cards<br>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                                                                                                                                                                         |

| Feature Quantity Part Number | Maximum TPS Capacity per Card | Maximum System TPS Capacity*                                                                                                                     |
|------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
|                              |                               | 326,400 TPS with one or more EPAP-related features and 24+1 cards<br>108,800 TPS with ELAP and 8+1 cards<br>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 HIPR2 and E5 B series cards.

## HIPR2

The HIPR2 High Rate Mode feature (Part Number 893-0201-01) must be enabled before a system equipped with all HIPR2 cards can use the entire channel for data and provide a throughput rate of 2.5Gbps. If this feature is not enabled, then a system equipped with all HIPR2 cards 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 5 ISS 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 5 ISS 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

**Caution:** Any of IDPRCDPN(X) NPP services must be ON for turning ON IDPR fetaure.

## 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 5 ISS. 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.

CAUTION

### **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.

CAUTION

### **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.

CAUTION

### **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.

CAUTION

### **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 numbers of unchannelized signaling links that can be assigned to HC-MIM and E5-E1T1 cards in the system when 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.

### CAUTION

Deleted 4735 (MB)

### 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 5 ISS 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 5 ISS 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 ISUP NP with EPAP or TINP features are already 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 interface 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.

## **Output**

```
enable-ctrl-feat:partnum=893xxxxxx:fak=xxxxxxxxxxxxxxxx
```

```
tekelecstp 08-12-04 13:55:19 EST EAGLE 40.1.0
enable-ctrl-feat:partnum=893xxxxxx:fak=xxxxxxxxxxxxxxxx
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=xxxxxxxxxxxxxx
```

```
tekelecstp 10-02-26 15:40:56 EST EAGLE 42.0.0
enable-ctrl-feat:partnum=893xxxxxx:fak=xxxxxxxxxxxxxx
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 5 ISS LNP query service receives a query to which a control applies, then the EAGLE 5 ISS 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:

3 - 10 digits

Valid digits are 000–999, 000000–9999999999

**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:**

*ayyyyyyyyyyyyyyy*

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:****cics (optional)**

The start range of circuit identification codes assigned to the routing key.

**Range:****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 (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:npcfnti` 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*

### 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 (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:npcfmt.i` 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*

#### **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

```

## 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.

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 AS can be associated to only one routing key that contains a routing context value.

## 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:**

*aaaaaaaaaaaaaaaa*

Up to 15 alphanumeric characters; the first character must be a letter

### **asname (mandatory)**

Name of the Application Server (AS).

#### **Range:**

*aaaaaaaaaaaaaaaa*

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 IPSPG 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.





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 5 ISS.

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.

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, 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.

## Notes

The IPAPSOCK table is used to associate the Local Host/Local Port to a Remote Host/Remote Port. This fully specifies the 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.

## 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:**

*xyyyyyyy*

1 alphabetic character followed by up to 6 alphanumeric characters. Valid applications are:

*atmansi*—Used by LIM-ATM, E5-ATM, and E5-ATM-B cards to support ANSI high-speed ATM signaling links. Used by E5-ATM and E5-ATM-B cards to support T1 functions.

*atmitu*—Used by E1-ATM, E5-ATM, and E5-ATM-B cards to support ITU E1 high-speed ATM signaling links. Used by E5-ATM and E5-ATM-B cards to support E1 functions.

*ccs7itu*—Used by E1/T1 MIM, HC-MIM, and E5-E1T1 cards for ITU-TSS MTP functions.

*elap* - Used by E5APPB card to support ELAP/LNP functionality.

*epap* - Used by E5APPB 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.

*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 IPSM 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 E5APPB card to support LSMS/LNP functionality.

*mcp*—Used by MCPM cards for the Measurements Platform feature.

*nas* - Used by E5APPB card to support NAS (storage of LNPDB from LSMS) functionality.

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

*ss7ansi*—Used by MPL, E1/T1 MIM, HC-MIM, and E5-E1T1 cards for ANSI MTP functions.

*ss7ipgw*—Application software for TCP/IP point-to-multipoint connectivity.

*stplan*—Used by DCM, 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, 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 (SSEDCM, E5-ENET, or E5-ENET-B card). Applications for this card type are STPLAN, IPLIM, IPLIMI, SS7IPGW, and IPGWI.

**Note:** The SSEDCM card supports only the STPLAN application.

##### *dsm*

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. E5-SM8G-B card also supports SIP NP feature. The application for E5-SM8G-B card running SIP application is SIPHC.

##### *e5appb*

E5APPB card to support ELAP, EPAP, 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*

LIM-ATM, E5-ATM, or E5-ATM-B card to support high-speed signaling links. The application for this card type is ATMANSI.

***limds0***

Multi-port LIM (MPL) card to support signaling links with the DS0 interface. The application for this card type is SS7ANSI.

***lime1atm***

E1-ATM, E5-ATM, or E5-ATM-B card to support high-speed signaling links. The application for this card type is ATMITU.

***lime1***

E1/T1 MIM or HC-MIM or E5-E1T1 card used as an E1 card or an SE-HSL card. Applications for this card type are SS7ANSI and CCS7ITU.

***limt1***

E1/T1 MIM or HC-MIM or E5-E1T1 card used as a T1 card. Applications for this card type are SS7ANSI or CCS7ITU.

***limch***

E1/T1 MIM card defined as a Channel card. Applications for this card type are SS7ANSI and CCS7ITU.

***mcpm***

EDSM-2G or 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***

DCM, SSED CM, 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 Tekelec personnel in a debug mode when 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*

#### **sryname (optional)**

The name/identifier of the server/host running on E5APPB cards and Telco Switches.

**Range:**

yyyyyyyyyyyyyyyyyy

## **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=vscpp:data=dn
ent-card:loc=1101:type=e5appb:appl=epap:svname=tklcepap:force=yes
ent-card:loc=1103:type=e5appb:appl=elap:svname=tklcelap
ent-card:loc=6201:type=telco:appl=switch:sryname=telco1
ent-card:loc=1101:type=dsm:appl=siphc:data=dn
ent-card:loc=1101:type=dsm:appl=vscpp:data=elap
```

## **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 60: 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, or  $xy$  09 and  $xy$  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=gl` 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.

All provisioned shelves must contain HIPR cards before more than 115 LIM-ATM cards can be provisioned.

If the force parameter is not specified or has a value of *no*, then the increased GTT TPS from the new card must be within the Eagle current TPS rating.

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 Tekelec personnel.

If value ELAP, or EPAP is specified for data parameter, 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 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 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.

SIPNP Feature must be enabled before type=dsm and appl=siphc parameters can be specified.

DATA can only be equal to EPAP/ELAP when type=dsml and appl=siphc parameters are specified.

The srvname parameter must be specified for an E5APPB card and Telco Switch.

The srvname must be unique for each E5APPB card and Telco Switch to be provisioned in the system.

Unless the force parameter is specified, two e5appb 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 E5APPB card or Telco Switch.

Telco switch can only be provisioned in a shelf with type equal to FPB.

E5APPB card and Telco switch cannot be provisioned in the same shelf. They are mutually exclusive.

Maximum 6 Telco switches can be provisioned in a shelf.

ENETB and E5-APP-B card can be provisioned if shelf FAN bit is turned ON.

## Notes

### ITU Environment

Each DSM card can handle 1700 transactions per second.

The ent - card command validates TPS of cards that requests service from a DSM card. The EAGLE 5 ISS adds the current TPS level to the estimated TPS level of the new card. The EAGLE 5 ISS uses the following values to derive the TPS estimate: 53 TPS for low-speed links (cards provisioned as SS7ANSI or CCS7ITU), 480 TPS for ATM/E5-ATM/E5-ATM-B, and 1000 TPS for IPLIM cards. The EAGLE 5 compares the sum to the user-configured threshold (SCCP TPS Threshold) set using the chg - th - a lm command. The purpose of the SCCP TPS threshold is to generate an alarm if the threshold is exceeded. The SCCP TPS threshold triggers an error message if the resulting TPS level exceeds the threshold.

```
E3715: Cmd Rej - Insufficient #SCCP cards to support LIM - use FORCE=YES
```

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 Manual - System Management*.

### ANSI Environment

In an ANSI environment with only the G-Flex feature turned on, only DSM cards in the system and the *ansigflex* system option enabled, each DSM card can handle up to 1700 TPS.

### LIM Cards

The MPL cards support only the LIMDS0 interface, and the *appl* value must be *ss7ansi*. The MPL cards support 8 ports: a, b, a1, b1, a2, b2, a3, and b3. The `rtrv-card` command displays the status of all ports of the MPL cards.

The EAGLE 5 ISS cannot contain more than 115 provisioned LIM-ATM cards unless every provisioned shelf contains HIPR cards. The EAGLE 5 ISS checks the card configuration when the `ent-card` command is used to add a LIM-ATM card.

Using the `dlt-card` command to reduce the ATM card count takes the card out of service.

### STC Cards

STC cards are SSED CM, 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 5 ISS. If single-slot STC cards are provisioned in the database, then a minimum of two single-slot STC cards must be provisioned in the EAGLE 5 ISS. For "n+1" redundancy purposes, a dual-slot STC card cannot be used to replace a single-slot STC card, and a DCM card cannot be used to replace an E5-ENET card.

The EAGLE 5 ISS can contain a maximum of 32 STC cards.

E5-STC cards cannot be provisioned on a shelf that contains HMUX cards. If a shelf contains HMUX cards, then any E5-STC cards must be provisioned in shelves adjacent to the shelf containing the cards being monitored. The optimum configuration is to provision half of the STC cards in the previous shelf and half in the next shelf.

If cards other than E5-ENET or E5-ENET-B cards are used as STC cards, then a maximum of 3 cards can be provisioned in a shelf that contains HMUX cards.

HIPR cards must be installed on any shelf that contains E5-STC cards.

HIPR and HMUX cards cannot be used at the same time in the shelf during normal operation.

If a shelf contains HIPR cards, then the STC cards must be provisioned in the same shelf that contains the cards or links being monitored. A maximum of 4 E5-STC cards can be provisioned on a shelf that contains HIPR cards. A maximum of 16 non-E5-ENET/E5-ENET-B cards that are acting as STC cards can be provisioned on a shelf that contains HIPR cards.

If IP signalling links are being monitored, then only single-slot STC cards can be provisioned. HIPR cards must be used in the shelves where the IP links are located.

### DCM Cards

The SSED CM card occupies only one slot in an EAGLE 5 ISS shelf. The provisioning rules for DCM/STC cards allow provisioning of any slot where a DCM or STC card can physically be inserted. If the slot is provisioned for a DCM card, an E5-ENET or E5-ENET-B card can be inserted instead of a DCM card. The slot located immediately to the right of the card can also be provisioned.

As of Release 45.0, the DCM and SSED CM cards are supported only for the STPLAN and EROUTE applications.

### Cards Running the STPLAN Application



DCM, 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 5 ISS. A minimum of 2 E5-SLAN cards must be provisioned in the EAGLE 5 ISS. For "n+1" redundancy purposes. A DCM card cannot be used to replace an E5-SLAN card.

E5-SLAN cards cannot be provisioned on a shelf that contains HMUX cards. If a shelf contains HMUX cards, then the E5-SLAN cards must be provisioned in shelves adjacent to the shelf containing the cards being monitored. The optimum configuration is to provision half of the E5-SLAN cards in the previous shelf and half in the next shelf.

If DCM cards are used to run the STPLAN application, then up to 16 cards can be provisioned in a shelf that contains HMUX cards.

HIPR cards must be installed on any shelf that contains E5-SLAN cards.

HIPR and HMUX cards cannot be used at the same time in the shelf during normal operation.

If a shelf contains HIPR cards, then the cards used to run the STPLAN application (either DCM or E5-SLAN cards) must be provisioned in the same shelf that contains the cards or links being monitored. A maximum of 2 E5-SLAN cards and up to 16 DCM cards can be provisioned on a shelf that contains HIPR cards.

#### **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).

Two HIPR cards must be installed on each shelf where an E5-SM4G or E5-SM8G-B card is installed.

#### **IPSM Cards**

IPSM cards consist of E5-IPSM and E5-ENET-B cards.

Two HIPR cards must be installed on each shelf where an IPSM card is installed.

A maximum of three IPSM cards is supported for a single EAGLE 5 ISS 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 and can be used to replace the LIM-ATM and E1-ATM cards. LIM-ATM and E1-ATM cards continue to be supported.

The cards can support 2 ATM signaling links, operating at 1 Erlang. If the *b* signaling link is provisioned, then the card slot is no longer compatible with LIM-ATM or E1-ATM cards.

HIPR or HIPR2 cards must be installed on any shelf that contains E5-ATM or E5-ATM-B cards.

#### **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.

### E5-TSM Cards

A maximum of eight E5-TSM is supported for a single EAGLE 5 ISS node, on any shelf or combination of shelves, to support the GLS application for Gateway Screening. Two HIPR cards must be installed on each shelf where an E5-TSM card is installed.

### 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 DSM, E5-SM4G, and E5-SM8G-B cards.

Connectivity to a T1200 AS with EPAP version 13.0 or higher is required for greater than 25 Service Module 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.

### E5-E1T1 Cards

E5-E1T1 cards support ANSI and ITU implementations and can be used to replace the E1/T1 MIM and HC-MIM cards. E1/T1 MIM and 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.

HIPR or HIPR2 cards must be installed on any shelf that contains E5-E1T1 cards.

### 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, which are 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

MCPM cards consist of EDSM-2G and E5-MCPM-B 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-MCPM-B cards are considered to be EPM-B based cards and can co-exist or be hot-swapped with EDSM-2G cards.

### E5APPB Cards

E5APPB cards support the ELAP, EPAP, LSMS and NAS applications. E5APPB card is dual-slot card. These cards host the EPAP, ELAP, 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 E5APPB card cannot be provisioned

if there is another E5APPB card already on the same source of power and force parameter is not 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 E5APPB cards will be mutually exclusive for a shelf. There can be maximum of 6 Telco Switches in a shelf.

## Output

```
ent-card:loc=1206:type=limds0: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=vscdp:loc=1306

Command Accepted - Processing

tekelecstp 10-02-27 23:07:28 EST EAGLE 42.0.0
ent-card:type=dsm:appl=vscdp: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=vscdp:loc=1307

```

tekelecstp 10-02-27 23:11:18 EST EAGLE 42.0.0
ent-card:type=dsm:appl=vscdp: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:svname=tklcepap1

```

tekelecstp 12-07-13 11:42:29 EST 45.0.0-64.37.0
ent-card:loc=1105:type=e5appb:appl=epap:svname=tklcepap1
Command entered at terminal #4.
ENT-CARD: MASP A - COMPLTD
;

```

ent-card:loc=1103:type=e5appb:appl=elap:svname=tklcelap1

```

tekelecstp 12-07-13 11:42:55 EST 45.0.0-64.37.0
ent-card:loc=1103:type=e5appb:appl=elap:svname=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
;
```

## Related Commands

[chg-card](#), [dlt-card](#), [init-card](#), [rept-stat-card](#), [rmv-card](#), [rst-card](#), [rtro-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

**Note:** See [Point Code Formats and Conversion](#) for a detailed description of point code formats, rules for specification, and examples.

**Note:** The p2 and scpgta parameters are used only by the Prepaid IDP Query Relay feature.

**Note:** The p1 parameter is used only by the IDP Service Key Routing feature.

### 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 *skbcsn* 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 — SIP Number Portability *npbypass* list

[Table 25: 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:

ayyyyyyyyyyyyyyyyyyyyyyyyyyy

1 alphabetic character followed by up to 24 optional alphanumeric characters, including spaces and special characters, enclosed in double quotation marks ("").

- IDP Screening for Prepaid
- IDP Service Key Routing
- Info Analyzed Relay Base
- Prepaid IDP Query Relay
- SIP Number Portability
- 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:**

|                 |                            |
|-----------------|----------------------------|
| <i>ccnc</i>     | CC+NC List                 |
| <i>delpfx</i>   | Delete Prefix List         |
| <i>gt</i>       | Global Title List          |
| <i>insl</i>     | In Network Subscriber List |
| <i>npbypass</i> | SIP NPBYPASS List          |
| <i>skbcm</i>    | SK+BCSM List               |
| <i>skts</i>     | SK+TS List                 |
| <i>trig</i>     | Trigger List               |
| <i>vmpfx</i>    | 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
- *npbypass* — SIP Number Portability
- *skbcm*—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 Tekelec 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 Prepaid IDP Query Relay feature are:

- 0, 1—National or International for the DELPFX list, which is for Tekelec personnel use ONLY.

**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 be provisioned for use with NPP. This value can be entered as a number or as a mnemonic.

**Range:**

*zzzzzzzzzz*

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

**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*).

**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:npcfmt i` 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:

- *893015501*—IDP Screening for Prepaid
- *893034201*—Info Analyzed Relay Base
- *893016001*—Prepaid IDP Query Relay
- *893040601*—SIP Number Portability
- *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*

**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:pn=893040601:list=npbypass:ds=0000000012:pfxstrip=yes
```

```
ent-csl:feature:"Sip Number Portability":list=npbypass:ds=0000000034
```

## 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=skbcsn — ds and scpgta parameters
- list=skts — ds parameter
- list=insl—ds parameter
- list=vmpfx — ds parameter
- list=trig — 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
- SIP Number Portability
  - NPBYPASS — 500 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.

SIPNP Feature must be enabled before entering NP prefix entries for NPBYPASS list.

The DS (Digit String) must be between 1-15 digits in length for SIPNP Feature.

## Notes

[Table 25: 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 25: TRIGTYPE Hexadecimal Codes**

| Hex | Decimal | Mnemonic                          | Hex | Decimal | Mnemonic                                   |
|-----|---------|-----------------------------------|-----|---------|--------------------------------------------|
| 00  | 0       | Unspecified                       | 1A  | 26      | Inter-LATA_<br>Toll_Call.                  |
| 01  | 1       | All_Calls.                        | 1B  | 27      | World_Zone_<br>Call.                       |
| 02  | 2       | Double_<br>Introducing_<br>_Star. | 1C  | 28      | International_<br>Call.                    |
| 03  | 3       | Single_<br>Introducing_<br>Star.  | 1D  | 29      | Unrecognized_<br>Number.                   |
| 04  | 4       | Reserved                          | 1E  | 30      | Prior_<br>Agreement.                       |
| 05  | 5       | Double_<br>Introducing_<br>Pound. | 1F  | 31      | Specific_<br>Called_Party_<br>Digit_String |
| 06  | 6       | Single_<br>Introducing_<br>Pound. | 20  | 32      | Mobile_<br>Termination                     |
| 07  | 7       | Revertive_<br>Call.               | 21  | 33      | Advanced_<br>Termination                   |
| 08  | 8       | 0_Digit.                          | 22  | 34      | Location                                   |

| Hex | Decimal | Mnemonic                  | Hex | Decimal | Mnemonic                                        |
|-----|---------|---------------------------|-----|---------|-------------------------------------------------|
| 09  | 9       | 1_Digit.                  | 23  | 35      | Locally_Allowed<br>_Specific_Digit_<br>String   |
| 0A  | 10      | 2_Digit.                  | 24  | 36      | Orgination_<br>Atempt_<br>Authorized.           |
| 0B  | 11      | 3_Digit.                  | 25  | 37      | Calling_<br>Routing_<br>Address_<br>_Available. |
| 0C  | 12      | 4_Digit.                  | 26  | 38      | Initial_<br>Termination                         |
| 0D  | 13      | 5_Digit.                  | 27  | 39      | Called_<br>Routing_<br>Address_<br>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_<br>Party_Busy.                        |
| 11  | 17      | 9_Digit.                  | 2B  | 43      | O_No_Answer.                                    |
| 12  | 18      | 10_Digit.                 | 40  | 64      | Terminating_<br>Resource_<br>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_<br>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.                                   |
| 19  | 25      | Intra-LATA<br>_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](#), [rtro-csl](#), [rtro-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 (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:npcfmt i` 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

## **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
```

## **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-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 DCM cards (running the VWXLAN GPL) or 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 DCM cards (running the VWXSLAN GPL) or 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 GPL.

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 a DCM card (running the VXWSLAN GPL) or an E5-ENET or E5-ENET-B card (running the SLANHC GPL) must be used.

## 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

**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 (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:npcfmt.i` 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.

**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 (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:npcfmt i` 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

#### 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.**cli (optional)**

The Common Language Location Identifier assigned to this destination.

**Range:***ayyyyyyyyyyy*

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 (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:npcfmt.i` 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*

#### **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 *rcausenp* and *rcausepfx* parameters.

##### **Range:**

*0 - 127, none*

*none*—use the values specified for the TIFOPTS *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 (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:npcfmt i` 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 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

**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 `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
```

## 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 destination point code for the STP must be defined before ITU-N destinations can be entered.

The 24-bit ITU-N self-ID 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 clii 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.

## 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 "8000". When the 7000 Routesets quantity feature is on, the DESTINATION ENTRIES ALLOCATED line shows "7000."

```
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 are 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
;
```

## 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 E1/T1 MIM cards, or HC-MIM or E5-E1T1 cards used as an E1 or SE-HSL cards.

CRC4, CAS, CCS, encoding, timing source, and NFAS signaling bit options can be set with the command parameters. Do not use the DIP switches, if any, on E1 and Channel cards to define the E1 interface.

The E1 card can have a DIP switch called E1BKEN, which is used to enable or disable data transmission on the E1 backplane. Because there is no command parameter that corresponds to the DIP switch, the default value of enabled is assumed. The backplane is enabled for data transmit and receive on E1 port number 1.

On an HC-MIM or E5-E1T1 card, 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 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. No more than 2 ports on the HC-MIM or 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 a E1 port for which an interface has not been configured on the specified E1 card.

#### Range:

1 - 8

Ports 3 through 8 can be specified only for HC-MIM and E5-E1T1 cards.

Any 2 of the 8 ports on an HC-MIM 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 on an HC-MIM or E5-E1T1 card 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 E1/T1 MIM, HC-MIM, and E5-E1T1 cards that are used as E1 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 HC-MIM and E5-E1T1 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 HC-MIM and E5-E1T1 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 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 on an HC-MIM or E5-E1T1 card, 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 on an HC-MIM and E5-E1T1 card, all signaling links assigned to the adjacent even-numbered E1 port must be deleted (see the `dlt-slk` command).

Shelf FAN bit must be turned ON for the shelf on which HC-MIM card being used as E1 or SE-HSL card.

HIPR cards must be equipped in card locations `xy09` and `xy10` ( $x$  is the frame,  $y$  is the shelf) on each EAGLE 5 ISS shelf that contains one or more HC-MIM or E5-E1T1 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 HC-MIM or E5-E1T1 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 (OAM, TDM, MDAL cards) cannot be specified as values for the `loc` parameter.

The `encode=ami` parameter is supported only for E1/T1 MIM cards and HC-MIM and E5-E1T1 cards used as E1 cards.

Locations `xy09` and `xy10`, where  $x$  is the shelf and  $y$  is the slot, 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 and any associated Channel cards types (LIME1 and LIMCH) are defined in the database (see the `ent-card` command), and before the signaling links and associated timeslots are defined for the E1 card and any associated Channel cards (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 an HC-MIM or E5-E1T1 card used as a 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.

On a HC-MIM or E5-E1T1 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 `minsrate` parameter indicates the least number of SUs present on a link uniformly distributed. The number of SUs present is the `minsrate` parameter value (without link traffic) or the `minsrate` 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-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 5 ISS.

## 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 Serve table entry for the FTP-based Table Retrieve Application (FTRA) is entered through input from FTRA. Though the entry can be made with this command at the EAGLE 5 ISS, the information entered at the EAGLE 5 ISS 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:

*meas*

Measurements Platform application

*user*

FTP-based Table Retrieve Application (FTRA)

*db*

Database Backup\Restore application

$$dist$$

# EAGLE 5 ISS Software Release Distribution application

**ipaddr (mandatory)**

IP Address of the FTP Server.

**Range:**

login (mandatory)

FTP Server Username (A prompt for entering a password appears on a separate line.)

**Range:**

ZZZZZZZZZZZZZZZZZZZZ

1 to 15 alphanumeric characters; mixed-case is allowed

**path (mandatory)**

FTP path used to locate the file that will be sent.

**Range:**

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzz (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=tektoperson1: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:npcfmt i` 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-stopts:npcfmt.i* 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:ac
tion=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 be both numbers or both 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 cgssr and cdssr parameters must each begin with an alphabetic character.

The cgssr and cdssr 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, 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:action=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-GSM MAP-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-GSM MAP-SCRN: MASP A - COMPLTD
;
```

ent-gsmmap-scrn:opname=test4:cgsr=ksl:action=forward:mapset=df1t: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-GSM MAP-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:npcfmt i` 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-gttset), 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:

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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

### **cgcnavsn (optional)**

CgPA conversion set name.

#### **Range:**

*ayyyyyyyyy*

1 leading alphabetic character and up to 8 following alphanumeric characters

### **cggmod (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.

### **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:npcfmt i* 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*

#### **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 (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:npcfmt.i* 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

**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:**

*ayyyyyyyyy*

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 (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:npcfmt i* 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*

**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:**

*ayyyyyyyyy*

1 leading alphabetic character and up to 8 following alphanumeric characters

**optsn (optional)**

Optional gtt set name.

**Range:**

*ayyyyyyyyy*

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 (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:npcfmt.i` 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-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*

*msa*—000-255

*ssa*—000-255

*sp*—000-255

**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=3919512120000000:
egta=3919512123999999:xlat=dpcssn :ri=ssn:pci=1-253-1:ssn=255
ent-gta:gttsn=imsi:gta=5919755930000000:
egta=5919755932999999: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
Provisions Advanced CdPA GTA translations.
ent-gta:gttsn=setcdgta:gta=123456789012345678901:egta=223456789012345678901:
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=523456789012345678901:actsn=actudts1
ent-gta:gttsn=setcggta:gta=323456789012345678901:egta=423456789012345678901:
xlat=dpcssn:ri=ssn:pca=001-001-001:ssn=20:optsn=setcgssn
ent-gta:gttsn=cggtadsc:gta=623456789012345678901:
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=opcdisc3: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=setcggt: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
```

## 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 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 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 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 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 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) 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 pc/pca/pci/pcn/pcn24 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 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*, *opc/opca/opci/opcn/opcn24*, *cgssn*, *cdssn*, *opcode/acn/pkgtype*, *opcode/family/pkgtype*, or *dpc/dpca/dpci/dpcn/dpcn24* parameter must be specified.

The *cdselid*, *cgtselid*, 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 *cgtselid* parameters cannot be specified.

The *cgpc/cgpca/cgpci/cgpcn/cgpcn24*, *opc/opca/opci/opcn/opcn24* and *dpc/dpca/dpci/dpcn/dpcn24* 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*, *opc/opca/opci/opcn/opcn24*, 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* parameter must be specified. This parameter cannot be specified for other set types.

The *opc/opca/opci/opcn/opcn24* 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 *cgtselid* parameter.

The OBSR feature must be enabled or the FLOBR feature must be turned on before the *cgtselid* parameter can be specified.

The ANSI/ITU SCCP Conversion feature must be enabled before the GTT set specified by the *opcsn* 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 `cgcnvs` 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 `cgcnvs` 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 `cgcnvs` parameter.

If the `family` parameter is specified, then a value of *ansiuni*, *qwop*, *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 `cgcnvs` parameters must match an existing GTT set.

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*.

One or more point codes in the command will exceed the maximum number of entries in the MAP table.

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` 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` parameter cannot be specified.

If the `xlat=none` parameter is specified, then the `ri`, `pc`, `pca`, `pci`, `pcn`, `pcn24`, `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.

## 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 5 ISS. 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 OPCS. For CdPA GTA and CdPA SSN translations, if an OPTSN GTTSET/SELID is provisioned apart from an OPCS, then the OPTSN GTTSET/SELID takes precedence over the OPCS.

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 OPCS parameter can not be configured for DPC translations.

E3568, E3569, E4170, E4171, E4175, E4176, E4197, E4237 and E4236.

## Output

ent-gta:gttsn=opcdi3: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=ittoa: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=ittoa: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=ittoa: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=ittoa: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 gtixlat=22 parameter is specified, then the nai and np parameters cannot be specified.

If the gtixlat=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=ittoa 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 theon and off parameters are located in the Notes section.

### gtmodid (mandatory)

GTMOD identifier.

#### Range:

*ayyyyyyyyy*

1 leading alphabetic character followed by up to 8 alphanumeric characters

### cgpasnn (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:***px*

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 than 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 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-gttset*), 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:npcfmt.i` 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-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*

*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:**

*ayyyyyyyyy*

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:**

*ayyyyyyy*

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/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 5 ISS 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:cggmod=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:npcfmt.i` 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 26: Valid ent-gtt Routing Parameter Combinations](#) shows the valid combinations for the xlat, ri, and ssn parameters. All other combinations are rejected.

**Table 26: 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 |  |
| 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.

One or more point codes in the command will exceed the maximum number of entries in the MAP table.

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 200,00 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 5 ISS does not require a MAP table entry to be configured prior to provisioning a GTT entry. The EAGLE 5 ISS 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 5 ISS. 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 MAP table results in a set of mate PC/SSNs, from which one is selected to route the MSU in 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-gttset` 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-gttset` command, or if the GTT set name of an entry is changed using the `chg-gttset` 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

*tcaperr*

discard message that has a specified TCAP error

*udts*

discard message and send UDTS/XUDTS

*fwd*

route the original message to a specified forward node instead of the destination indicated by the GTT/ DB data

**actid (mandatory)**

This parameter specifies the Action ID associated with the GTT action entry.

**Range:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:npcfmt.i** 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-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*

*msa—000-255*

*ssa—000-255*

*sp—000-255*

**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 data in the GTT Action

**Default:**

*dflt*

**defactid (optional)**

Default Action ID. The default action that is performed when the  *fwd* GTT Action fails to route the MSU.

**Range:** *ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:npcfmt i** 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-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*

*msa—000-255*

*ssa—000-255*

*sp—000-255*

#### **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***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
```

## 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 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/cgpcacgpci/cgpcn/cgpcn24 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 and cgpc/cgpcacgpci/cgpcn/cgpcn24 parameters must be within the range specified by the parameter definition.

The point code specified for the pc/pci/pcn/pcn24 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, cgpc/cgpcacgpci/cgpcn/cgpcn24, ssn, ri, mrnset, mapset, loopset, cgpcogmsg, cdgtmodid, or cggmodid 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 udtser parameter can be specified.

The act=fwd parameter must be specified before the defactid parameter can be specified.

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 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 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, 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 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 parameter must be a point code that is already associated with a valid route.

The AMGTT feature must be enabled before the cggmodid parameter can be specified.

The value specified for the cdgtmodid and cggmodid parameters must already exist in the GTMOD table.

A value of *none* cannot be specified for the cdgtmodid or cggmodid 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 and cgpc/cgpca/cgpci/cgpcn/cgpcn24 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.

## 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:

*ayyyyyyyyy*

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

#### **cggtsn (optional)**

GTT set name (CGPA type).

##### **Range:**

*ayyyyyyyyy*

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

#### **opgtsn (optional)**

GTT set name (Opcode type).

##### **Range:**

*ayyyyyyyyy*

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

|                                                                                     |                                 |
|-------------------------------------------------------------------------------------|---------------------------------|
| <i>resp</i>                                                                         | Response                        |
| <i>cwp</i>                                                                          | Conversation with Permission    |
| <i>cwop</i>                                                                         | Conversation without Permission |
| <i>any</i>                                                                          | Wildcard value                  |
| <i>bgn</i>                                                                          | Begin                           |
| <i>end</i>                                                                          | End                             |
| <i>cnt</i>                                                                          | Continue                        |
| <i>ituabort</i>                                                                     | ITU abort                       |
| <i>ansiabort</i>                                                                    | ANSI abort                      |
| <i>ansiuni</i>                                                                      | ANSI unidirectional             |
| ANSI TCAP Package Types— <i>ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort, any</i> |                                 |
| ITU TCAP Package Types— <i>bgn, ituabort, ituuni, any, end, cnt</i>                 |                                 |

## Example

```
ent-gttapath:gtttn=path1:opgttsn=opsn1:acn=111-111-111-111-111-111-111:opcode=
123:pkgtype=ituuni:cdgttsn=cdsn1:cdgta=7654
```

```
ent-gttapath:gtttn=path2:cgttsn=cgsn2:cggta=45673:opgttsn=opsn2:opcode=124:
family=2:pkgtype=ansiuni
```

```
ent-gttapath:gtttn=path3:opgttsn=opsn2:pkgtype=ansiuni:opcode=124:family=2:
cgttsn=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, cggtsn, 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, cggtsn, or cdgttsn parameter must match an existing GTT setname.

The GTT set name specified by the opgttsn, cggtsn, 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:gtttn=path2:cggtsn=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:gtttn=path2:cggtsn=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:

*ayyyyyyyyy*

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:

*ayyyyyyyyy*

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:

*ayyyyyyyyy*

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:

*ayyyyyyyyy*

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:

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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
```

## **Dependencies**

Failure while reading the GTT Action table.

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*, or *tcaperr*.

If an Action ID associated with an act of *fwd* is specified, then no other Action ID in the Action Set can be associated with an act of *disc*, *udts*, *tcaperr*, or *fwd*.

If the Action Set contains 5 Action IDs associated with an act of *dup*, then the remaining action ID cannot be associated with an act of *dup*.

Action IDs associated with an act 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*

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-gttset`), 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

### **gti/gtia/gtii/gtin/gtin24/gtiis/gtins (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), and GTINS (ITU national spare).

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=0, 2, 4

### **cdgtasn (optional)**

CdPA GTA GTT set name.

#### **Range:**

*ayyyyyyyyy*

1 leading alphabetic and up to 8 following alphanumeric characters

### **cdgttsn (optional)**

CdPA GTT set name.

#### **Range:**

*ayyyyyyyyy*

1 leading alphabetic and up to 8 following alphanumeric characters

### **cgtasn (optional)**

CgPA GTA GTT set name.

#### **Range:**

*ayyyyyyyyy*

1 leading alphabetic and up to 8 following alphanumeric characters

### **cgttsn (optional)**

CgPA GTT set name.

**Range:**

*ayyyyyyyyy*

1 leading alphabetic and up to 8 following alphanumeric characters

**cgpcsn (optional)**

CgPA PC GTT set name.

**Range:**

*ayyyyyyyyy*

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 5 ISS 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:**

*ayyyyyyyyy*

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-gtttsel:gti=0:cdgttsn=acdgtta
```

```
ent-gtttsel:gtia=2:tt=10:gttsn=t800
```

```

ent-gtttsel:gtia=2:tt=253:gttsn=setans253
ent-gtttsel:gtii=4:tt=0:np=e164:nai=intl:gttsn=setint000
ent-gtttsel:gtii=2:tt=0:gttsn=setint000
ent-gtttsel:gtin=4:tt=9:np=e214:nai=natl:gttsn=imsi
ent-gtttsel:gtii=4:tt=0:np=e164:nai=sub:gttsn=setint000
ent-gtttsel:gtia=2:tt=20:cdgtasn=setcdgta:
cggtasn=setcggtta:cgssn=10:selid=0
ent-gtttsel:gtia=2:tt=21:cggttsn=setcgpc:cdgttsn=setcdgta:
cgssn=20:selid=1:lsn=ls10
ent-gtttsel:gtii=2:tt=40:cdgtasn=setcdgta:cgpcsn=setcgpc:cgssn=12
ent-gtttsel:gtii=2:tt=41:cgpcsn=setcgpc:cgssn=255:selid=65534
ent-gtttsel:gtin=4:tt=60:npv=5:naiv=5:cdgtasn=setcdgta
ent-gtttsel:gtin=4:tt=60:npv=5:naiv=6:cgpcsn=setcgpc:cgssn=112
ent-gtttsel:gtia=2:tt=9:cdgttsn=lidb:eaglegen=yes
ent-gtttsel:gti=0:cdgttsn=acdgtta:selid=1

```

## 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=2 parameter is specified, then the np/npv and nai/naiv parameters cannot be specified.

If the gtii/gtin/gtin24/gtiis/gtins=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 cggtsn parameters.

At least one GTT set name parameter must be specified. These parameters include:

- cdgtasn, cggtasn, or cgpcsn if the OBR feature is enabled
- cdgttsn or cggtsn if the FLOBR feature is turned on
- gttsn if the OBR feature is not enabled and the FLOBR feature is not turned on

The OBR 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 *cggtsn* parameters can be specified.

If the FLOBR feature is turned on, then the *cdgtasn*, *cggtsn*, 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 *cggtsn*, *cggtsn* or *cgpcsn* parameter must already exist in the GTT Set table.

The network domain of the GTT set that is specified by the *cggtsn*, *cggtsn*, or *cgpcsn* parameter must match the domain specified by the *gti(x)* parameter.

The set type of the GTT set specified by the *cggtsn* 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 *cggtsn*, *cgpcsn*, and *cggtsn* 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 *cggtsn*, *cgpcsn* or *cggtsn* parameter is specified, then the *cgssn* parameter must be specified.

If the *cdgttsn* or *cggtsn* parameter is specified, then the *lsn* parameter must be specified.

If the *eaglegen=yes* parameter is specified, then the *lsn*, *selid*, *gttsn*, *cdgtasn*, *cgssn*, *cggtsn*, *cggtsn* , 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=4*, the domain of the new entry must match the existing domain.

## Notes

For `gtii/gtin=4`, DFLT may appear in the `rtrv-gttset` output, but *dflt* cannot be specified as value for the `np` or `nai` parameters when the `ent-gttset` 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-gttset` 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.

## Output

`ent-gttset:gti=0:cdgttsn=acdgt`

```
tekelecstp 10-04-05 15:41:49 EST Eagle 42.0.0
ent-gttset:gti=0:cdgttsn=acdgt
Command entered at terminal #4.
ENT-GTTSEL: MASP A - COMPLTD
;
```

## Related Commands

[chg-gttset](#), [dlt-gttset](#), [rtrv-gttset](#)

## 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:

*ayyyyyyyyy*

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*

*cggtta*

*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=cggtta
```

```
ent-gttset:gttsn=setxyz:netdom=ansi:ndgt=11:settype=cggtta
```

```
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 *cggtta*, *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 (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:npcfmt1* 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

### **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
```

## Dependencies

The dpc/dpca/dpci/dpcn/dpcn24 parameter must be defined in the Destination table or defined as the STP site point code.

If the dpc/dpca/dpci/dpcn/dpcn24 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 EAGLE 5 ISS 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 5 ISS 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.

## Notes

None

## Output

ent-home-smsc:smc=256489

```
rlghncxa03w 04-02-28 08:50:12 EST EAGLE 31.3.0
ENT-HOME-SMSC: MASP A - COMPLTD
;
```

## Related Commands

[dlt-home-smsc](#), [rtro-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.

## Notes

None

## Output

ent-homern:rn=C441234

```

 rlgncxa03w 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 connection information. The IPCONN table supports the provisioning information related to the SIP connections.

## Parameters

**cname (mandatory)**

Connection name. This parameter specifies the unique logical name assigned to each SIP connection.

**Range:**

ZZZZZZZZZZZZZZZZZZZZ

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:**

[illegible]

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)**



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.

## 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
;
```

## Related Commands

*dlt-ip-conn, rtrv-ip-conn, chg-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:**

[illegible]

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 *.*

**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.

**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 5 ISS.

*remote*

The IP host name and IP address resides on equipment not in this EAGLE 5 ISS.

**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
```

## 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.

## Notes

None

## 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
;
```

## 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 DCM, 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%.

## 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.

### Determining the correct CAP value for ECAP

The STPLAN uses a TVG (grant) rate value, while the ECAP uses an MSUs per second value. These values do not have a 1-to-1 correlation. Therefore, the average number of MSUs per TVG can vary depending on the average MSU size. When calculating the `cap` parameter value, the average number of MSUs per TVG must be factored. The formula for determining the `cap` value is as follows:

$$\text{cap value} = (\text{Host capacity} / (175 [\text{or } 17.5] * \text{MSU}/\text{TVG})).$$



**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.

**Note:** The `cap` value is rounded down.

- **Host capacity**—capacity of the ECAP server
- **MSU/TVG**—average number of MSUs a single system buffer can transfer to Remote Host

If the MSU/TVG value is not known, then 2 should be used as the MSU/TVG value. If a value of 2 is used, then the network must be monitored to determine if the `cap` value requires adjustment.

### Using the CAP Value to Calculate Throughput for DCM and 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 DCM, 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
  - DCM card—2870
- $175 [\text{or } 17.5] * \text{cap parameter value}$





**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](#)

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:**

### **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***cli (optional)**

The Common Language Location Identifier (CLLI) code, or other mnemonic identifier, used to refer to the given loopback point.

**Range:***ayyyyyyyyyyy*

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=nl* 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:cli=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:cli=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=nl* 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 clii 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 LIMDS0, LIMIT1, or LIMCH (associated to a LIMIT1) card that is running an 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*

*lidx*

*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.
- *falltogg* —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*, *lnqst*

**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 = lldb : tt = 16 : dv = tcap : ttn = mrlldb
```

```
ent - lnp - serv : serv = lnrqt : 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=wsmc 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 *wsmc* 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-stopts:npcfmt i* 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

### **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
```

## 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 be 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.

## 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*, *rtro-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*

### apc/apca/apci/apcn/apcn24 (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*).

### 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:npcfmt.i* 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*).

### 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* indicates a private point code (*prefix-msa-ssa-sp*).

### 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:**

|            |                |
|------------|----------------|
| <i>a</i>   | Access links   |
| <i>b</i>   | Bridge links   |
| <i>c</i>   | Cross links    |
| <i>d</i>   | Diagonal links |
| <i>e</i>   | Extended links |
| <i>prx</i> | Proxy links    |

**adapter (optional)**

The adapter layer for links provisioned in a 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 IPSP-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***cggmod (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:***ayyyyyyyyyyy*



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

*acdgcg*

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

*fcgfc*

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*

**gwsn (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 IP SG 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 27: Incoming SLS Bit Rotation for ITU* shows how the rotation affects the four bits of the ITU SLS during linkset selection:

Table 27: Incoming SLS Bit Rotation for ITU

| If This Bit is Selected... | Then Bit Locations 4 3 2 1<br>Are Rotated To...                  | Description                                                                              |
|----------------------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Bit 4                      | 3 2 1 4                                                          | SLS = 0110 becomes<br>Rotated SLS = 1100<br><br>SLS = 1011 becomes<br>Rotated SLS = 0111 |
| Bit 3                      | 2 1 4 3                                                          | SLS = 0110 becomes<br>Rotated SLS = 1001<br><br>SLS = 1011 becomes<br>Rotated SLS = 1110 |
| Bit 2                      | 1 4 3 2                                                          | SLS = 0110 becomes<br>Rotated SLS = 0011<br><br>SLS = 1011 becomes<br>Rotated SLS = 1101 |
| Bit 1                      | No rotation is performed<br>because bit 1 is the existing<br>LSB | -                                                                                        |

*Table 28: Incoming SLS Bit Rotation for ANSI* shows how the rotation affects the eight bits of the ANSI SLS during linkset selection:

Table 28: Incoming SLS Bit Rotation for ANSI

| If This Bit is Selected... | Then Bit Locations 8 7 6 5<br>4 3 2 1 Are Rotated To... |                                                                                                          |
|----------------------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Bit 8                      | 7 6 5 4 3 2 1 8                                         | SLS = 10010110 becomes<br>Rotated SLS = 00101101<br><br>SLS = 11001011 becomes<br>Rotated SLS = 10010111 |
| Bit 7                      | 6 5 4 3 2 1 8 7                                         | SLS = 10010110 becomes<br>Rotated SLS = 01011010<br><br>SLS = 11001011 becomes<br>Rotated SLS = 00101111 |
| Bit 6                      | 5 4 3 2 1 8 7 6                                         | SLS = 10010110 becomes<br>Rotated SLS = 10110100<br><br>SLS = 11001011 becomes<br>Rotated SLS = 01011110 |
| Bit 5                      | 4 3 2 1 8 7 6 5                                         | SLS = 10010110 becomes<br>Rotated SLS = 01101001                                                         |

| If This Bit is Selected... | Then Bit Locations 8 7 6 5<br>4 3 2 1 Are Rotated To...           |                                                                                                          |
|----------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|                            |                                                                   | SLS = 11001011 becomes<br>Rotated SLS = 10111100                                                         |
| Bit 4                      | 3 2 1 8 7 6 5 4                                                   | SLS = 10010110 becomes<br>Rotated SLS = 11010010<br><br>SLS = 11001011 becomes<br>Rotated SLS = 01111001 |
| Bit 3                      | 2 1 8 7 6 5 4 3                                                   | SLS = 10010110 becomes<br>Rotated SLS = 10100101<br><br>SLS = 11001011 becomes<br>Rotated SLS = 11110010 |
| Bit 2                      | 1 8 7 6 5 4 3 2                                                   | SLS = 10010110 becomes<br>Rotated SLS = 01001011<br><br>SLS = 11001011 becomes<br>Rotated SLS = 11100101 |
| Bit 1                      | No rotation is performed<br>because bit 1 is the existing<br>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 - lsops s` 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 IPSP 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 IPSP card that is used and whether the E5-ENET-B IPSP High Throughput feature is turned on:

- E5-ENET card-5000 TPS
- E5-ENET-B card when the E5-ENET-B IPSP High Throughput feature is turned off-6500 TPS
- E5-ENET-B card when the E5-ENET-B IPSP High Throughput feature is turned on-9500 TPS

**System Default:**

value of `slktps/rsvdslktps` parameter

**mtprese (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 (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:npcfmt.i` 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***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 enables 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 IPSP-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 IPSP Linkset. The capacity guaranteed to each link in the linkset.

**Note:** This parameter is required for each link in an IPSP linkset. The parameter cannot be specified for links in non-IPSP linksets. The guaranteed capacity for the links hosted by an IPSP card cannot exceed the IPSP 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:**

*rsvdsllktps*

**Range:**

0 - 9500

**Note:** The maximum value that can be specified for this parameter depends on the type of IPSP card that is used and whether the E5-ENET-B IPSP High Throughput feature is turned on:

- E5-ENET card-5000 TPS
- E5-ENET-B card when the E5-ENET-B IPSP High Throughput feature is turned off-6500 TPS
- E5-ENET-B card when the E5-ENET-B IPSP 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/rsvdsllktps 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 29: 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 30: SLS Bit Rotation](#) shows how the rotation affects the four bits of the SLS during linkset selection:

**Table 30: 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<br>SLS = 1011 becomes Rotated SLS = 0111 |
| Bit 3                      | 2 1 4 3                                      | SLS = 0110 becomes Rotated SLS = 1001<br>SLS = 1011 becomes Rotated SLS = 1110 |
| Bit 2                      | 1 4 3 2                                      | SLS = 0110 becomes Rotated SLS = 0011                                          |

| If This Bit is Selected... | Then Bit Locations 4 3 2 1<br>Are Rotated To...                  | Description                              |
|----------------------------|------------------------------------------------------------------|------------------------------------------|
|                            |                                                                  | SLS = 1011 becomes<br>Rotated SLS = 1101 |
| Bit 1                      | No rotation is performed<br>because bit 1 is the existing<br>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 (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:npcfmt.i` 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

**tpsalmttype (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:gmscrn=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:lsta:cggmod=yes
```

Adds an IPSP-M3UA linkset:

```
ent-ls:lsn=ls1201:apc=10-10-10:lsta:adapter=m3ua:ipsg=yes:slktps=100
```

Adds an IPSP-M2PA linkset:

```
ent-ls:lsn=lsm2pa:apc=5-6-7:lsta:ipsg=yes:slktps=300
```

Adds a linkset and sets the Incoming SLS Bit Rotation on the 2nd Bit:

```
ent-ls:lsn=lsa:lsta: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:lsta: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:lsta:apca=1-1-1:islsrsb=6
```

Converts the linkset to SLT reflect mode

```
ent-ls:lsn=ls1:lsta:apca=1-1-1: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, gwsn=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 `apctype` 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 `slrsb` 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 `gmscrn` parameter can be specified.

The `itutfr` parameter is valid only for ITU national linksets on the EAGLE 5 ISS STP or ITU linksets on the IP7 Secure Gateway.

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 `gmscrn=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 *acdc*, *cgacdc*, *acdcgc*, *acdcgcg*, *cgcd*, *cdcg*, or *cg*.

A new IPGW link set 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 link set 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` 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.

A failure occurred when trying to read the SPC table.

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 `cggmod` 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 5 ISS.

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*, *fcgfcg*, or *fcdfcg* can be specified for the `gtmode` 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.

## 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 than 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 SLs. For other linkset types, the asl8=yes parameter indicates that the adjacent STP is converting 5-bit SLs to 8-bit SLs. 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 SLs.

The Network Indicator Spare (nis) parameter can be specified only for ANSI and ITU-N links.

The mtprese parameter value can be specified independently of the value specified on the mtpresi parameter of the chg-stpopts command.

The MTP restart option (mtprese) 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 slsobit and slsrsb/slsrsb values.



### CAUTION

**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 `slrsb` 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 `slsobit` 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 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](#), [dlt-ls](#), [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 5 ISS 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 (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:npcfmt i` 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*

**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 5 ISS 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 5 ISS 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 (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*

**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 (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

**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 5 ISS 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
```

Thus 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=df lt
```

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=df lt
```

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=df lt
```

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
```

## 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 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 or ANSI point code.
- For the AIQ, ATINPQ, VFLEX, and EIR subsystems, the True Point code can not 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 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, or EIR 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 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 5 ISS 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 5 ISS 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

Both OAM cards must be running GPSM II.

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.

One or more point codes in the command will 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, V-FLEX, and EIR)
- ITU-I—4 (ANSI41 AIQ, ATINPQ, EIR, V-FLEX)
- ITU-N—5 (for 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.

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 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/mrnpai/mrnpn/mrnpn24 parameter must be 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

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.

## 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 5 ISS 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 5 ISS 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 5 ISS 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

**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 5 ISS 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 `dflwt` 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 (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:npcfmt.i` 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

**dflwt (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 *dflwt* 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 (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:npcfmt i` 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*

**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 (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:

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:npcfmt i` 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:npcfmt i` 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:npcfmt.i` 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:npcfmt.i` 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. 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=df1t
```

```
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:df1tw1=20
```

```
ent-mrn:pc=1-1-0:rc=10:pc1=1-1-1:rc1=10:wt1=30:pc2=1-3-2:rc2=10:df1tw1=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:df1tw1=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:df1tw1=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
```

## Dependencies

The Intermediate Global Title Translation Loadsharing feature must be turned on before this command can be entered.

The apca and pcn24 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 5 ISS 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 `dfltw` parameters can be specified.

If the `wt/wt1/wt2/wt3/wt4` parameter is specified, the corresponding `pc/pc1/pc2/pc3/pc4` parameter must be specified.

When creating or modifying a weighted entity set, the `dfltw` 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 `dfltw` 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 dflwt parameter must be specified.

If PCs are being added to a non-weighted entity set, the wt/wt1/wt2/wt3/wt4 and the dflwt parameters cannot be specified.

At least one optional parameter must be specified.

If the wt/wt1/wt2/wt3/wt4 parameters are specified, the dflwt 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 parameter must be 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

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 MAP table is corrupt or cannot be found.

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 5 ISS supports the following modes for nodes and subsystems:

- A group of replicated PCs are *indominant* 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 *inload 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 5 ISS 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*

### 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 specified network appearance cannot already exist in the Network Appearance table.

## 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](#), [rtro-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:** As of Release 45.0, the individual CA, SA, and FA parameters are obsolete. CAs, FAs, and SAs must be specified using the comma-separated list (ca, fa, and sa parameters). The ca1, fa1, and sa1 parameters are shown at the end of the parameter list in their obsolete status. For readability purposes, the remaining CA, SA, and FA parameters are not shown.

**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\*, andcc\* 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 and TIF Subscriber CgPN Blacklist 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, fpx, 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, asdoth, cc, dlma, dlmb, dlmc, dlmd, dlme, dlmf, dlmg, dlmh, dlmi, dlmj, dlmk, dlml, dlmm, dlmn, dlmo, dlmp, dn, fpx, grn, grnoth, orig, pfxa, pfxb, pfxc, pfxd, pfxe, pfxf, rn, rnospodn, rnosposn, rnospoz, 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, blkstgry, blkstrly, blnfndrls, blrls, cdial, ccncchk, cdpnnp, cgpnasdrqd, cgpngrnrqd, cgpnnp, cgpnrtd, cgpnsucr, crp, fpxrls, fraudchk, fwdscs, grnlkup, inprtd, lacck, migrate, nocgpnr, npnr, nprelay, nprls, nscgp, nscdp, pprelay, rtdbtrn, rtdbtsp, rtdbtrns, skgtartg, snsrgp, 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.





```
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=inpirtg,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=int l
```

```
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:svrn=nppt:fpfx=a:fdl=10:fnai=intl:asn=asn2
ent-npp-srs:svrn=tif:fnai=INTL:fpfx=9090:fdl=:asn=set1:invkserv=tifcgpn
ent-npp-srs:svrn=nppt:asn=testzn1:fnai=nai2:fdl=:fpfx=1?2?3
ent-npp-srs:svrn=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 `svrn` parameter.

The AS specified by the `asn` parameter cannot contain Service Actions that are not supported by the service specified by the `svrn` parameter.

The AS specified by the `asn` parameter cannot contain Formatting Actions that are not supported by the service specified by the `svrn` 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 `svrn` 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 `svrn` 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 containing 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 `fpx` 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 *tifcgpnpn*, *tifcgpnp2*, or *tifcgpnp3* 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 *tifcgpnpn*, *tifcgpnp2*, or *tifcgpnp3* 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 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 between 1-FF.

## Notes

None.

## Output

```
ent-npp-srs:svrn=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:npcfmt.i` 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:npcfmt.i` 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:npcfmt.i` 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 (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*

**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 numbers.

**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
```

## 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

**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:

*ayyyyyyyyyyy*

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 (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:npcfmt i* 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

#### **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-10-100-14: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
```

## 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:npcfmt i*.

The *dpc/dpca/dpci/dpcn/dpcn24* 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* 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/dpci/dpcn/dpcn24* parameter can be specified.

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* parameter cannot be the same as the EAGLE 5 ISS capability point code.

The value of the *dpc/dpca/dpci/dpcn/dpcn24* parameter cannot be the same as the EAGLE 5 ISS capability point code.

The value of the *dpc/dpca/dpci/dpcn/dpcn24* 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:npcfmt i* 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 (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

#### **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 (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:npcfmt* 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*

#### **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
```

Searching rtx table on disk - please wait...

## **Dependencies**

Only one of the opc, ils, 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 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 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 ils 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 5 ISS. 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* parameter have the same value, or if the value specified for the *opc/opca/opci/opcn/opcn24* 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* parameter cannot be the same as the adjacent point code of the linkset specified by the *lsn* parameter.

## 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:**

*ayyyyyy*

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

**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.

**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*

**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

**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
```

## Dependencies



CAUTION

**Caution:** Even though gateway screening is in the screen test mode, as defined by the `gwsa=off` and `gws=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 four point code parameter combinations: `ni-nc-ncm`, `zone-area-id`, `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 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`, 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 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 AFTP 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`). The `pcst` and `npcst` parameters cannot be specified for ANSI and ITU-N24 point codes.

The Gateway Screening Rules table can contain a maximum of 372,600 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.

## 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 - aftp` 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.

## Output

```
ent - scr - aftp : 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-aftp\*](#), [\*dlt-scr-aftp\*](#), [\*rtro-scr-aftp\*](#)

## 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:**

*ayyyy*

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:**

*ayyyyyy*

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

**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.

**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:**

*yyyy*

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*

**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

**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=wrds
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
```

## Dependencies



### CAUTION

**Caution:** Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gws=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 362,700 rules.

A complete point code must be specified, using the ni-nc-ncm, zone-area-id, 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 DPC screen is created, the first entry for the ni-nc-ncm, zone-area-id, or msa-ssa-sp 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 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 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*, 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*, 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*, 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*). The *pcst* parameter cannot be specified for ANSI and ITU-N24 point codes.

If the *ssa=\** parameter is specified, then the *sp=\** 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 screen reference exists, then the *ni*, *zone*, *msa*, and *npc* parameters cannot have a value of *c*.

## 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, 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, 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.

## Output

```
ent-scr-blkdpc:sr=iec:ni=c:nc=c:ncm=c:nsfi=cgpa:nsr=wrds5
```

```
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:**

*ayyyy*

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:**

*ayyyyyy*

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

**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.

**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*

**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

### 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

```
ent-scr-blkopc:sr=iec:ni=c:nc=c:ncm=c:nsfi=cgpa:nsr=wrds
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
```

## Dependencies



### CAUTION

**Caution:** Even though gateway screening is in the screen test mode, as defined by the `gwsa=off` and `gwsn=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 362,700 rules.

A complete point code must be specified, using the `ni-nc-ncm`, `zone-area-id`, `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 OPC screen is created, the first entry for the `ni-nc-ncm`, `zone-area-id`, or `msa-ssa-sp` must be *c-c-c* or `npc` must be *c*. 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 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 `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`, 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`, 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`, 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`, `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`). The `pcst` parameter cannot be specified for ANSI and ITU-N24 point codes.

If `ssa=*` is specified, `sp=*` 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 screen reference exists, then the ni, zone, msa, and npc parameters cannot have a value of *c*.

## 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, 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, 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 or has the spare point code prefix.

## Output



```
ent-scr-blkopc:sr=iec:ni=c:nc=c:ncm=c:nsfi=cgpa:nsr=wrds
```

```
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:***ayyyyyy*

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

**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.

**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

**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

**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=aftp:nsr=wrds
```

```
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
```

## Dependencies

**CAUTION**

**Caution:** Even though gateway screening is in the screen test mode, as defined by the *gwsa=off* and *gwsn=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 372,600 rules.

A complete point code must be specified, and must be one and only one of the four point code parameter combinations: *ni-nc-ncm*, *zone-area-id*, *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*, 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`). The `pcst` parameter cannot be specified for ANSI and 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.

## 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 or has the spare point code prefix.

## Output

```
ent-scr-cdpa:sr=iec:ni=240:nc=010:ncm=:ssn=224:nsfi=aftpc:nsr=wrds
```

```
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:**

*ayyyyyy*

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

**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.

**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:**

\*

**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

**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=wr5: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
```

## Dependencies



### CAUTION

**Caution:** Even though gateway screening is in the screen test mode, as defined by the `gwsa=off` and `gws=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 372,600 rules.

A complete point code must be specified, and must be one, and only one of the four point code parameter combinations: `ni-nc-ncm`, `zone-area-id`, `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`, 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 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`). The `pcst` parameter cannot be specified for ANSI and 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 `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.

## 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 or has the spare point code prefix.

## Output

```
ent-scr-cgpa:sr=iec:ni=240:nc=010:ncm=*:ssn=224:nsfi=aftpc:nsr=wrds: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:

*ayyyyyy*

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

### 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.

**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*

**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

**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
```

## Dependencies



**CAUTION**

**Caution:** Even though gateway screening is in the screen test mode, as defined by the *gwsa=off* and *gwsn=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 362,700 rules.

The destination point code specified by `ni-nc-ncm`, `zone-area-id`, `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 `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 `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`). The `pcst` and `npcst` parameters cannot be specified for ANSI and ITU-N24 point codes.

If the `nsfi=fail` parameter is specified, then the `nni`, `nc`, `nncm`, `narea`, `nzone`, `nid`, `nmsa`, `nssa`, `nsp`, and `npc` parameters cannot have a value of `c`.

## 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 or has the spare point code prefix.

## 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:**

*ayyyyyy*

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

**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.

**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***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

**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
```

**Dependencies**



**Caution:** Even though gateway screening is in the screen test mode, as defined by thegwsa=off and gwsn=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 362,700 rules.

The destination point code specified by ni-nc-ncm, zone-area-id, msa-ssa-sp, 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 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 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). The pcst parameter cannot be specified for ANSI and ITU-N24 point codes.

If the nsfi=fail parameter is specified, then the ni, nc, ncm, area, zone, id, msa, ssa, sp, and npc parameters cannot have a value of c.

The value of the nsfi parameter must be valid for the BLKDPC entity type.

## 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, 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, 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.

## 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:**

*ayyyy*

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:**

*ayyyyyy*

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:**

*ayyyy*

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.

## 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

**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.

**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*

**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

**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
```

## Dependencies



### CAUTION

**Caution:** Even though gateway screening is in the screen test mode, as defined by the `gwsa=off` and `gwsn=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 362,700 rules.

A complete point code must be specified, using the `ni-nc-ncm`, `zone-area-id`, `msa-ssa-sp`, or `npc` combination unless a value of *c* is specified.

The OPC specified by `ni-nc-ncm`, `zone-area-id`, `msa-ssa-sp`, 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 `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 `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`). The `pcst` parameter cannot be specified for ANSI and ITU-N24 point codes.

If the nsfi=fail parameter is specified, then the nni, nc, nncm, narea, nzone, nid, nmsa, nssa, nsp, and npc parameters cannot have a value of *c*.

The value of the nsfi parameter must be valid for the OPC entity type.

## 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 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 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, 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, 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.

## 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:**

*ayyyy*

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:**

*ayyyyyy*

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**

**Caution:** Even though gateway screening is in the screen test mode, as defined by the gwsa=off and gwsn=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 31: Additional Valid ent-scr-sio Parameter Combinations](#) to determine the acceptable combination of the specified parameter values:

**Table 31: 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         |
| <b>Legend</b> <ul style="list-style-type: none"> <li>• s = single value</li> <li>• r = range</li> <li>• * = asterisk</li> <li>• u = unspecified</li> </ul> |           |           |           |           |

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 362,700 rules.

## 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:**

ayyyyyy

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=wrds
```

```
ent-scr-tt:sr=iec:type=012:nsfi=stop:actname=copy
```

## Dependencies



**CAUTION**

**Caution:** Even though gateway screening is in the screen test mode, as defined by the `gwsa=off` and `gwsn=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 362,700 rules.

The value specified for the type parameter must be within the allowed range.

## 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=wrds
```

```
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.

## 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 5 ISS 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:

```
aaayyyyyyyy
```

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.

## 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

[\*rtro-serial-num\*](#)

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 (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:npcfmt.i` 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

## 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
```

## 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-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 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.

## 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.

## 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
;
```

## Related Commands

*chg-sid*, *rtro-sid*

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:**

[illegible]

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:**

7.7.7.7.7.7.7.7.7.7.7.7.7.7

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:**

ZZZZZZZZZZZZZZZZZZZZ

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*

**px (optional)**

Prefix

**Range:**

ZZZZZZZZZZZZZZZZZZZZ

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=df1t: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 PHCXT 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.
PHCXTID 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.
PHCTXID 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 E1/T1 MIM, HC-MIM, Channel or E5-E1T1 cards, use this command to associate a signaling link and a timeslot with the E1 or T1 interface that will service the timeslot.

For HC-MIM cards used for SE-HSL links, use this command to assign links A and B on any 2 of the 8 HC-MIM 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 8 signaling links can be assigned to one E1/T1 MIM card, allowing links A, A1 - A3, B, and B1 - B3 to be provisioned. Up to 64 signaling links can be assigned to one HC-MIM 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.

One signaling link can be assigned to a LIMATM or E1-ATM card, allowing link A 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 5 ISS 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 52: 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.

If the signaling link is being assigned to an E1 or T1 card for a Channel card, specify the location of the Channel card. If the link is being assigned for the E1 or T1 card itself, specify the location of the E1 or T1 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

### **lsn (mandatory)**

Linkset name. The linkset name must be unique.

#### **Range:**

ayyyyyyyyyyy

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 IPSC linkset.

#### **Range:**

ayyyyyyyyyyyyyyy

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  $\pm$  200 Hz for ANSI links and 2.048 MHz  $\pm$  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.

#### CAUTION

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 Manual - SS7*.

#### 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

#### Default:

*56000*

#### e1atmcr4 (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

Ports 3 through 8 can be specified only for HC-MIM and E5-E1T1 cards.

Any 2, but no more than 2, of the 8 ports on an HC-MIM 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***l2tset (optional)**

Level 2 timer set

A signaling link can be assigned to any of the thirty-five timer sets.

**Range:***1 - 35**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**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**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*

Ports 3 through 8 can be specified only for HC-MIM and E5-E1T1 cards.

Any 2, but no more than 2, of the 8 ports on an HC-MIM 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*

**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 signalling link A to linkset LSHCAP on an HCAP card:

```
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 for a multi-port LIM:

```
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 assigns a timeslot for a signaling link on a Channel card in the location specified by the loc parameter. The card is serviced by the E1 assigned to the E1 card in the location specified by the e1loc parameter.

```
ent-slk:loc=1206:link=a:slc=0:lsn=e1jwk:ts=2:e1loc=1205
```

This example adds a timeslot for a signaling link on an E1/T1 MIM card 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 on an E1/T1 MIM card used as an E1 Channel card in card location 1206. The command specifies signaling link port A1. The E1 interface that services the Channel card is on the E1 card in card location 1205 (e1loc parameter).

```
ent-slk:loc=1206:link=a1:slc=1:lsn=e1jwk:ts=2:e1loc=1205
```

This example adds a timeslot for a signaling link on an E1/T1 MIM card 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 on an E1/T1 MIM card 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 timeslot for a signaling link on an E1/T1 MIM card used as an T1 Channel card in card location 1208. The command specifies signaling link A1. The T1 interface that services the Channel card is on the T1 card in card location 1207 (t1loc parameter).

```
ent-slk:loc=1208:link=a3:slc=1:lsn=t1jwk:bps=64000:ts=2:t1loc=1207
```

This example adds a signaling link to linkset LS1 at 2048000 bps for an E1 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 an HC-MIM 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 an HC-MIM 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 signalling 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
```

## 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 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 or E5-E1T1 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).
- IPSP-M2PA linksets cannot contain IPGWx and IPSP-M3UA link types. During migration to an IPSP-M2PA linkset, link types other than IPGWx or IPSP-M3UA can be added to the linkset. After the linkset is transitioned to IPSP-M2PA, only IPSP-M2PA and IPLIMx links can be added.
- IPSP-M3UA linksets cannot contain SS7IPGW, IPGWI, and IPGHC link types. After the linkset is transitioned to IPSP-M3UA, only IPSP-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 is 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 - A15 and B4 - B15—card type is LIME1 or LIMT1 for an E5-E1T1 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 card used as an E1 or T1 card, and the card application is SS7ANSI or CCS7ITU. Cannot be specified for even-numbered card locations. HC-MIM cards are dual-slot cards. These links are assigned only to cards in odd-numbered locations.
- A4 - A31 and B4 - B31—cannot be specified for a Channel card, an SE-HSL card 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 IPSP application

HIPR cards must be in card locations `xy 09` and `xy 10` on any shelf that contains one or more HC-MIM, E5-E1T1, E5-ENET, or E5-ENET-B cards. When links A4 - A31 or B4 - B31 are specified, the system verifies that HIPR cards are in card locations `xy 09` and `xy 10` on the same shelf with the specified HC-MIM, E5-E1T1, 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 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 secs. During this period, the hardware is not detected, which may result in a lack of support for signalling 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 and E5-E1T1 cards cannot be used as or with Channel cards. The e1loc and t1loc parameters cannot be specified for HC-MIM or E5-E1T1 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 or E5-E1T1 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 IPSP card, then the ipsg=yes parameter must be specified (see the `ent - ls` command).

If an IPSP 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 IPSP card cannot exceed 5000 TPS for an E5-ENET card. The total TPS of all signaling links configured for an IPSP 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 IPSP links.

The e1loc and t1loc or e1port and t1port parameters cannot be specified together in the command.

The specified parameter must be valid for the card type and use:

- e1port —E1/T1 MIM, HC-MIM or E5-E1T1 cards used as E1 cards
- t1port — E1/T1 MIM, HC-MIM or E5-E1T1 cards used as T1 cards
- e1loc and t1loc —E1/T1 MIM cards used as E1/T1 channel cards
- ts —E1/T1 MIM, HC-MIM or E5-E1T1 cards used as E1/T1 cards and E1/T1 MIM cards used as E1/T1 channel cards
- lsn, slc, loc, port, bps, lpset, atmsel, vci, vpi, e1atmcrc4, e1atmsi, and e1atmsn —LIM E1 ATM cards. Low-speed link parameters (ecm, l2tset, pcrn1, and pcrn2) cannot be specified.
- e1port and l2tset —HC-MIM and E5-E1T1 cards used as SE-HSL cards
- t1port and l2tset—HC-MIM and E5-E1T1 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 E1/T1 MIM 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 `t1port` 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

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—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- a-a1, b—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

## 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 E1/T1 MIM Cards*

One E1/T1 MIM card can be used for E1 card functions or T1 card functions, but not both at the same time. E1 cards and T1 cards can coexist in the same EAGLE 5 ISS.

When configuring signaling links for an E1, T1, or Channel card, each signaling link must be associated with a timeslot assigned in the command. Each signaling link/timeslot assigned for an E1, T1, or Channel card must be associated with an E1 or T1 interface that has been defined for one of the ports on the E1/T1 MIM card (see the `ent - e1` 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, the signaling link port (A, A1, A2, A3, B, B1, B2, or B3), the timeslot number, and the card location and port for the servicing E1 or T1 interface on the E1 or T1 card (e1loc/e1port or t1loc/t1port parameters). 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 different signaling links.

If the link and timeslot are for a Channel card, the Channel card location is specified in the loc parameter, and the associated E1 or T1 card is specified in the e1loc or t1loc parameter.

If the link and timeslot are for the E1 or T1 card itself, the E1 or T1 card location is specified in the loc parameter, and the E1 or T1 interface port (1 or 2) that will service the link is specified in the e1port or t1port parameter.

The E1/T1 MIM used as an E1 card can service 8 timeslots assigned to signaling links for itself, and 1-31 timeslots assigned to signaling links for Channel cards on the same shelf. If the E1 card is not servicing any Channel cards, 8 links with associated timeslots can be defined—all on the interface on port 1, all on the interface on port 2, or some on the interface on each port. If the E1 card is servicing Channel card links, the links for the E1 card itself can be assigned either to the port 1 interface or the port 2 interface. But for each E1 link assigned to the port 1 interface, the number of links is decreased

by one that can be assigned to that port interface for a Channel card. All links for any Channel cards serviced by an the E1 card must be serviced by the interface on port 1. Each Channel card can have up to 8 links assigned to the E1 interface on port 1, for a total of up to 31 links (Timeslot 0 cannot be used). used.) All links for a Channel card must be assigned to the same E1 card. If the E1 card is servicing any Channel cards, the 8 links for the E1 card itself can all be assigned to the interface on port 2 (which cannot service Channel card links and can service only 8 links).

The E1/T1 MIM used as a T1 card can service 8 timeslots assigned to signaling links for itself, and 1-24 timeslots assigned to signaling links for Channel cards on the same shelf. If the T1 card is not servicing any Channel cards, 8 links with associated timeslots can be defined—all on the interface on port 1, all on the interface on port 2, or some on the interface on each port. If the T1 card is servicing Channel card links, the links for the T1 card itself can be assigned either to the port 1 interface or the port 2 interface. But for each T1 link assigned to the port 1 interface, the number of links is decreased by one that can be assigned to that port interface for a Channel card. All links for any Channel cards serviced by the T1 card must be serviced by the interface on port 1. Each Channel card can have up to 8 links assigned to the T1 interface on port 1, for a total of up to 24 links. All links for a Channel card must be assigned to the same T1 card. If the T1 card is servicing any Channel cards, the 8 links for the T1 card itself can all be assigned to the interface on port 2 (which cannot service Channel card links and can service only 8 links).

### 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 and T1 cards can coexist in the same EAGLE 5 ISS.

Each signaling link for an E1 card or a T1 card must be associated with a timeslot assigned in the `ent - slk` command. Each signaling link and timeslot assigned for an E1 card or a 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 the `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 an 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 or T1 card functions, but not both at the same time. E1 cards and T1 cards can coexist in the same EAGLE 5 ISS.

Each signaling link for an E1 or a T1 card must be associated with a timeslot assigned in this command. Each signaling link and timeslot assigned for an E1 or T1 card must be associated with an E1 or T1 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-A15, B, B1-B15), 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 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.

### **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 5.

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
```

## 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:**

ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ

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





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 (mandatory)**

##### **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*

## 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
```

## 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 parameter cannot be the same as any Emulated Point Code value in the PCT table.

## 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
;
```

## 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 58: NAIV/NAI Mapping](#) shows the mapping between the naiv and nai values. [Table 59: 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 AnalyzedInformation 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:**

*aaaaaaaa*

1 leading alphabetic followed by up to 8 alphanumeric characters

The *dfiltact* 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/tcperr*
- *fallback*—Fallback to the Relay data. The relayed MSU is routed as per routing data provided by the service.
- *falltogg*—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  
*rnmdn*  
 Routing number prefix and national dialed/directory number  
*rnsdn*  
 Routing number prefix and subscriber dialed/directory number  
*ccrnda*  
 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 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=inpqr 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*, *inpq*, or *gport*, 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* or *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=mnpr* 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 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=gtr* parameter cannot be specified.

If a value of *aiq* or *idps* is specified for the *serv* parameter, then the *rqdtblnop* parameter cannot be specified.

## 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
;
```

## 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 or ANSI 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 E1/T1 MIM card or an HC-MIM, or E5-E1T1 card used as a T1 or ST-HSL-A card.

On an HC-MIM or E5-E1T1 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*

Ports 3 through 8 can be specified only for HC-MIM or E5-E1T1 cards.

Any 2 of the 8 ports on an HC-MIM 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 on an HC-MIM or E5-E1T1 card 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.

**Range:**

*sf, esf, esfperf*

*esf*

framing format with performance monitoring

**Default:**

*sf*

**linkclass (optional)**

Link class for links assigned to HC-MIM and E5-E1T1 cards (channelized links) or ST-HSL-A cards (unchannelized links).

**Range:**

*chan*

*unchan*

**Default:**

*chan*

**l1 (optional)**

T1 cable length in feet between the EAGLE 5 ISS 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:minsrate=1200
```

**Dependencies**

The specified card location (loc parameter) must be equipped.

The card specified by the loc parameter must be a LIMT1card 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 HC-MIM and E5-E1T1 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 on an HC-MIM or E5-E1T1 card 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 on an HC-MIM or E5-E1T1 card, all signaling links assigned to the adjacent even-numbered T1 port must be deleted.

Shelf FAN bit must be turned ON for the shelf on which HC-MIM card being used as T1 or ST-HSL card.

HIPR cards must be equipped in card locations *xy09* and *xy10* (*x* is the frame, *y* is the shelf) on each EAGLE 5 ISS shelf that contains one or more HC-MIM or E5-E1T1 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 (OAM, TDM, 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 HC-MIM or E5-E1T1 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 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 and any associated Channel card types (LIMT1 and LIMCH) are defined in the database, and before the signaling links and associated timeslots are defined for the T1 card and any associated Channel cards.

External timing is derived from the EAGLE 5 ISS 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 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 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-gttset), 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/typeei/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 typeei 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 (typeei/typen/typen24/typeis/typens). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE 5 ISS 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:**

*ayyyyyyyyy*

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-gttset` command, a new entry using the same TTN cannot be created. If the true selector is deleted for an entry using the `dlt-gttset` 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-gttset` command, or if the GTT set name of an entry is changed using the `chg-gttset` command, then a new entry for the same TTN cannot be created. If a true GTT selector entry is deleted using the `dlt-gttset` command, or if the GTT set name of an entry is changed using the `chg-gttset` 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:**

*ayyyyyyyyyyy*

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:** All cc(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:

*azzzzzzzzzzzzzzzzz*

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

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

**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 - 2

## Example

```
ent-vendidvend:len=6
```

```
ent-vendid:vendid=886933:vendnum=1:vendtype=1
```

## 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 200 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
;
```

## 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=1234ABCD56
```

```
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:***ayyyyyyyy*

1 alphabetic character followed by up to 7 alphanumeric characters

**idx2 (optional)**

Index 2. The routing number name for index 2.

**Range:***ayyyyyyyy*

1 alphabetic character followed by upto 7 alphanumeric characters

**idx3 (optional)**

Index 3. The routing number name for index 3.

**Range:***ayyyyyyyy*

1 alphabetic character followed by up to 7 alphanumeric characters

**idx4 (optional)**

Index 4. The routing number name for index 4.

**Range:***ayyyyyyyy*

1 alphabetic character followed by up to 7 alphanumeric characters

**idx5 (optional)**

Index 5. The routing number name for index 5.

**Range:***ayyyyyyyy*

1 alphabetic character followed by up to 7 alphanumeric characters

**idx6 (optional)**

Index 6. The routing number name for index 6.

**Range:***ayyyyyyyy*

1 alphabetic character followed by up to 7 alphanumeric characters

**idx7 (optional)**

Index 7. The routing number name for index 7.

**Range:***ayyyyyyyy*

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 rname 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 provisioned 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 HMUX or HIPR cards. Use the `init-flash` command.

If the even-numbered TDM (1114,1116) is specified, the flash occurs on the odd-numbered GPSM-II running OAM (1113,1115).

The specified card location cannot be the active MASP (either the active GPSM-II or the active 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 do 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 BPMPPL on card 1105.
;
tekelecstp 08-05-11 01:52:11 EST EAGLE5 39.0.0
Flash Card: Card 1105 download BPMPPL 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 BPMPPL on card 1105.
;
tekelecstp 08-05-11 01:52:11 EST EAGLE5 39.0.0
Flash Card: Card 1105 activation BPMPPL 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 cartridge, removable drive, or standby Terminal Disk Module (TDM).

**Note:** The `format-disk` command leaves the disk unusable until the `chg-db` and `copy-gp1` commands are entered.

## Parameters

### type (mandatory)

The type of drive to format.

#### Range:

*fixed*

The standby fixed disk on the standby TDM

*meas*

The measurement cartridge

*system*

The removable system cartridge or drive

*usb*

Argument to be used by Tekelec personnel only.

**force (optional)**

This parameter provides some protection against data loss due to reformatting a used system removable cartridge.

**Range:**

*yes*

*no*

**Default:**

*no*

**loc (optional)**

The location of the disk that is being formatted.

**Range:**

*1114*

The TDM

*1116*

The TDM

*1117*

The removable cartridge drive

*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 EOAM 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.

To format a cartridge that already contains system data, the `force=yes` parameter must be specified.

The `force=yes` parameter must be specified if the cartridge to be formatted is recognized as a system removable cartridge. This parameter is optional if the cartridge is not recognized as a system removable cartridge. Only cartridges that have a **dms.cfg** file are recognized as system removable cartridges.

A removable cartridge must be inserted and made ready before the `type=meas` or `type=system` parameter can be specified in the command.

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 `format-disk` 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.

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.

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 medium that is being formatted contains system data. The `force=yes` parameter must be specified in the command to format the medium.

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.

If the `type=usb` parameter is specified, then a credit card drive must be present in 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.

## 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 cartridge or removable drive is built.

When the `type=system` parameter is specified, a system removable cartridge, removable drive, or credit card drive is built.

A system removable cartridge or drive can contain only GPLs and the database, not measurement data. After formatting, the cartridge or 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 cartridge or 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 cartridge or drive, providing a backup copy of the database.

A measurements removable cartridge or drive can contain only measurement data, not database information and GPLs. After formatting, the cartridge or 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 cartridge or 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.

The format of magneto-optical removable cartridges allows the cartridges to be used in DOS/Windows environments in addition to being used on the system.

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 cartridge 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 32: 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 32: DMS.CFG File Location for format-disk Command**

| Value of the type Parameter | Target Disk (Card Location)                                      | Location of the DMS.CFG File                                     |
|-----------------------------|------------------------------------------------------------------|------------------------------------------------------------------|
| <i>fixed</i>                | Standby TDM (1114 or 1116)                                       | Removable Cartridge Drive (1117) Latched USB Port (1113 or 1115) |
| <i>system</i>               | Removable Cartridge Drive (1117) Latched USB Port (1113 or 1115) | Active TDM (1114 or 1116)                                        |
| <i>meas</i>                 | Removable Cartridge Drive (1117) 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 33: 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 33: Disk Format Capacity**

| Target Disk Type                    | Disk Location | Target Capacity | Number of Partitions | Formatted Size of Partition |
|-------------------------------------|---------------|-----------------|----------------------|-----------------------------|
| Magneto-Optical Removable Cartridge | 1117          | 1096 Mbytes*    | 1                    | 1024 Mbytes                 |
| 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                 |

| Target Disk Type                                                                                                                                                                                                                                                                                                                                                                                                                                     | Disk Location | Target Capacity | Number of Partitions | Formatted Size of Partition |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|----------------------|-----------------------------|
| TDM                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1114 or 1116  | 4 Gigabytes     | 2                    | 2047 Mbytes                 |
| * The magneto-optical removable cartridge is a double-sided cartridge that contains 2.3 gigabytes of data. Only one side of the disk can be formatted and used when the cartridge is inserted into the removable cartridge drive. The target capacity given for the magneto-optical removable cartridge is for one side of the disk in the cartridge and is approximately one half of the total capacity of the magneto-optical removable cartridge. |               |                 |                      |                             |

## 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*, *rtro-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 Application Server

*card*

Cards in the database

*cdt*

Customer defined troubles

*clock*

System clock

*dlk*

IP ports on the VSCCP, EROUTE, SLAN, VXWSLAN, MCPM, and FC-capable cards

*e1port*

E1 port on E1/T1 MIM or HC MIM cards

*ls*

Linksets

*lsmsconn*

Communication link between the LSMS and the EMS

*route*

Route

|               |                                      |
|---------------|--------------------------------------|
| <i>slk</i>    | Signaling links                      |
| <i>t1port</i> | T1 port on E1/T1 MIM or HC MIM cards |
| <i>trm</i>    | Terminals                            |
| <i>rtx</i>    | Exception Route                      |
| <i>enet</i>   | Ethernet                             |
| <i>tps</i>    | TPS subsystem                        |

**asname (optional)**

Gateway Application Server name. Used with the dev=as parameter to inhibit alarms for the named Application Server.

**Range:**

*aaaaaaaaaaaaaaaa*

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 (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:npcfmt.i` 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*

**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*

Ports 3 - 8 can be specified only for HC-MIM and E5-E1T1 cards.

**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* (*yymmd*).

**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* (*hlmm*).

**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*

*a, b* —dev=dlk, dev=slk for a two-port LIM

*a1, a2, b1, b2* —dev=lsmsconn

*a, b, a1, b1, a2, b2, a3, b3* —dev=slk for a multi-port LIM

*a, b, a1-a31, b1-b31* —dev=slk for an HC MIM

*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 (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:npcfmt i` 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

**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:**

aaaaaaaaaaaaaaaa

1 to 15 alphanumeric characters

**t1port (optional)**

Port ID. This parameter is mandatory if the dev=t1port parameter is specified.

**Range:**

1 - 8

Ports 3 - 8 can be specified only for HC MIM cards.

**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
```

## 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 — 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 already 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 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 because 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 port parameter is out of range.

The link parameter must be valid for the selected device type.

## 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](#)

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-DSM 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 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. E5APPB 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-DSM, 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 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.

The card cannot be inhibited as the terminals are still in use.

## 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**

**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 MPCM 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

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 5 ISS 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 5 ISS to generate a TFP for the EAGLE 5 ISS 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 34: 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 35: 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 35: 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:**

### **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:

- E1 ATM card running the ATMITU application
- E1/T1 MIM, E5-E1T1, 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
- LIM card running the SS7ANSI or CCS7ITU application
- LIM ATM card running the ATMANSI 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—E1-ATM card running the ATMITU application or a LIM-ATM card running the ATMANSI application



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

## 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*

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 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:** When a LIME1 or LIMT1 card has associated channel cards (LIMCH) with provisioned links, the init-card command entered for the LIME1 or LIMT1 card causes all links on the associated channel cards to go out of service.



**Caution:** Resetting more than 8 Service Module cards via the 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:

*xyyyyyyy*

1 alphabetic character followed by up to 6 alphanumeric characters. Valid applications are:

*atmansi*—Used by LIM-ATM, E5-ATM, and E5-ATM-B cards to support high-speed ATM signaling links. Used by E5-ATM and E5-ATM-B cards to support T1 functions.

*atmitu*—Used by E1-ATM, E5-ATM, and E5-ATM-B cards to support E1 high-speed signaling links. Used by E5-ATM and E5-ATM-B cards to support E1 functions.

*ccs7itu*—Used by E1/T1 MIM, HC-MIM, and E5-E1T1 cards for ITU-TSS MTP functions.

*eroute*—Used by STC cards and E5-STC 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 IPSM 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 MCPM cards for the Measurements Platform feature

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

*ss7ansi*—Used by E1/T1 MIM, HC-MIM, and E5-E1T1 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 SSED CM, 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* GPL 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.  
T

**Note:** he 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 run the VSCCP application and contain an RTDB.

#### 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 5 ISS perform a warm restart of the requested cards. The EAGLE 5 ISS 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=eoam 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**

**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=eoam 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.

**prtnggrp (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*

## Example

```
init-card:Loc=1113:prtnggrp=inactive
init-card:loc=1101:data=persist
init-card:loc=1113:initclk=yes
init-card:appl=eoam:initclk=yes:force=yes
init-card:appl=ipsg
init-card:appl=siphc
```

## Dependencies

The shelf and card must be equipped.

The loc or appl 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  $xy09$  and  $xy10$  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 *eoam*.

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.

#### CAUTION

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, or MPS database (VSCCP) card locations or GPLs.

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

The specified card does not exist or is not 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 DSM card must be provisioned.

The link interface module service cannot be loaded due to nonavailability of the system resources.

The command cannot be executed as the 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 cartridge is inserted in the system, then the prtnggrp=inactive parameter cannot be specified.

The loc parameter must be specified with a value of 1113 or 1115 before the prtnggrp parameter can be specified.

If an Extended BERT is running, the appl parameter cannot be specified in this command to initialize multiple cards.

## 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 EOAM Card is isolated from the system
;

tekelecstp 04-07-17 13:03:10 EST EAGLE 31.6.0
3022.0014 CARD 1115 EOAM Card is present
 ASSY SN: 1216115
;

```

init-card:appl=siphc

```

tekelecstp 12-07-09 19:08:39 EST EST EAGLE 45.0.0
init-card:appl=siphc
Command entered at terminal #18.
;

Command Accepted - Processing
tekelecstp 12-07-09 19:08:39 EST EST EAGLE 45.0.0
Init Card command issued to card 1101
;

tekelecstp 12-07-09 19:08:39 EST EST EAGLE 45.0.0
Initialized all SIPHC cards.
;

Command Executed

Report Date:02-13-06 Time:17:09:52
;

tekelecstp 12-07-09 19:08:39 EST EST EAGLE 45.0.0

```

```

** 2167.0013 ** CARD 1101 SIPHC Card is isolated from the system;
tekelecstp 12-07-09 19:08:39 EST EST EAGLE 45.0.0
2168.0014 CARD 1101 SIPHC Card is present
tekelecstp 12-07-09 19:08:39 EST EST EAGLE 45.0.0
2169.0096 CARD 1101 SIPHC Card has been reloaded
;

```

## 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.

### **code** (mandatory)

The version of the GPL being loaded onto the card.

### **Range:**

*appr*

The approved GPL version

*trial*

The trial GPL version

### **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.

### **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, bpdcm, bpdcm2, bphcap, bphcapt, bphmux, bpmpl, bpmpl, hipr, hipr2, imtpci, pldpmc1*

**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 Tekelec'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 Tekelec'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=bpdcm: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=blxp: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 HCAP, HCAP-T, DCM, E1/T1 MIM, HC-MIM, E5-class card, MPL, or Service Module card. An HMUX, HIPR, or HIPR2 card can be specified for locations *xy09* and *xy10* (*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 an HMUX, HIPR, or HIPR2 card or E5-class card with mode set to backgrnd, imgselct or pvjoy).

If the target card is an HMUX, HIPR, or HIPR2 card, then both card locations specified in the sloc and eloc parameters must contain HMUX, HIPR, or HIPR2 cards on the same IMT bus. For these cards, the bus is implicit based on the specified location. Location *xy09* specifies an HMUX, HIPR, or HIPR2 A Bus, and location *xy10* specifies an HMUX, HIPR, or HIPR2 B Bus (*x* is the frame and *y* is the shelf). For example, sloc=1109:eloc=6109 specifies all HMUX, HIPR, or HIPR2 cards on the A Bus only; sloc=1110:eloc=6110 specifies all HMUX, HIPR, or HIPR2 cards on the B Bus only. HMUX, HIPR, or HIPR2 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. The cards in the locations specified in the sloc and eloc parameters must be running the specified general program load (gpl). Other cards in the range of card locations can be running other GPLs, but will not be initialized. 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 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.

#### CAUTION

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.



The cards specified in the sloc and eloc location parameters must be running the specified GPL.

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.

## 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 the E5-OAMS will be loc=1113/1115 but the card location specified cannot be active 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=bpdc: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 (HCAP, HCAP-T, DCM, MPL, HC MIM, HIPR, or HMUX).

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
```

```

 rlgncxa03w 04-02-27 16:53:22 EST EAGLE 31.3.0
 Initializing IMT GPL for card 1201.

 rlgncxa03w 04-02-27 16:53:22 EST EAGLE 31.3.0
* 0192.0013 * CARD 1201 SS7ANSI Card is isolated from the system

 rlgncxa03w 04-02-27 16:53:22 EST EAGLE 31.3.0
 0193.0014 CARD 1201 SS7ANSI Card is present

 rlgncxa03w 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 HMUX, HIPR, or HIPR2 card, or a given IMT Bus A or B (which includes all HMUX, HIPR, or HIPR2 cards for that bus).

The command boots the MUX card processor and brings down the respective IMT bus temporarily (approximately 10 seconds) until the HMUX, HIPR, or HIPR2 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 HMUX, HIPR, or HIPR2 bus to be reset. All HMUX, HIPR, or HIPR2 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 HMUX, HIPR, or HIPR2 bus when the alternate bus is non-functional or to reset one HMUX, HIPR, or HIPR2 card during a fault isolation test (see the `tst -imt` command).



**CAUTION**

**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 HMUX, HIPR, or HIPR2 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, 610, 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).

The STP options `hmutexbus` or `hmutexbus` must have their value set to *yes* before this command can be executed.

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 coherent 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 inhibition
 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 and HIPR 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. There are 30 seconds to re-enter the command. 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).

### 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 5 ISS perform a warm restart of the requested cards. The EAGLE 5 ISS performs various checks to ensure that all conditions necessary to initiate the warm restart are in place.

**Default:**

*refresh*

## 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.

## 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 `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
```

## Related Commands

*act-gpl, chg-db, chg-gpl, copy-gpl, copy-meas, disp-disk-dir, rept-stat-db*

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\*](#)

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:**

*azzzzzzzzzzzzzzzzz*

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 and on application-specific information.

## Parameters



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
- SSEDCM card running the 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

PASS command not found.

## 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

*atinq*

Measurements for ATINP

*eir*

Measurements for Equipment Identity Register

*gttath*

Measurements for GTT Actions Per-Path

*idpr*

Measurements for IDPR

|                  |                                                                                                                                              |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <i>link</i>      | Measurements for signaling links                                                                                                             |
| <i>lnkset</i>    | Measurements for linksets                                                                                                                    |
| <i>lnp</i>       | Measurements for local number portability                                                                                                    |
| <i>lsdestni</i>  | Measurements for linkset destination network identifiers                                                                                     |
| <i>lsonismt</i>  | Measurements for ISUP message type screening                                                                                                 |
| <i>lsorigni</i>  | Measurements for linkset originating network identifiers                                                                                     |
| <i>mapscrn</i>   | Measurements for GSM MAP message screening                                                                                                   |
| <i>np</i>        | 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 |
| <i>origni</i>    | Measurements for originating network identifiers greater than 5                                                                              |
| <i>origininc</i> | Measurements for originating network identifiers (less than 5, small networks) for network clusters                                          |
| <i>sctpasoc</i>  | Measurements per association for the SCTP protocol (used to carry M3UA, M2PA, and SUA traffic)                                               |
| <i>sctpcard</i>  | Measurements per card for the SCTP protocol (used to carry M3UA, M2PA, and SUA traffic)                                                      |
| <i>sip</i>       | Measurements for SIP                                                                                                                         |
| <i>stp</i>       | Measurements pertaining to the Signaling Transfer Point in general or summarized totals recorded on the STP                                  |
| <i>stplan</i>    | Measurements for STP Local Area Network data links                                                                                           |
| <i>tt</i>        | Measurements for translation types                                                                                                           |
| <i>ua</i>        |                                                                                                                                              |

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=systot:enttype=sip
```

## 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 *gttath*.

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 36: rept-ftp-meas Valid Parameter Combinations](#) indicates valid parameter combinations for measurements reports; invalid combinations will generate an error message.

Table 36: 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    |      |    |        |       |
| eir          |              |      |        |      |      | X    |        | X    |      |    |        |       |
| gttpath      |              |      |        |      |      | 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    |      |        |      |      |    |        |       |
| mapson       |              |      |        |      |      | X    |        | X    |      |    |        |       |
| np           |              |      |        |      |      | X    |        | X    |      |    |        |       |
| origni       |              |      |        |      | X    |      |        |      |      |    |        |       |
| origininc    |              |      |        |      | 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      |              |      |        |      |      |      |        |      |      |    |        |       |
| 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.

## 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=systot:enttype=sip`

```
tekelecstp 12-07-27 13:12:38 EST EAGLE 45.0.0
rept-ftp-meas:type=systot:enttype=sip
```

```
Command entered at terminal #4.
;
```

```
tekelecstp 12-07-27 13:12:38 EST EAGLE 45.0.0
FTP measurement report request sent to primary MCP.
;
```

```
tekelecstp 12-07-27 13:12:38 EST EAGLE 45.0.0
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.
- HMUX, HIPR, and HIPR2 card error statistics

## Parameters

### report (mandatory)

The type of report that is generated.

#### Range:

*err*

IMT bus error statistics

*hmutexerr*

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 HMUX, HIPR, or HIPR2 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 HIPR or HIPR2 statistics for the cards in the HIPR or HIPR2 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 HMUX, HIPR, or HIPR2 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 HIPR or HIPR2 statistics for the cards in the HIPR or HIPR2 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 *hmutexerr*, *hiprerr*, or *hipr2err* must be specified for the report parameter before the sshelf and eshelf parameters can be specified.

The HIPR or HIPR2 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 *hmutexerr* 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 HMUX, HIPR, and HIPR2 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.

### HMUX, HIPR, or HIPR2 Statistics

An HMUX, HIPR, or HIPR2 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 37: rept-imt-info Statistics, Low Speed Summary (rept-imt-info:report=(hmutexerr, 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.<br><br>Detected by hardware. | Maintenance activity: Card insertion, removal, or boot. Does not occur in a normal system and indicates a hardware failure: defective LIM | 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 |

| Stat Label – Low Speed Error & Event Counts | Explanation of Stat                                                                                                                                                                                                                                | Probable Cause                                                                                                                                                                   | Recommended Action                                                                                                                                                                           |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             |                                                                                                                                                                                                                                                    | card, MUX card, FC cable or backplane.                                                                                                                                           | the Customer Care Center.                                                                                                                                                                    |
| IMT Rx Packet Format Error                  | Receive Format error:<br>Occurs when the End of Message byte of an IMT packet is found missing.<br><br>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:<br>Received an illegal character from the physical IMT transport (TAXI Interface).<br><br>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.                                                                                                                                                                                    |
| 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.                                                                                                                                                                                | Relatively heavy traffic on this interface can cause these counts to increment. This                                                                                             | Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear, there is no action to                                                                                             |

| Stat Label – Low Speed Error & Event Counts | Explanation of Stat                                                                                                                                                          | Probable Cause                                                                                                                        | Recommended Action                                                                                                                                           |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             | This stat is only meaningful for MUX card columns.                                                                                                                           | condition should never occur. These events may indicate a software problem                                                            | 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.<br><br>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 CPU Rx FIFO and the end (EOM) 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 low speed link. | None. This error will automatically empty the 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.                                                                                             |



| Stat Label – Low Speed Error & Event Counts | Explanation of Stat                                                                                                   | Probable Cause                                                                                                                                    | Recommended Action                                                                                                                                                                       |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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.                                                                                                                       |
| 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. |

| Stat Label – Low Speed Error & Event Counts | Explanation of Stat                                                                                                   | Probable Cause                                                                          | Recommended Action                                                 |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 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 38: 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 HIPR2 card.) | Fibre Channel Receive Lost Synchronization Errors:<br><br>The receiver on this interface lost synchronization.                               | 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 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 | 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                                                  |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                                                                     | Probable Cause                                                                                      | Recommended Action                                                                                                                                                                   |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | before the end of the previous packet was detected.                                                                                     |                                                                                                     | 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 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.                                                                                                           |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                                                                         | Probable Cause                                                                                                                         | Recommended Action                                                                                                                                                                       |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.                                                                                                                       |
| 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.                            |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                                                                                                         | Probable Cause                                                                                                        | Recommended Action                                                                                                                                                               |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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 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. |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                                                                         | Probable Cause                                                                  | Recommended Action                                                 |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 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.                                            |
| 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.                                            |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                               | Probable Cause  | Recommended Action      |
|----------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------|-------------------------|
| 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. |
| 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. |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                           | Probable Cause   | Recommended Action      |
|----------------------------------------------|-----------------------------------------------------------------------------------------------|------------------|-------------------------|
| 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. |
| 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. |



| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                                        | Probable Cause   | Recommended Action      |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------|-------------------------|
| 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. |
| 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                                                              | Normal behavior  | None. Information only. |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                                        | Probable Cause                                      | Recommended Action                                                         |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------|
|                                              | arrive to the intended recipient on the IMT.                                                               |                                                     |                                                                            |
| 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.                                                    |
| 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, |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat                                                                                                                | Probable Cause                                                                                                                                                                   | Recommended Action                                                                                                                                                                   |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              |                                                                                                                                    |                                                                                                                                                                                  | 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. |
| 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                                           |

| Stat Label – High Speed Error & Event Counts | Explanation of Stat | Probable Cause | Recommended Action                       |
|----------------------------------------------|---------------------|----------------|------------------------------------------|
|                                              |                     |                | may exist. Contact Customer Care Center. |

### Miscellaneous Summary

Table 39: 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 an 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:erroronly=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 HIPR 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 HIPR 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 Tx 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 HMUX 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 HMUX 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 HMUX 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 (xy09 card locations) and B (xy10 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 (xy09 card locations) and B (xy10 card locations).

HMUX Statistics:



- **Bucket**—The hourly time periods (*buckets*) for which a report was requested.
- **Low Speed Statistic**—The error statistic type for the low speed 125 Mbps secondary rings with HMUX 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 HMUX 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.

#### HIPR 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 HMUX 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 HMUX 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.

#### HIPR2 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 HMUX 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 HMUX 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 40: 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 40: 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

**Default:**

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 40: 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 |                   |               |               |                   |               |

| Card Location      | Hexadecimal Value | Decimal Value | Card location | Hexadecimal Value | Decimal Value |
|--------------------|-------------------|---------------|---------------|-------------------|---------------|
| 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            |
| 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            |

| Card Location      | Hexadecimal Value | Decimal Value | Card location | Hexadecimal Value | Decimal Value |
|--------------------|-------------------|---------------|---------------|-------------------|---------------|
| 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            |
| 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           |

| Card Location      | Hexadecimal Value | Decimal Value | Card location | Hexadecimal Value | Decimal Value |
|--------------------|-------------------|---------------|---------------|-------------------|---------------|
| 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 |                   |               |               |                   |               |
| 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           |



| Card Location      | Hexadecimal Value | Decimal Value | Card location | Hexadecimal Value | Decimal Value |
|--------------------|-------------------|---------------|---------------|-------------------|---------------|
| 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           |
| 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           |

| Card Location      | Hexadecimal Value | Decimal Value | Card location | Hexadecimal Value | Decimal Value |
|--------------------|-------------------|---------------|---------------|-------------------|---------------|
| 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 41: 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:slot=xxxx:eloc=yyyy:r=full` command is entered.

**Table 41: 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.<br><br>Detected by hardware. | Maintenance activity: Card insertion, removal, or boot.<br><br>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.<br><br>Does not occur in a normal system. Indicates a hardware failure: defective LIM                                | 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. |

| IMT Statistic         | Explanation Of Statistic                                                                                                                                                                                                                                                | Probable Causes                                                                                                                                   | Recommended Action                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                                                                                                                                                                                                                                                                         | card, MUX card, FC cable or backplane.                                                                                                            |                                                                                                                                                                                      |
| 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.<br><br>Detected by software                                                                               | Software defect.<br><br>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 errors and Format errors. Detected by hardware | 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. |
| CPU Rx FIFO Half Full | CPU Receive FIFO Half Full: Communication CPU on the card is becoming congested. Detected by hardware.<br><br>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                                                                                                                                                                  | 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                                                                                     |

| IMT Statistic         | Explanation Of Statistic                                                                                                                                                                                                                                                                                                                            | Probable Causes                                                                                            | Recommended Action                                                                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | <p>cause retransmissions, format and large packet errors. Detected by hardware.</p> <p>This stat is only meaningful for cards that contain a BPxxxx GPL.</p>                                                                                                                                                                                        |                                                                                                            | perform. If errors continue, a hardware issue is present. Contact Customer Care Center.                                                                                                  |
| CPU Rx MSU FIFO Full  | <p>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.</p> <p>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.</p> | 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 | <p>CPU Receive LSSU FIFO Full: Watermark indication that the LSSU traffic is in excess of what the card can handle.</p> <p>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.</p>                                                                                  | May indicate a hardware failure (i.e.: a defective board), although a software issue is also possible.     | 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.     |
| CPU Rx XSU FIFO Full  | <p>CPU Receive XSU FIFO Full: Watermark indication that the XSU traffic is in excess of what the card can handle.</p> <p>This stat is only meaningful for cards</p>                                                                                                                                                                                 | 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.     |

| IMT Statistic         | Explanation Of Statistic                                                                                                                                                                                                                                                                                                                                      | Probable Causes                                                                                                                                     | Recommended Action                                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | 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.                                                                                                                                                                                                        |                                                                                                                                                     |                                                                                                                                                                                      |
| ASU Rx FIFO Half Full | <p>CPU Receive ASU FIFO Half Full: Watermark indication that this interface has received substantial ASU traffic.</p> <p>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.</p>                                                                                                | 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      | <p>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 other possible LVL1 errors.</p> <p>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.</p> | 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. |
| 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.                                                                                                                            |

| IMT Statistic         | Explanation Of Statistic                                                                                                                                                         | Probable Causes                                                                                                                    | Recommended Action                                                                                                                                                               |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| 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. |
| IMT Receive FIFO Full | Deprecated.                                                                                                                                                                      |                                                                                                                                    | None.                                                                                                                                                                            |
| Pri Ctrl No SOM       | Primary Control No Start of Message Error: Incoming data was detected without a start of message (SOM.)<br><br>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.  |

| IMT Statistic         | Explanation Of Statistic                                                                                                                                                     | Probable Causes                                                                                                 | Recommended Action                                                                                                                                                               |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pri Ctrl Tx Err       | Primary Control Transmit Error: Transmit logic encountered a problem sending a packet. Detected by hardware.<br><br>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. |
| Tx FIFO Half Full     | Transmit FIFO Half Full: Watermark indication that this interface is backed up through ½ of its available storage.<br><br>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.<br><br>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. |
| FC Tx FIFO Half Full  | Reserved                                                                                                                                                                     | Reserved                                                                                                        | Reserved                                                                                                                                                                         |
| FC Tx FIFO Full       | 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.<br><br>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.                                                                                                          | May indicate a software problem.                                                                                | 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                                                                                                                                                                                                 |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | This stat is only meaningful for MUX card columns.                                                                                                                                                                   |                                                                                      | 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.<br><br>This stat is only meaningful for cards that contain a BLMCAP GPL.                                                               | 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 By-pass FIFO Full      | By-pass FIFO overflowed data has been lost.<br><br>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.<br><br>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.<br><br>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.                                   |



| IMT Statistic      | Explanation Of Statistic                                                                                                                                                                                                                                                                                                                 | Probable Causes                                                                              | Recommended Action                                                                                                                                                               |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    |                                                                                                                                                                                                                                                                                                                                          |                                                                                              | The card may need to be replaced.                                                                                                                                                |
| Error Int Overflow | Deprecated                                                                                                                                                                                                                                                                                                                               | Deprecated                                                                                   | Deprecated                                                                                                                                                                       |
| Large Pkt Error    | <p>Large Packet Error: The interface has detected packets larger than allowed in the data stream.</p> <p>This stat is meaningful for all cards except those containing the IMTPCI GPL.</p>                                                                                                                                               | 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 may exist. Contact Customer Care Center. |
| MSU Retransmitted  | <p>Retransmissions occur when a transmitted MSU does not receive an acknowledgment (ASU) within an engineered timeout value. Detected by software.</p> <p>This stat is only meaningful for application cards.</p>                                                                                                                        | Card insertion, removal, or boot. May indicate hardware, software or configuration problems. | 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 Ret on error   | 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. | Destination card is not available to receive packets.                                        | None. MSU Returned on Error is an indication. No action is required.                                                                                                             |
| VC OSS Count       | Virtual Circuit Out of Service Count: Count of times a Virtual Circuit                                                                                                                                                                                                                                                                   | Destination card is not available to receive packets, or software/hardware                   | 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                                                                                                                                                                                                                                       |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           | <p>(VC) on this card has gone Out of Service.</p> <p>Note: The A and B bus counts will be the same. For the VC to drop, communications on both busses must be lost.</p> <p>This stat is only meaningful for application cards.</p>                                                               | errors that cause the virtual connection(s) to be dropped. Could occur during normal maintenance (card replacement/upgrades, or booting).                                                              | perform. If errors continue, a problem may exist. Contact Customer Care Center.                                                                                                                                                                          |
| Bus Disconnect Count      | <p>Bus Disconnect Count:</p> <p>Counts the times that the card has been disconnected from the bus.</p> <p>Note: The A and B bus counts can be different.</p> <p>This stat is only meaningful for application cards.</p>                                                                          | 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 <code>disc-imt</code> or <code>inh-imt</code> command) | If commands that disconnect the card from the bus have not been issued, 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. |
| Violation Error           | <p>Received an illegal character from the physical IMT transport (TAXI Interface).</p> <p>Detected by hardware</p>                                                                                                                                                                               | 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.                                                                         |
| Info: MSU Dropped no Rept | <p>MSU Dropped With No Report: Number of undeliverable MSUs that are not being returned to the application.</p> <p>Note: This statistic may be non-zero after executing the <code>rept-imt-lvl1</code> or <code>clr-imt-stats</code> command. During execution of these commands, the active</p> | Destination card is not available to receive packets.                                                                                                                                                  | None. MSU Dropped is an indication. No action is required.                                                                                                                                                                                               |

| IMT Statistic | Explanation Of Statistic                                                                                                                                                                                                                                       | Probable Causes | Recommended Action |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|
|               | 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. |                 |                    |

### 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:slc=xxxx:elc=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 42: 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:slc=xxxx:elc=yyyy:r=full` command is entered.

Table 42: 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 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                                                        | May indicate a hardware failure. | Clear IMT stats, wait 1 hour and retrieve stats again. If stats are clear,                                                                                                      |

| Stat Label               | Explanation of Stat                                                                                                                          | Probable Cause                                                                  | Recommended Action                                                                                                                                                              |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                          | previous End of Message Errors: The software received detected the start of a new packet before the end of the previous packet was detected. |                                                                                 | 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.                                                                                                                   |
| 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.                                                                                                                   |

| Stat Label            | Explanation of Stat                                                                                                                         | Probable Cause                                                                  | Recommended Action                                                                                                                                                              |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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. |

## Output

```
rept-imt-lvl1:hs=yes:sloc=1104
```

```
imttest1 11-11-11 12:40:50 EDT EAGLE 44.0.0
Retrieving LVL1 data from Eagle cards...
```

```

Card: H'00f3 Elapsed Time (day - h:m:s): 0 - 00:02:59.3
```

| Error Counts          | A Bus |       | B Bus |       |
|-----------------------|-------|-------|-------|-------|
|                       | 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     | --    |
| CPU Rx FIFO Full      | 0     | --    | 0     | --    |
| CPU Rx MSU FIFO Full  | 0     | --    | 0     | --    |
| CPU Rx LSSU FIFO Full | 0     | --    | 0     | --    |
| CPU Rx XSU FIFO Full  | 0     | --    | 0     | --    |
| ASU Rx FIFO Half Full | 0     | --    | 0     | --    |
| ASU Rx FIFO Full      | 0     | --    | 0     | --    |
| SSU Packet Rx         | 0     | --    | 0     | --    |
| ASU Safety Pkt        | 0     | --    | 0     | --    |
| TSU Safety Pkt        | 0     | --    | 0     | --    |
| BSU Safety Pkt        | 0     | --    | 0     | --    |

|                            |   |    |   |    |
|----------------------------|---|----|---|----|
| SSU Safety Pkt             | 0 | -- | 0 | -- |
| Other Safety Pkt           | 0 | -- | 0 | -- |
| Pri Ctrl Rx Err            | 0 | -- | 0 | -- |
| Pri Ctrl Sanity Err        | 0 | -- | 0 | -- |
| IMT Receive FIFO Full      | 0 | -- | 0 | -- |
| Pri Ctrl No SOM            | 0 | 0  | 0 | 0  |
| Pri Ctrl Tx Err            | 0 | -- | 0 | -- |
| Tx FIFO Half Full          | 0 | 0  | 0 | 0  |
| Tx FIFO Full               | 0 | 0  | 0 | 0  |
| FC Tx FIFO Half Full       | 0 | 0  | 0 | 0  |
| FC Tx FIFO Full            | 0 | 0  | 0 | 0  |
| IMT Tx FIFO Half Full      | 0 | 0  | 0 | 0  |
| IMT Tx FIFO Full           | 0 | 0  | 0 | 0  |
| Tx FIFO 3/4 Full           | 0 | -- | 0 | -- |
| IMT By-pass FIFO Half Full | 0 | -- | 0 | -- |
| IMT By-pass FIFO Full      | 0 | -- | 0 | -- |
| Pass thru CRC Error        | 0 | -- | 0 | -- |
| Lost Multicast Pkt         | 0 | -- | 0 | -- |
| Invalid Interrupt          | 0 | -- | 0 | -- |
| Error Int Overflow         | 0 | -- | 0 | -- |
| Large Pkt Error            | 0 | 0  | 0 | 0  |
| MSU Retransmitted          | 0 | -- | 0 | -- |
| MSU Ret on error           | 0 | -- | 0 | -- |
| VC OSS Count               | 0 | -- | 0 | -- |
| Bus Disconnect Count       | 0 | -- | 0 | -- |
| Violation Error            | 0 | -- | 0 | -- |
| Info: MSU Dropped no Rept  | 0 | 0  | 0 | 0  |

| Low Speed Perf Counts | A Bus |       | B Bus |       |
|-----------------------|-------|-------|-------|-------|
|                       | Rx    | Tx    | Rx    | Tx    |
| -----                 | ----- | ----- | ----- | ----- |
| All Packets           | 0K    | 0K    | 0K    | 0K    |
| All Bytes             | 0M    | 0M    | 0M    | 0M    |
| MSU Packets           | 0K    | 0K    | 0K    | 0K    |
| MSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| ASU Packets           | 0K    | 0K    | 0K    | 0K    |
| ASU Bytes             | 0K    | 0K    | 0K    | 0K    |
| DSU Packets           | 0K    | 0K    | 0K    | 0K    |
| DSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| HSU Packets           | 0K    | 0K    | 0K    | 0K    |
| HSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| TSU Packets           | 0K    | 0K    | 0K    | 0K    |
| TSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| LSSU Packets          | 0K    | 0K    | 0K    | 0K    |
| LSSU Bytes            | 0K    | 0K    | 0K    | 0K    |
| BSU Packets           | 0K    | 0K    | 0K    | 0K    |
| BSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| SSU Packets           | 0K    | 0K    | 0K    | 0K    |
| SSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| Othr Packets          | 0K    | 0K    | 0K    | 0K    |
| Othr Bytes            | 0K    | 0K    | 0K    | 0K    |
| TAXI Util             | 0     | 0     | 0     | 0     |

;

imttest1 11-11-11 12:40:56 EDT EAGLE 44.0.0

-----  
Shelf: h'00f0

| High Speed Perf Counts | A Bus |       | B Bus |       |
|------------------------|-------|-------|-------|-------|
|                        | Rx    | Tx    | Rx    | Tx    |
| -----                  | ----- | ----- | ----- | ----- |
| All Packets            | 0K    | 0K    | 0K    | 0K    |
| All Bytes              | 0M    | 0M    | 0M    | 0M    |

|      |         |    |    |    |    |
|------|---------|----|----|----|----|
| MSU  | Packets | 0K | 0K | 0K | 0K |
| MSU  | Bytes   | 0K | 0K | 0K | 0K |
| ASU  | Packets | 0K | 0K | 0K | 0K |
| ASU  | Bytes   | 0K | 0K | 0K | 0K |
| DSU  | Packets | 0K | 0K | 0K | 0K |
| DSU  | Bytes   | 0K | 0K | 0K | 0K |
| HSU  | Packets | 0K | 0K | 0K | 0K |
| HSU  | Bytes   | 0K | 0K | 0K | 0K |
| TSU  | Packets | 0K | 0K | 0K | 0K |
| TSU  | Bytes   | 0K | 0K | 0K | 0K |
| LSSU | Packets | 0K | 0K | 0K | 0K |
| LSSU | Bytes   | 0K | 0K | 0K | 0K |
| BSU  | Packets | 0K | 0K | 0K | 0K |
| BSU  | Bytes   | 0K | 0K | 0K | 0K |
| SSU  | Packets | 0K | 0K | 0K | 0K |
| SSU  | Bytes   | 0K | 0K | 0K | 0K |
| Othr | Packets | 0K | 0K | 0K | 0K |
| Othr | Bytes   | 0K | 0K | 0K | 0K |

#### High Speed Interface Counts

|                          | A Bus | B Bus |
|--------------------------|-------|-------|
| FC Bus Utilization       | 0     | 0     |
| Minor Congestion Event   | 0     | 0     |
| Major Congestion Event   | 0     | 0     |
| Minor Congestion Second  | 0     | 0     |
| Major Congestion Second  | 0     | 0     |
| 100 MS Peak Bytes        | 0     | 0     |
| 100 MS Peak MSU Bytes    | 0     | 0     |
| 100 MS Peak ASU Bytes    | 0     | 0     |
| 100 MS Peak DSU Bytes    | 0     | 0     |
| 100 MS Peak HSU Bytes    | 0     | 0     |
| 100 MS Peak TSU Bytes    | 0     | 0     |
| 100 MS Peak LSSU Bytes   | 0     | 0     |
| 100 MS Peak BSU Bytes    | 0     | 0     |
| 100 MS Peak SSU Bytes    | 0     | 0     |
| 100 MS Peak Othr Bytes   | 0     | 0     |
| HIPR2 Switching Util     | 0     | 0     |
| HIPR2 MPKT Peak Count    | 0     | 0     |
| 100 MS Peak Packets      | 0     | 0     |
| 100 MS Peak MSU Packets  | 0     | 0     |
| 100 MS Peak ASU Packets  | 0     | 0     |
| 100 MS Peak DSU Packets  | 0     | 0     |
| 100 MS Peak HSU Packets  | 0     | 0     |
| 100 MS Peak TSU Packets  | 0     | 0     |
| 100 MS Peak LSSU Packets | 0     | 0     |
| 100 MS Peak BSU Packets  | 0     | 0     |
| 100 MS Peak SSU Packets  | 0     | 0     |
| 100 MS Peak Othr Packets | 0     | 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     | --  | 0     | --  |
| CPU Rx LSSU FIFO Full | 0     | --  | 0     | --  |



|                            |   |    |   |    |
|----------------------------|---|----|---|----|
| CPU Rx XSU FIFO Full       | 0 | -- | 0 | -- |
| ASU Rx FIFO Half Full      | 0 | -- | 0 | -- |
| ASU Rx FIFO Full           | 0 | -- | 0 | -- |
| SSU Packet Rx              | 0 | -- | 0 | -- |
| ASU Safety Pkt             | 0 | -- | 0 | -- |
| TSU Safety Pkt             | 0 | -- | 0 | -- |
| BSU Safety Pkt             | 0 | -- | 0 | -- |
| SSU Safety Pkt             | 0 | -- | 0 | -- |
| Other Safety Pkt           | 0 | -- | 0 | -- |
| Pri Ctrl Rx Err            | 0 | -- | 0 | -- |
| Pri Ctrl Sanity Err        | 0 | -- | 0 | -- |
| IMT Receive FIFO Full      | 0 | -- | 0 | -- |
| Pri Ctrl No SOM            | 0 | 0  | 0 | 0  |
| Pri Ctrl Tx Err            | 0 | -- | 0 | -- |
| Tx FIFO Half Full          | 0 | -- | 0 | -- |
| Tx FIFO Full               | 0 | -- | 0 | -- |
| FC Tx FIFO Half Full       | 0 | 0  | 0 | 0  |
| FC Tx FIFO Full            | 0 | 0  | 0 | 0  |
| IMT Tx FIFO Half Full      | 0 | 0  | 0 | 0  |
| IMT Tx FIFO Full           | 0 | 0  | 0 | 0  |
| Tx FIFO 3/4 Full           | 0 | -- | 0 | -- |
| IMT By-pass FIFO Half Full | 0 | -- | 0 | -- |
| IMT By-pass FIFO Full      | 0 | -- | 0 | -- |
| Pass thru CRC Error        | 0 | -- | 0 | -- |
| Lost Multicast Pkt         | 0 | -- | 0 | -- |
| Invalid Interrupt          | 0 | -- | 0 | -- |
| Error Int Overflow         | 0 | -- | 0 | -- |
| Large Pkt Error            | 0 | 0  | 0 | 0  |
| MSU Retransmitted          | 0 | -- | 0 | -- |
| MSU Ret on error           | 0 | -- | 0 | -- |
| VC OSS Count               | 0 | -- | 0 | -- |
| Bus Disconnect Count       | 0 | -- | 0 | -- |
| Violation Error            | 1 | -- | 1 | -- |
| Info: MSU Dropped no Rept  | 0 | 0  | 0 | 0  |

|                       | A Bus |       | B Bus |       |
|-----------------------|-------|-------|-------|-------|
| Low Speed Perf Counts | Rx    | Tx    | Rx    | Tx    |
| -----                 | ----- | ----- | ----- | ----- |
| All Packets           | 0M    | 0M    | 0M    | 0M    |
| All Bytes             | 0M    | 0M    | 0M    | 0M    |
| MSU Packets           | 0K    | 0K    | 0K    | 0K    |
| MSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| ASU Packets           | 0K    | 0K    | 0K    | 0K    |
| ASU Bytes             | 0K    | 0K    | 0K    | 0K    |
| DSU Packets           | 0K    | 0K    | 0K    | 0K    |
| DSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| HSU Packets           | 0K    | 0K    | 0K    | 0K    |
| HSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| TSU Packets           | 0K    | 0K    | 0K    | 0K    |
| TSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| LSSU Packets          | 0K    | 0K    | 0K    | 0K    |
| LSSU Bytes            | 0K    | 0K    | 0K    | 0K    |
| BSU Packets           | 0K    | 0K    | 0K    | 0K    |
| BSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| SSU Packets           | 0K    | 0K    | 0K    | 0K    |
| SSU Bytes             | 0K    | 0K    | 0K    | 0K    |
| Othr Packets          | 0K    | 0K    | 0K    | 0K    |
| Othr Bytes            | 0K    | 0K    | 0K    | 0K    |

|                        | A Bus |       | B Bus |       |
|------------------------|-------|-------|-------|-------|
| High Speed Perf Counts | Rx    | Tx    | Rx    | Tx    |
| -----                  | ----- | ----- | ----- | ----- |
| All Packets            | 0M    | 0M    | 0M    | 0M    |

|      |         |    |    |    |    |
|------|---------|----|----|----|----|
| All  | Bytes   | 0M | 0M | 0M | 0M |
| MSU  | Packets | 0K | 0K | 0K | 0K |
| MSU  | Bytes   | 0K | 0K | 0K | 0K |
| ASU  | Packets | 0K | 0K | 0K | 0K |
| ASU  | Bytes   | 0K | 0K | 0K | 0K |
| DSU  | Packets | 0K | 0K | 0K | 0K |
| DSU  | Bytes   | 0K | 0K | 0K | 0K |
| HSU  | Packets | 0K | 0K | 0K | 0K |
| HSU  | Bytes   | 0K | 0K | 0K | 0K |
| TSU  | Packets | 0K | 0K | 0K | 0K |
| TSU  | Bytes   | 0K | 0K | 0K | 0K |
| LSSU | Packets | 0K | 0K | 0K | 0K |
| LSSU | Bytes   | 0K | 0K | 0K | 0K |
| BSU  | Packets | 0K | 0K | 0K | 0K |
| BSU  | Bytes   | 0K | 0K | 0K | 0K |
| SSU  | Packets | 0K | 0K | 0K | 0K |
| SSU  | Bytes   | 0K | 0K | 0K | 0K |
| Othr | Packets | 0K | 0K | 0K | 0K |
| Othr | Bytes   | 0K | 0K | 0K | 0K |

SUMMARY REPORT HS Totals accumlated from

|   |             |
|---|-------------|
| 1 | HIPR2 Slots |
| 0 | HIPR Slots  |
| 1 | HMUX Slots  |

| High Speed Interface Summary | A Bus | B Bus |
|------------------------------|-------|-------|
| -----                        | ----- | ----- |
| HIPR2 Switching Util         | 0     | 0     |
| FC Bus Utilization           | 0     | 0     |
| Minor Congestion Event       | 0     | 0     |
| Major Congestion Event       | 0     | 0     |
| Minor Congestion Second      | 0     | 0     |
| Major Congestion Second      | 0     | 0     |
| 100 MS Peak Bytes            | 0     | 0     |
| 100 MS Peak MSU Bytes        | 0     | 0     |
| 100 MS Peak ASU Bytes        | 0     | 0     |
| 100 MS Peak DSU Bytes        | 0     | 0     |
| 100 MS Peak HSU Bytes        | 0     | 0     |
| 100 MS Peak TSU Bytes        | 0     | 0     |
| 100 MS Peak LSSU Bytes       | 0     | 0     |
| 100 MS Peak BSU Bytes        | 0     | 0     |
| 100 MS Peak SSU Bytes        | 0     | 0     |
| 100 MS Peak Othr Bytes       | 0     | 0     |
| HIPR2 Switching Util         | 0     | 0     |
| HIPR2 MPKT Peak Count        | 0     | 0     |
| 100 MS Peak Packets          | 0     | 0     |
| 100 MS Peak MSU Packets      | 0     | 0     |
| 100 MS Peak ASU Packets      | 0     | 0     |
| 100 MS Peak DSU Packets      | 0     | 0     |
| 100 MS Peak HSU Packets      | 0     | 0     |
| 100 MS Peak TSU Packets      | 0     | 0     |
| 100 MS Peak LSSU Packets     | 0     | 0     |
| 100 MS Peak BSU Packets      | 0     | 0     |
| 100 MS Peak SSU Packets      | 0     | 0     |
| 100 MS Peak Othr Packets     | 0     | 0     |

| High Speed Error Summary  | A Bus | B Bus |
|---------------------------|-------|-------|
| -----                     | ----- | ----- |
| HS Rx Packet CRC Error    | 0     | 0     |
| HS Rx Packet Format Error | 0     | 0     |
| HS Rx Disparity Error     | 0     | 0     |
| HS Rx Sync Lost Error     | 0     | 0     |
| HS Rx Code Word Error     | 0     | 0     |

|                              |       |       |
|------------------------------|-------|-------|
| HS Rx Packet SOM Before EOM  | 0     | 0     |
| HS Bypass FIFO Half Full     | 0     | 0     |
| HS Bypass FIFO Full          | 0     | 0     |
| HS Rx FIFO Half Full         | 0     | 0     |
| HS Rx FIFO Full              | 0     | 0     |
| HS Tx FIFO Half Full         | 0     | 0     |
| HS Tx FIFO Full              | 0     | 0     |
| IXP Rx FIFO Half Full        | 0     | 0     |
| IXP Rx FIFO Full             | 0     | 0     |
|                              |       |       |
| HMUX Low Speed Ring Summary  | A Bus | B Bus |
| -----                        | ----- | ----- |
| IMT Rx Packet CRC Error      | 0     | 0     |
| IMT Rx Packet Format Error   | 0     | 0     |
| IMT Rx Violation Error       | 0     | 0     |
| IMT Bypass FIFO Half Full    | 0     | 0     |
| IMT Bypass FIFO Full         | 0     | 0     |
| IMT Rx FIFO Half Full        | 0     | 0     |
| IMT Rx FIFO Full             | 0     | 0     |
| CPU Rx FIFO Half Full        | 0     | 0     |
| CPU Rx FIFO Full             | 0     | 0     |
| CPU Rx FIFO Empty Before SOM | 0     | 0     |
| CPU Rx FIFO Empty Before EOM | 0     | 0     |
| CPU Rx Packet SOM Before EOM | 0     | 0     |
| CPU Rx Packet CRC Error      | 0     | 0     |
| DMA terminal count           | 0     | 0     |
| CPU Tx Buffer EOB            | 0     | 0     |
| CPU Tx Buffer Full           | 0     | 0     |
| -----                        |       |       |
| ;                            |       |       |
| END OF REPORT                |       |       |
| ;                            |       |       |

## 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 parameters), 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 combinations).

## 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 40: 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 40: 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 40: 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
OS Count (dec) ALGN -OS- ALGN ALGN
Transmit BSN (dec) 16 0 1 2
Transmit FSN (dec) 0 0 158 168
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

***origininc***

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

**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:**

*aaaaaaaaaaaaaaaa*

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:

*atmansi*—Used by the LIM cards to support the high-speed ATM signaling link feature



*atmhc*—Used by E5-ATM or 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

*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.

*ss7ml*—Used by MPL and E1/T1 MIM cards. The GPL allows the MPL card 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.

*vsccp*—Used by DSM 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 DSM card is present, then the GPL processes normal GTT traffic.

*vxwslan* —Used by SSED CM cards to support the STPLAN application

#### **asname (optional)**

Application server name. The name of the application server.

##### **Range:**

*aaaaaaaaaaaaaaaa*

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:****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 43: Valid Parameter Combinations for the type Parameter](#). An X in a cell indicates that the parameter is valid for the report type shown.

**Table 43: 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    |       |
| mapscm          |                               |      | X    |        | X    |      |    |     |      |        |      |       |
| np              |                               |      | X    |        | X    |      |    |     |      |        |      |       |
| origni          |                               |      |      |        |      |      |    |     |      |        | X    |       |
| origininc       |                               |      |      |        |      |      |    |     |      |        | 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 origininc 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 (*mtcd* and *nm* are excluded with message "E2307: QH or HH is not valid for this TYPE"). 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*, *origininc*, *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 line.

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 line.

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=origininc* 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 *origininc* 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.

The value specified for the lsn parameter must already exist in the database.

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 mtcnp=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.

## 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 5 ISS 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 the *Measurements* Manual for the current release 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

### cli (optional)

CLLI string. Displays only alarms that pertain to a particular CLI.

#### Range:

*ayyyyyyyyyyy*

### dev (optional)

Device. The type of device for which alarms are displayed.

#### Range:

*applsock*

*as*

*card*

*cdt*

*clock*

*dlk*

*ls*

*lsmconn*

*route*

*slk*

*trm*

*rtx*

*e1port*

*t1port*

*tps*

*enet*

**display (optional)**

Type of alarms to be displayed. When the `disply=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 `cli` 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 `cli` parameter is specified.

The `dur` parameter must be compatible with the specified device.

The value specified for the `cli` 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 DSM/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-stpopt` command *critalminh* parameter is turned on.
- **CUR LVL**—Level of the current alarm on the device (Critical, Major, Minor). "None" indicates that there is currently no alarm on the device (DUR 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:**

[illegible]

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:**

**Default:**

Current value

**rhost (optional)**

Remote host name. The logical name assigned to the remote host device.

**Range:**

abcdefghijklmnopqrstuvwxyz

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:**

*aaaaaaaaaaaaaaaa*

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 ----
sochblue OOS-MT-DSBLD ----
```

```
Command Completed
;
```

```
rept-stat-aplsock
```

```
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-aplsock: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:

*aaaaaaaaaaaaaaaa*

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:

*aaaaaaaaaaaaaaaa*

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:**

*a*yuyuyuyuyuyuyuyuyuyuy

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:**

[illegible]

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:**

**rhost (optional)**

Name of Remote Host as defined in the IP Host table.

**Range:**

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), 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 00S-MT-DSBLD 00S
ipl1302a 1302 A A IS-NR ESTABLISHED
n 1315 A A 00S-MT CONNECTING
ipg1305a1 1305 A A 00S-MT-DSBLD 00S undefined
ipl1301b3 1301 A B3 IS-NR ESTABLISHED
m2pa1107a0 1107 A -- 00S-MT-DSBLD 00S
m2pa1107a1 1107 A -- 00S-MT-DSBLD 00S
ipg1215a01 1215 A ** IS-NR ESTABLISHED undefined
ipg1215a02 1215 A ** IS-NR ESTABLISHED undefined
ipg1215a03 1215 A -- 00S-MT-DSBLD 00S undefined
ipg1215a04 1215 A ** 00S-MT 00S undefined
ipg1215a05 1215 A -- 00S-MT-DSBLD 00S 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
ipsgm2pa 1102 B A15 IS-NR ESTABLISHED

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:**

*xyyyyyyy*

1 alphabetic character followed by up to 6 alphanumeric characters. Valid applications are:

*atmansi*—Used by LIM-ATM, E5-ATM, and E5-ATM-B cards to support ATM high-speed signaling links. Used by E5-ATM and E5-ATM-B cards to support T1 functions.

*atmitu*—Used by E1 ATM, E5-ATM, and E5-ATM-B cards to support E1 high-speed signaling links. Used by E5-ATM and E5-ATM-B cards to support E1 functions.

*ccs7itu*—Used by E1/T1 MIM, HC-MIM, and E5-E1T1 cards for ITU MTP functions.

*elap* - Used by E5APPB cards to support ELAP application

*epap* - Used by E5APPB cards to support 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 IPSM 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 E5APPB cards to support LSMS application.

*mcp*—Used by MCPM cards for the Measurements Platform feature

*nas* - Used by E5APPB cards to support NAS application.

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

*ss7ansi*—Used by MPL, E1/T1 MIM cards, HC-MIM, and E5-E1T1 cards for ANSI 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 DCM, 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
```

## 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, stat, or appl parameters can be specified in the command.

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

If Message Flow Control (MFC) is OFF, then LIM cards show TVG results for SNM, SLAN, SCCP, EROUTE and INM. SCCP cards show TVG results for SNM and INM.

If MFC is ON, then 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 44: Maximum Supported Links based on Card Type and GPL**

| GPL with Card Type         | Maximum Supported Links |                       |
|----------------------------|-------------------------|-----------------------|
|                            | Card Hardware Verified  | Card Hardware Unknown |
| ATMITU/ATMANSI on LIMATM   | 1                       | 3                     |
| ATMHC on E5-ATM/E5-ATM-B   | 3                       | 3                     |
| SS7HC on E5-E1T1           | 32                      | 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                    |
| SS7ML on MPL or E1/T1 MIM  | 8                       | 8                     |
| SS7HC on E1/T1 MIM         | 8                       | 8                     |
| SIPHC on E5-SM8G-B         | 17(16 TCP & 1 UDP)      | 17(16 TCP & 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 and E5-E1T1 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 or E5-E1T1 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-sl`, `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:

.  
 .  
 .

MCPM cards consist of EDSM-2G and E5-MCPM-B cards. If either MCPM card is used, then the *Type* field displays MCPM.

Card TYPE "ENET" appears if an E5-ENET card is not installed for an IPSG application. If an E5-ENET card (IPSG card) is installed, card TYPE "E5ENET" appears.

rept-stat-card

```

r lghncxa03w 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    | VSCCP  | IS-NR | Active  | ----- |
| 1105 | 125-020-000 | DSM    | VSCCP  | 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 | HMUX   | BPHMUX | IS-NR | Active  | ----- |
| 1110 | 125-020-000 | HMUX   | BPHMUX | IS-NR | Active  | ----- |
| 1111 | 125-020-000 | IPSM   | IPS    | IS-NR | Active  | ----- |
| 1112 | 125-020-000 | MCPM   | MCP    | IS-NR | Active  | ----- |
| 1113 | 070-019-002 | GPSM   | EOAM   | IS-NR | Standby | ----- |
| 1114 | -----       | TDM    |        | IS-NR | Active  | ----- |
| 1115 | 070-019-002 | GPSM   | EOAM   | IS-NR | Active  | ----- |
| 1116 | -----       | TDM    |        | IS-NR | Active  | ----- |
| 1117 | -----       | MDAL   |        | IS-NR | Active  | ----- |

```

1201 125-020-000 LIMDS0 SS7ANSI IS-NR Active -----
1202 ----- LIMCH SS7ANSI 00S-MT-DSBLD Manual ---
1203 125-020-000 LIMCH SS7ANSI IS-NR Active -----
1205 134-045-000 DSM SIPHC IS-NR Active -----
1209 125-020-000 HMUX BPHMUX IS-NR Active -----
1210 125-020-000 HMUX BPHMUX IS-NR Active -----
1211 125-020-000 LIMATM ATMANSI IS-NR Active -----
1213 125-020-000 LIME1ATM ATMITU IS-NR Active -----
1301 048-019-022 LIME1 SS7ANSI IS-NR Active -----
1303 125-022-000 LIME1 SS7ANSI IS-NR Active -----
1305 125-022-000 LIME1 CCS7ITU IS-NR Active -----
1309 125-017-000 HIPR HIPR IS-NR Active -----
1310 125-017-000 HIPR HIPR IS-NR Active -----
1311 125-020-000 STC EROUTE IS-NR Active -----
1313 125-020-000 DCM VXWSLAN IS-NR Active -----
2101 104-002-000 LIMV35 CCS7ITU IS-NR Active -----
2103 128-018-000 DCM IPLHC IS-NR Active -----
2107 104-001-000 LIMCH CCS7ITU 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 GPSM-II 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 45: Auto-Inhibit Hardware Verification Codes](#). The MDAL and HMUX cards do not display the field in mode=full reports on their locations.

rept-stat-card:loc=1113:mode=full

```

tekelecstp 06-05-29 12:15:95 EST EAGLE 35.0.0
CARD VERSION TYPE GPL PST SST AST
1113 126-004-000 GPSM EOAM IS-NR Active -----
ALARM STATUS = No Alarms.
BPDCM GPL version = 126-004-000
IMT BUS A = Conn
IMT BUS B = Conn
CLOCK A = Active
CLOCK B = Idle
CLOCK I = Idle
MBD BIP STATUS = Valid
MOTHER BOARD ID = GPSM2
DBD STATUS = Valid
DBD TYPE = MEM
DBD MEMORY SIZE = 1024M
HW VERIFICATION CODE = -----
TROUBLE TEXT VER. = Rev 1.6
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 the output for a multi-port LIM (MPL) card receiving pure MTP routed traffic. The MFC option and EAGLE 5 Integrated Monitoring Support (E5IS) feature is ON. The GPL running on the card is SS7ML; the card TYPE is LIMDS0. When the mode=full parameter is specified, the mother board ID is displayed. The MIM type is displayed for multi-port LIM cards.

```
rept-stat-card:loc=1203:mode=full
```

```

tekelecstp 11-03-21 11:19:03 EST EAGLE 44.0.0
CARD VERSION TYPE GPL PST SST AST
1203 134-000-000 LIMDS0 SS7ML IS-NR Active -----
ALARM STATUS = * 0022 Clock B for card failed
BPMLT GPL version = 056-000-000
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 = MIM
DBD STATUS = Valid
DBD TYPE = None
DBD MEMORY SIZE = 0M
HW VERIFICATION CODE = ----
SIGNALING LINK STATUS
 SLK PST LS CLLI E5IS
 A IS-NR ls1203a0 tklcb1203a0 INACTIVE
 B IS-NR ls1203a0 tklcb1203a0 INACTIVE
 A1 IS-NR ls1203a1 tklcb1203a1 INACTIVE
 B1 IS-NR ls1203a1 tklcb1203a1 INACTIVE
 A2 IS-NR ls1203a2 tklcb1203a2 INACTIVE
 B2 IS-NR ls1203a2 tklcb1203a2 INACTIVE
 A3 IS-NR ls1203a3 tklcb1203a3 INACTIVE
 B3 IS-NR ls1203a3 tklcb1203a3 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 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 HMUX card:

```
rept-stat-card:loc=1109:mode=full
```

```

rlghncxa03w 07-07-04 15:10:19 EST EAGLE 37.0.0
CARD VERSION TYPE GPL PST SST AST
1109 239-009-010 HMUX BPHMUX IS-NR Active -----
ALARM STATUS = No Alarms
TRIAL VERSION = BPHMUX 101-009-000
FPGA VERSION = BPHMUX 000-022-005

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 MCPM card running the MCP application for the Measurements Platform feature:

```
rept-stat-card:loc=1105:mode=full
```

```

rlghncxa03w 11-05-09 16:35:57 IST EAGLE 44.0.0
CARD VERSION TYPE GPL PST SST AST
1105 132-049-000 MCPM MCP IS-NR Active -----
ALARM STATUS = No Alarms
BPDCM GPL VERSION = 128-001-000
IMT BUS A = Conn
IMT BUS B = Conn
CLOCK A = Active
CLOCK B = Fault
CLOCK I = Idle
MBD BIP STATUS = valid
MOTHER BOARD ID = SS EDCM
DBD STATUS = Valid
DBD TYPE = MEM
DBD MEMORY SIZE = 2048M
HW VERIFICATION CODE = ----
IPLNK STATUS
 IPLNK IPADDR STATUS PST
 A 10.254.101.92 UP IS-NR
MCP IP CONNECTION
 PORT PST SST
 A IS-NR Active
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
 SNM REQ STATUS = 24 hr: TVG MFC TVG MFC
 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 tkxcb1101a1
 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

 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

```

tklcl1110501 07-04-12 17:28:02 EST EAGLE5 37.0.0
CARD VERSION TYPE GPL PST SST AST
1107 128-015-000 DSM SCCPHC IS-NR Active -----
1317 ----- DSM VSCCP OOS-MT Isolated -----
2217 128-015-000 DSM SCCPHC IS-NR Active -----
2317 ----- DSM VSCCP OOS-MT Isolated -----
3103 ----- DSM VSCCP 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 IPSP GPL. Fast Copy functionality has been provisioned for the IPSP 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 IPSP 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
 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 ipsq1105b2 ----- 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
 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 08-12-01 15:38:32 EST EAGLE 40.1.0
CARD VERSION TYPE GPL PST SST AST
1108 ----- MCPM MCP OOS-MT-DSBLD Manual -----
1109 030-009-000 HIPR HIPR IS-NR Active -----
1110 030-009-000 HIPR HIPR IS-NR Active -----
1111 030-010-000 IPSM IPS 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 10-02-09 00:57:31 EST EAGLE 42.0.0
CARD VERSION TYPE GPL PST SST AST
1113 132-057-000 E5-OAM OAMHC IS-NR Active %23
ALARM STATUS = No Alarms.
BPDCM GPL version = 132-048-000
IMT BUS A = Conn
IMT BUS B = Conn
E5-OAM IP CONNECTION IS-NR Active

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 SS7ANSI 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  | 00S-MT-DSBLD | ls3   | ----- |
| A2  | 00S-MT-DSBLD | ls3   | ----- |
| B2  | 00S-MT-DSBLD | ls3   | ----- |
| A3  | 00S-MT-DSBLD | ls3   | ----- |
| B3  | 00S-MT-DSBLD | ls3   | ----- |
| A4  | 00S-MT-DSBLD | ls3   | ----- |
| B4  | 00S-MT-DSBLD | ls3   | ----- |
| A5  | 00S-MT-DSBLD | ls3   | ----- |
| B5  | 00S-MT-DSBLD | ls3   | ----- |
| A6  | 00S-MT-DSBLD | ls3   | ----- |
| B6  | 00S-MT-DSBLD | ls3   | ----- |
| A7  | 00S-MT-DSBLD | ls3   | ----- |
| B7  | 00S-MT-DSBLD | ls3   | ----- |
| A8  | 00S-MA       | ----- | ----- |
| B8  | 00S-MA       | ----- | ----- |
| A9  | 00S-MA       | ----- | ----- |
| B9  | 00S-MA       | ----- | ----- |
| A10 | 00S-MA       | ----- | ----- |
| B10 | 00S-MA       | ----- | ----- |
| A11 | 00S-MA       | ----- | ----- |
| B11 | 00S-MA       | ----- | ----- |
| A12 | 00S-MA       | ----- | ----- |
| B12 | 00S-MA       | ----- | ----- |
| A13 | 00S-MA       | ----- | ----- |
| B13 | 00S-MA       | ----- | ----- |
| A14 | 00S-MA       | ----- | ----- |
| B14 | 00S-MA       | ----- | ----- |
| A15 | 00S-MA       | ----- | ----- |
| B15 | 00S-MA       | ----- | ----- |
| A16 | 00S-MA       | ----- | ----- |
| B16 | 00S-MA       | ----- | ----- |
| A17 | 00S-MA       | ----- | ----- |
| B17 | 00S-MA       | ----- | ----- |
| A18 | 00S-MA       | ----- | ----- |
| B18 | 00S-MA       | ----- | ----- |
| A19 | 00S-MA       | ----- | ----- |
| B19 | 00S-MA       | ----- | ----- |
| A20 | 00S-MA       | ----- | ----- |
| B20 | 00S-MA       | ----- | ----- |
| A21 | 00S-MA       | ----- | ----- |
| B21 | 00S-MA       | ----- | ----- |
| A22 | 00S-MA       | ----- | ----- |
| B22 | 00S-MA       | ----- | ----- |
| A23 | 00S-MA       | ----- | ----- |
| B23 | 00S-MA       | ----- | ----- |
| A24 | 00S-MA       | ----- | ----- |
| B24 | 00S-MA       | ----- | ----- |
| A25 | 00S-MA       | ----- | ----- |
| B25 | 00S-MA       | ----- | ----- |
| A26 | 00S-MA       | ----- | ----- |
| B26 | 00S-MA       | ----- | ----- |
| A27 | 00S-MA       | ----- | ----- |
| B27 | 00S-MA       | ----- | ----- |
| A28 | 00S-MA       | ----- | ----- |
| B28 | 00S-MA       | ----- | ----- |
| A29 | 00S-MA       | ----- | ----- |
| B29 | 00S-MA       | ----- | ----- |
| A30 | 00S-MA       | ----- | ----- |
| B30 | 00S-MA       | ----- | ----- |
| A31 | 00S-MA       | ----- | ----- |
| B31 | 00S-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 00S-MT-DSBLD ls3 -----
 B 00S-MT-DSBLD ls3 -----
 A1 00S-MT-DSBLD ls3 -----
 B1 00S-MT-DSBLD ls3 -----
 A2 00S-MT-DSBLD ls3 -----
 B2 00S-MT-DSBLD ls3 -----
 A3 00S-MT-DSBLD ls3 -----
 B3 00S-MT-DSBLD ls3 -----
 A4 00S-MT-DSBLD ls3 -----
 B4 00S-MT-DSBLD ls3 -----
 A5 00S-MT-DSBLD ls3 -----
 B5 00S-MT-DSBLD ls3 -----
 A6 00S-MT-DSBLD ls3 -----
 B6 00S-MT-DSBLD ls3 -----
 A7 00S-MT-DSBLD ls3 -----
 B7 00S-MT-DSBLD ls3 -----
 A8 00S-MA -----
 B8 00S-MA -----
 A9 00S-MA -----
 B9 00S-MA -----
 A10 00S-MA -----
 B10 00S-MA -----
 A11 00S-MA -----
 B11 00S-MA -----
 A12 00S-MA -----
 B12 00S-MA -----
 A13 00S-MA -----
 B13 00S-MA -----
 A14 00S-MA -----
 B14 00S-MA -----
 A15 00S-MA -----
 B15 00S-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 SS7ANSI 00S-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 00S-MA - -
 B8 00S-MA - -
 A9 00S-MA - -
 B9 00S-MA - -
 A10 00S-MA - -
 B10 00S-MA - -
 A11 00S-MA - -
 B11 00S-MA - -
 A12 00S-MA - -
 B12 00S-MA - -
 A13 00S-MA - -
 B13 00S-MA - -
 A14 00S-MA - -
 B14 00S-MA - -
 A15 00S-MA - -
 B15 00S-MA - -
 A16 00S-MA - -
 B16 00S-MA - -
 A17 00S-MA - -
 B17 00S-MA - -
 A18 00S-MA - -
 B18 00S-MA - -
 A19 00S-MA - -
 B19 00S-MA - -
 A20 00S-MA - -
 B20 00S-MA - -
 A21 00S-MA - -
 B21 00S-MA - -
 A22 00S-MA - -
 B22 00S-MA - -
 A23 00S-MA - -
 B23 00S-MA - -
 A24 00S-MA - -
 B24 00S-MA - -
 A25 00S-MA - -
 B25 00S-MA - -
 A26 00S-MA - -
 B26 00S-MA - -
 A27 00S-MA - -
 B27 00S-MA - -
 A28 00S-MA - -
 B28 00S-MA - -
 A29 00S-MA - -
 B29 00S-MA - -
 A30 00S-MA - -
 B30 00S-MA - -
 A31 00S-MA - -
 B31 00S-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 IPSC 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 IPSC 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 tkllcc1111n0 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 LIMDS0 SS7ML IS-NR Active -----
ALARM STATUS = No Alarms.
BPMP 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: -----
SCPMSI 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.
BPMPPL 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.
BPMPPL 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 the output when E5APPB cards exist in the system:

rept-stat-card

```

tekelecstp 12-07-13 11:48:18 EST 45.0.0-64.37.0
rept-stat-card
Command entered at terminal #4.
CARD VERSION TYPE GPL PST SST AST
1101 ----- IPSM IPS 00S-MT-DSBLD Standby -----
1105 ----- E5APPB EPAP RSRVD Avail -----
1107 ----- E5APPB ELAP RSRVD Avail -----
1109 000-000-000 HMUX BPHMUX IS-NR Active -----
1110 000-000-000 HMUX BPHMUX IS-NR Active -----
1113 255-255-255 GPSM EOAM IS-NR Active -----
1114 ----- TDM IS-NR Active -----
1115 255-255-255 GPSM EOAM IS-NR Standby -----
1116 ----- TDM IS-NR Active -----
1117 ----- MDAL 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 E5APPB 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 E5APPB 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.
;
```

## 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 (DCM cards show card type DCM.)
- **APPL**—Application loaded on the card

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 types DCM (SLAN application) and 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 the *Maintenance Manual*) 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 the *Maintenance Manual*) 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 45: Auto-Inhibit Hardware Verification Codes**

| HW Verification Code | Card or Application Code | Description                                                                                              | Associated UAM Code |
|----------------------|--------------------------|----------------------------------------------------------------------------------------------------------|---------------------|
| 002*                 | VSCCP                    | VSCCP card equipped with non-DSM MPS feature is on                                                       | 99                  |
| 003*                 | VSCCP                    | VSCCP card equipped with non-DSM LNP and VGTT feature is on                                              | 99                  |
| 004*                 | VSCCP                    | VSCCP card equipped with non-DSM XGTT 1,000,000 is on                                                    | 99                  |
| 005*                 | VSCCP                    | VSCCP card equipped w/non-DSM when EGMS enabled                                                          | 99                  |
| 050                  | VSCCP                    | VSCCP card equipped with no daughterboards                                                               | 99                  |
| 051                  | VSCCP                    | VSCCP card equipped with less than 4GB when LNP ported TNs key equal to or greater than 48 million is on | 422                 |
| 052                  | VSCCP                    | VSCCP card equipped with less than 3GB when LNP ported TNs key equal to or greater than 36 million is on | 422                 |

| HW Verification Code | Card or Application Code      | Description                                                                                                                                                                                       | Associated UAM Code |
|----------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 053                  | VSCCP                         | VSCCP card equipped with less than 2GB when LNP NPAXXX 150,000 or LNP LRN 100,000 feature key is on                                                                                               | 422                 |
| 059                  | VSCCP                         | MPS database has been detected to exceed capacity of DSM extended memory (only for GPORT, GFLEX, INP, EIR features). UAMs 281, 283, and 285 are used for LNP and LNP ELAP Configuration features. | 422                 |
| 060                  | VSCCP                         | VSCCP card equipped w/< 4GB when the ANSI-41 INP Query feature key is on.                                                                                                                         | 422                 |
| 098                  | Any Card                      | New card inserted into system with a flash image not compatible with system release                                                                                                               | 570                 |
| 099                  | E5-TSM                        | E5-TSM card equipped has one or more daughterboard.                                                                                                                                               | 99                  |
| 100                  | SS7IPGW, IPGWI                | DCM with IP connection on B port only when debug enabled                                                                                                                                          | 276                 |
| 101                  | SS7IPGW, IPGWI, IPLIM, IPLIMI | E5-ENET only supports SLK link A-7and B-7                                                                                                                                                         | 276                 |
| 102*                 | SS7IPGW, IPGWI                | Non-DCM detected in slot                                                                                                                                                                          | 99                  |
| 103                  | SS7IPGW, IPGWI, IPLIM, IPLIMI | E5-ENET or E5-ENET-B does not support >16 associations (IPLIMx)<br><br>E5-ENET or E5-ENET-B does not support >50 associations (IPGWx)                                                             | 276                 |

| HW Verification Code | Card or Application Code      | Description                                                                                                                                   | Associated UAM Code |
|----------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 104                  | SS7IPGW, IPGWI, IPLIM, IPLIMI | E5-ENET or E5-ENET-B does not support >0 sockets (IPLIMx)<br><br>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)<br><br>E5-ENET or E5-ENET-B does not support >3200Kb SCTP buffers (IPGWx) | 276                 |
| 110                  | SS7IPGW, IPGWI                | (SRKQ = DRKQ > 1000) not supported on DCM.                                                                                                    | 276                 |
| 122                  | MIM                           | Card is not a MIM - provisioned as a T1 card or as a T1 channel card associated with a T1 interface.                                          | 99                  |
| 123                  | MPL                           | MPL cannot run with port A or B provisioned for speeds not equal to 56K.                                                                      | 297                 |
| 124                  | MIM, HC-MIM                   | Card is not a MIM or HC-MIM and is provisioned as a T1 card.                                                                                  | 99                  |
| 125                  | MIM, MPL                      | MIM or MPL card with a signaling link greater than B3 provisioned.                                                                            | 297                 |
| 127                  | MIM                           | MIM card with a signaling link provisioned on E1/T1 port 2-7.                                                                                 | 297                 |
| 129                  | HC-MIM, E5-E1T1               | Card does not support CAS framing.                                                                                                            | 297                 |

| HW Verification Code | Card or Application Code                                                            | Description                                                                          | Associated UAM Code |
|----------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------|
| 130                  | LIME1, MIM                                                                          | Card is not a LIME1 or MIM and is provisioned as an E1 channel card.                 | 99                  |
| 131                  | HC-MIM, E5-E1T1                                                                     | Card has channel bridging mode active but is not running supported high capacity GPL | 297                 |
| 132                  | MPL                                                                                 | Card is not a LIME1 or MIM and is provisioned as an E1 card.                         | 99                  |
| 133                  | LIME1, LIMDS0, MIM, MPL                                                             | Card cannot support unchanneled mode.                                                | 99                  |
| 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                 |
| 136                  | LIM-ATM, LIME1-ATM                                                                  | Single Port ATM card with SLK provisioned on link B                                  | 297                 |
| 140                  | MCP                                                                                 | MCP card not running with D2G memory.                                                | 422                 |
| 141                  | IPS                                                                                 | IPSM card not running with D2G memory.                                               | 422                 |
| 142                  | MCP                                                                                 | E5-MCPM-B card not running with D4G memory                                           | 422                 |
| 150                  | ASM, EILA, DSM-1G, EDCM, LIM-AINF, LIM-DS0, LIM-E1, LIM-ILA, LIM-OCU, LIM-V.35, TSM | Card is obsolete.                                                                    | 47                  |
| 160                  | MCP                                                                                 | MCP card has incorrect motherboard. The application must run on an EDSM card.        | 441                 |

| 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-DCM/Non-E5-ENET card detected in slot provisioned for <i>eroute</i> with card type DCM | 99                  |
| 171                  | STPLAN                   | Non-DCM/Non-E5-ENET card detected in slot provisioned for STPLAN with card type DCM        | 99                  |
| 179                  | E5-ATM-B, E5-ENET-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:

### 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 LIMIT1 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.

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. A LIM-ATM 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 LIM-DS0, MPL, or HS clock capable cards.

The following example shows output when two GPSM-II cards are configured, and LIM-DS0 cards, MPL cards, 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
 SYSTEM CLOCK
 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
 SYSTEM CLOCK
 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, LIM-DS0 and MPL cards are not 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 LIM-DS0 cards, MPL cards, 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, LIMDS0 and MPL cards are not 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, LIM-DS0 or MPL cards are configured, 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 at least one LIMDS0 or MPL card is 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 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
SYSTEM CLOCK
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 (eg. 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 00S-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 00S-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 00S-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
- **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](#), [rtro-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 AINPQ, G-Flex, G-Port, INP, LNP ELAP Configuration, Prepaid SMS Intercept Ph1 (PPSMS), 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 (G-Flex, G-Port, INP, PPSMS, 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 EOAM cards, values of 1113, 1115, and 1118 cannot be specified for the loc parameter. 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, or the ATINP feature must be enabled 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 cartridge or 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 EIR, G-Flex, G-Port, INP, PPSMS, 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 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:** Credit card USB database information is shown only for the Active OAM slot, whether or not a credit card 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 EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, 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 EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, 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)
 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
 MDAL 1117

RD BKUP Y 1 08-05-29 15:44:20 NZST
;

```

This example shows the output when the EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, 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)
 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
 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 EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, 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)
 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
 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)
 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
 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
TDM-BKUP 1114 Y - 11 02-10-29 08:04:00 111-000-000 NORMAL
LNP
TDM-CRNT 1116 Y N 11 02-10-29 08:04:00 111-000-000 NORMAL
LNP
TDM-BKUP 1116 Y - 11 02-10-29 08:04:00 111-000-000 NORMAL
LNP
MDAL 1117 Y - 1 02-10-24 15:06:29 114-000-000 NORMAL
LNP
;

```

This example shows the output when the G-Flex, G-Port, EIR, INP, LNP ELAP Configuration, PPSMS, 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)
 C LEVEL TIME LAST BACKUP

FD BKUP Y 11 08-05-29 08:20:13 NZST
FD CRNT 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)
 C LEVEL TIME LAST BACKUP

FD BKUP Y 11 02-10-29 08:20:13 NZST
FD CRNT 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 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 -
;
```

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)
 C LEVEL TIME LAST BACKUP

FD BKUP Y 11 02-10-29 08:20:13 NZST
FD CRNT Y 11
 TDM 1116 (STDBY)
 C LEVEL TIME LAST BACKUP

Y 11 02-10-29 08:20:13 NZST
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 )                              |      |       |                        |       |                   |                        |  |
|                                                | 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
 C BIRTHDATE LEVEL EXCEPTION
 - - - - - - - - - - - - - - - - - - -
CARD/APPL LOC Y 02-10-29 08:20:04 12340 DIFF LEVEL
VSCCP 1203
;

```

This example shows the output when the G-Flex, G-Port, EIR, INP, PPSMS, 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)
 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
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 EIR, G-Flex, G-Port, INP, PPSMS, 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)
 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
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 EIR, G-Flex, G-Port, INP, PPSMS, 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)
 C LEVEL TIME LAST BACKUP
 - - - - - -
FD BKUP Y 11 08-05-29 08:20:13 NZST
FD CRNT 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 G-Flex, G-Port, EIR, INP, LNP ELAP Configuration, PPSMS, 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
 MDAL 1117

RD BKUP Y 1 08-05-29 15:44:20 NZST
;

```

This example shows the output when the EIR, G-Flex, G-Port, INP, LNP ELAP Configuration, PPSMS, 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
 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 G-Flex, G-Port, EIR, INP, LNP ELAP Configuration, PPSMS, 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)
 C LEVEL TIME LAST BACKUP
 - - - - - -
FD BKUP Y 11 08-05-29 08:20:13 NZST
FD CRNT 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 G-Flex, G-Port, EIR, INP, PPSMS, 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 EIR, G-Flex, G-Port, EIR, INP, PPSMS, 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 EIR, G-Flex, G-Port, INP, PPSMS, 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
 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
 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 Dual ExAP Config feature is enabled and both LNP and EPAP base features 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
 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 Y 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)
 C LEVEL TIME LAST BACKUP
 - - - - -
FD BKUP Y 1 - -
FD CRNT Y 79
 MCAP 1113
 - - - - -
RD BKUP Y 1 - -
USB BKP - - - -

 TDM 1116 (ACTV)
 C LEVEL TIME LAST BACKUP
 - - - - -
Y 1 - -
Y 79
 MCAP 1115
 - - - - -
Y 1 - -
- - - -

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 cartridges or 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 cartridge or 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 cartridge or 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 Provisioning Application Processor. This section appears only if the G-Port, G-Flex, EIR, INP, PPSMS, 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 Provisioning Application Processor. This section appears only if the G-Port, G-Flex, EIR, INP, PPSMS, 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 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 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:**

|               |                                                                                                                                                                       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>resp</i>   | Responding cards                                                                                                                                                      |
| <i>nresp</i>  | Non-responding cards                                                                                                                                                  |
| <i>incn</i>   | Inconsistent cards                                                                                                                                                    |
| <i>cons</i>   | Consistent cards                                                                                                                                                      |
| <i>ncons</i>  | 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 |
| <i>ndat</i>   | Cards marked as "No Data" because the checksum of dynamic tables is not available                                                                                     |
| <i>nddl</i>   | Cards marked as "No Data " because the checksum of dynamic tables is not available due to the DDL crossload being in incomplete state                                 |
| <i>nddb</i>   | Cards marked as "No Data" because the checksum of dynamic tables is not available due to non-initialization of DDB                                                    |
| <i>duip</i>   | Cards returning replies marked as "DDB update in progress"                                                                                                            |
| <i>duipt</i>  | Cards returning replies marked as "DDB update in progress" due to incomplete evaluation of TSRC task                                                                  |
| <i>duipc</i>  | Cards returning replies marked as "DDB update in progress" due to incomplete checksum calculation                                                                     |
| <i>nquiet</i> | 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:**

|             |                  |
|-------------|------------------|
| <i>resp</i> | Responding cards |
|-------------|------------------|

|               |                                                                                                                                                                        |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>nrsp</i>   | Non-responding cards                                                                                                                                                   |
| <i>incn</i>   | Inconsistent cards                                                                                                                                                     |
| <i>cons</i>   | Consistent cards                                                                                                                                                       |
| <i>ncons</i>  | 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 |
| <i>ndat</i>   | Cards marked as "No Data " because the checksum of dynamic tables is not available                                                                                     |
| <i>nddl</i>   | Cards marked as "No Data " because the checksum of dynamic tables is not available due to the DDL crossload being in incomplete state                                  |
| <i>nddb</i>   | Cards marked as "No Data " because the checksum of dynamic tables is not available due to non-initialization of the DDB                                                |
| <i>duip</i>   | Cards returning replies marked as "DDB update in progress"                                                                                                             |
| <i>duipt</i>  | Cards returning replies marked as "DDB update in progress" due to incomplete evaluation of TSRC task                                                                   |
| <i>duipc</i>  | Cards returning replies marked as "DDB update in progress" due to incomplete checksum calculation                                                                      |
| <i>nquiet</i> | 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 GLOBL
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 progress".

```
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 progress" 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 progress" 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 progress" 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 progress" 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-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

## Related Commands

[act-dlk](#), [canc-dlk](#), [dlt-dlk](#), [ent-dlk](#), [rtro-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 (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:npcfmt.i** 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*

**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:**

|               |                                                    |
|---------------|----------------------------------------------------|
| <i>all</i>    | All of the primary states                          |
| <i>alminh</i> | Alarms inhibited                                   |
| <i>anr</i>    | In service abnormal (IS-ANR)                       |
| <i>dsbld</i>  | Out of service maintenance disabled (OOS-MT-DSBLD) |
| <i>mt</i>     | Out of service maintenance (OOS-MT)                |
| <i>nr</i>     | 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
```

## 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 on *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 output 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:npcfmt` 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-MTLP-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
 001-001-001 PST SST AST
 IS-NR Allowed ACCESS

 ILSN
 lsnstpy PST SST AST
 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 00S-MT Idle INACCESS
 003-001-000 00S-MT Idle INACCESS
 002-102-001 00S-MT Idle INACCESS
 001-101-001 00S-MT Idle INACCESS

 OPCA PST SST AST
 001-001-001 00S-MT Idle INACCESS
 002-001-000 00S-MT Idle INACCESS

 ILSN PST SST AST
 e2m1s1 00S-MT Idle INACCESS

 CIC ECIC PST SST AST
 0 1000 00S-MT Idle INACCESS

 SI PST SST AST
 3 00S-MT Idle INACCESS

 003-101-001 00S-MT Idle INACCESS
 004-101-001 00S-MT Idle INACCESS
 007-101-001 00S-MT Idle INACCESS
 100-100-* 00S-MT Idle INACCESS
 100-100-001 00S-MT Idle INACCESS

 OPCA PST SST AST
 001-001-001 00S-MT Idle INACCESS
 002-002-002 00S-MT Idle INACCESS
 001-102-001 00S-MT Idle INACCESS
 200-200-001 00S-MT Idle INACCESS

 DPCN PST SST AST
 1-010-1 00S-MT Idle INACCESS
 1-020-2 00S-MT Idle INACCESS
 1-020-3 00S-MT Idle INACCESS
 1-020-4 00S-MT Idle INACCESS
 1-050-1 00S-MT Idle INACCESS

 OPCA PST SST AST
 002-001-000 00S-MT Idle INACCESS
 002-101-001 00S-MT Idle INACCESS

DPCN24 PST SST AST

```

```

DPCI
1-030-1 PST SST AST
 00S-MT Idle INACCESS
1-030-2 00S-MT Idle INACCESS
1-040-4 00S-MT Idle INACCESS
1-070-1 00S-MT Idle INACCESS

 OPCN
 1-050-1 PST SST AST
 00S-MT Idle INACCESS

 ILSN
 npc1 PST SST AST
 00S-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
001-101-001 PST SST AST
 00S-MT Idle INACCESS

 OPCA
 001-001-001 PST SST AST
 002-001-000 00S-MT Idle INACCESS
 00S-MT Idle INACCESS

 ILSN
 e2m1s1 PST SST AST
 00S-MT Idle INACCESS

DPCN
1-050-1 PST SST AST
 00S-MT Idle INACCESS

 OPCA
 002-001-000 PST SST AST
 002-101-001 00S-MT Idle INACCESS
 00S-MT Idle INACCESS

DPCN24 PST SST AST

DPCI
1-070-1 PST SST AST
 00S-MT Idle INACCESS

 OPCN
 1-050-1 PST SST AST
 00S-MT Idle INACCESS

 ILSN
 npc1 PST SST AST
 00S-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.
;
```

## 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

## 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 HMUX or HIPR card locations ( $xy09$  and  $xy10$  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.
- **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

## Related Commands

None.



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

## 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

**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 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:

*xyyyyyyyy*

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-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.

*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

*hipr*—Communication software used on the High Speed IMT Packet Router (HIPR) card

*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 SSEDCEM 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
```

**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 cartridge or 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 cartridge or 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`

|                                                 |      |             |             |             |
|-------------------------------------------------|------|-------------|-------------|-------------|
| r lghncxa03w 12-03-04 07:01:08 EST EAGLE 45.0.0 |      |             |             |             |
| 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
Command Completed.
;

```

This example shows the output for the UTILITY GPL, whether the cartridge or 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 card 3108 is running the older, approved GPL. Cards 2108 and 2208 are each running a new nonapproved version. Card 2108 has had this version activated, and card 2208 is still running this version in a trial mode (a + appears following the ALM indicator).

```
rept-stat-gpl:gpl=bphcap
```

```

rlghncxa03w 05-01-07 10:23:93 EST EAGLE 33.0.0
GPL CARD RUNNING APPROVED TRIAL
BPHCAP 2108 101-005-001 ALM 101-016-000 101-005-001
BPHCAP 2208 101-005-001 ALM+ 101-016-000 101-005-001
BPHCAP 3108 101-016-000 101-016-000 101-005-001
Command Completed.
;

```

This example shows the output for the HIPR GPL:

```
rept-stat-gpl:gpl=hipr
```

```

rlghncxa03w 09-08-04 07:01:08 EST EAGLE5 41.1.0
GPL CARD RUNNING APPROVED TRIAL
HIPR 1109 118-020-000 118-020-000 118-020-000
HIPR 1110 118-020-000 118-020-000 118-020-000
HIPR 1209 118-020-000 118-020-000 118-020-000
HIPR 1210 118-020-000 118-020-000 118-020-000
Command Completed.
;

```

This example shows the output when the display=all parameter is specified. IMT and application GPL information is shown.

The ( \*) in the SS7ML entry in the GPL column at location 1105 indicates that a multi-port LIM is running on the system. The card is provisioned in the database with the SS7ANSI application.

```
rept-stat-gpl:display=all
```

```
rlghncxa03w 12-05-07 10:23:93 EST EAGLE 45.0.0
```



```

GPL CARD RUNNING APPROVED TRIAL
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
SS7ML * 1105 027-001-000 027-001-000 027-001-000
 BPMPL 230-001-001 230-001-001 230-001-001
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 12-03-15 18:53:54 EST EAGLE 45.0.0
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
.
.
.
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 12-03-04 07:01:08 EST EAGLE 45.0.0
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
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 E5-SM8G-B card is running 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.
;
```

## 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, , 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
- **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 46: IMT Bus States](#).

**Table 46: 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                                        |

| PST          | SST  | AST      | Definition                                             |
|--------------|------|----------|--------------------------------------------------------|
|              |      |          | 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

SIPNP Feature must be enabled before retrieving the dynamic status of SIP transport.

A SIP card running the SIPHC 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, ent-ip-conn, rtrv-ip-conn, dlt-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:

### 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:

*aaaaaaaaa*

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 IPSP 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 IPSP, 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 IPSP 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 IPSP.

## 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.

IPSP linksets have SLKTPS linksets configured rather than IPTPS. SLKTPS configures the transactions per second for each link assigned to the IPSP linkset as opposed to IPTPS which configures the combined transactions per second for the entire IPGW linkset. For an IPSP 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-IPSP hosted links are not counted in the calculation as they do not support SLKTPS.

If a linkset contains a mixture of IPLIMx M2PA and IPSP-M2PA links, then the command does not report any data below the TPS header or raise alarms.

For IPSP-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 IPSP-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 IPSP and IPGWx linkset IP TPS. The report includes the following information for the system and for each IPSP 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 IPSPG 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 IPSPG card or the links in the specified linkset are hosted on E5-ENET-B card,
- the E5-ENET-B IPSPG High Throughput feature is turned ON,
- the actual traffic rate running on the IPSPG card > 6500 TPS and
- the network configuration or traffic characteristics exceeds optimal configuration limits as shown in [Table 47: Baseline Configuration Changes for the E5-ENET-B Card](#).

**Table 47: Baseline Configuration Changes for the E5-ENET-B Card**

| E5-ENET-B Card Baseline Configuration | E5-ENET-B IPSPG High Throughput feature OFF | E5-ENET-B IPSPG 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=yes` parameter 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 IPSP-M2PA linksets, the command does not report any data or raise alarms.

IPGW linksets display dashes in the *CONFIG/MAX* column.

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/<br>RSVD | CONFIG/<br>MAX |      | TPS  | PEAK | PEAKTIMESTAMP |          |
| -----                                         |      |        |                 |                |      |      |      |               |          |
| 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 IPSP 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/<br>RSVD | CONFIG/<br>MAX |      | TPS | PEAK | PEAKTIMESTAMP |          |
| -----                                          |        |                 |                |      |     |      |               |          |
| 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 |
| lsituais                                       | 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 IPSP 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/
 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 IPSP 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/
 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 IPSP 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<br>TPS | Derived<br>TPS | Derived PEAK<br>TPS | PEAKTIMESTAMP     |
|--------------------|---|---------------|----------------|---------------------|-------------------|
| -----              |   |               |                |                     |                   |
| 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<br>TPS | Derived<br>TPS | Derived PEAK<br>TPS | PEAKTIMESTAMP     |
|--------------------|---|---------------|----------------|---------------------|-------------------|
| -----              |   |               |                |                     |                   |
| 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<br>TPS | Derived<br>TPS | PEAK<br>TPS | PEAKTIMESTAMP     |
|----------|---|---------------|----------------|-------------|-------------------|
| -----    |   |               |                |             |                   |
| 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<br>RTT | AVG TX<br>MSU SIZE | AVG RX<br>MSU SIZE |
|---------|-----|--------|------|---------|------|------------|--------------------|--------------------|
|         |     | TX     | RX   | TX      | RX   |            |                    |                    |
| 1       | A   | 1702   | 0    | 2331    | ---  | 7          | 292                | 0                  |
|         | A1  | 3403   | 3403 | 4662    | 4662 | 14         | 292                | 292                |

.  
.  
.

| SAMPLE# | SLK | ACTUAL |      | DERIVED |      | AVG<br>RTT | AVG TX<br>MSU SIZE | AVG RX<br>MSU SIZE |
|---------|-----|--------|------|---------|------|------------|--------------------|--------------------|
|         |     | TX     | RX   | TX      | RX   |            |                    |                    |
| 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<br>RTT | AVG TX<br>MSU SIZE | AVG RX<br>MSU SIZE |
|---------|-----|--------|----|---------|-----|------------|--------------------|--------------------|
|         |     | TX     | RX | TX      | RX  |            |                    |                    |
| 1       | A   | 3403   | 0  | 4662    | --- | 8          | 292                | 0                  |

.  
.  
.

| SAMPLE# | SLK | ACTUAL |    | DERIVED |     | AVG<br>RTT | AVG TX<br>MSU SIZE | AVG RX<br>MSU SIZE |
|---------|-----|--------|----|---------|-----|------------|--------------------|--------------------|
|         |     | TX     | RX | TX      | RX  |            |                    |                    |
| 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 slkusealthresh 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-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:**

**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 a LIMDS0, LIMT1, or LIMCH (associated with a LIMT1) card configured with either an 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](#)

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 LNPMPR usage is expressed as the average percentage of LNPMPR 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, LNPMPR, 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.
- LNPMPR STATUS, either ACT (active), OFFLINE, or SWDL (software loading).

- LNP<sub>MR</sub> 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.
- LNP<sub>MR</sub> ERRORS, the number of LNP message relay errors detected for the total number of LNP message relay messages received by the specified card.
- LNP<sub>QS</sub> STATUS, either ACT (active), OFFLINE, and SWDL (software loading).
- LNP<sub>QS</sub> 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.
- LNP<sub>QS</sub> ERRORS, the number of LNP query errors detected for the total number of LNP query messages received by the specified card.
- WNP<sub>QS</sub> STATUS, either ACT (active), OFFLINE, and SWDL (software loading).
- WNP<sub>QS</sub> 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.
- WNP<sub>QS</sub> 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 LNP<sub>QS</sub> service are pegged as IS-41 LNP Queries with a TT associated with the WNP service under the WNP<sub>QS</sub> counter. The WNP<sub>QS</sub> STATUS, WNP<sub>QS</sub> USAGE, and WNP<sub>QS</sub> ERRORS fields are displayed only if the Wireless Number Portability feature is ON.

- PLNP<sub>QS</sub> STATUS, either ACT (active), OFFLINE, and SWDL (software loading).
- PLNP<sub>QS</sub> 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.
- PLNP<sub>QS</sub> 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 LNP<sub>QS</sub> service are processed and pegged as IN LNP Queries under the LNP<sub>QS</sub> counter. The PLNP<sub>QS</sub> STATUS, PLNP<sub>QS</sub> USAGE, and PLNP<sub>QS</sub> 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

```

tklcl190601 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% LNPMS = 0% LNPQS = 0%
 WNPQS = 0% TLNP = 10% PLNPQS = 0%
 LRNQT = 5%

AVERAGE CPU USAGE = 28%
TOTAL ERRORS:
 GTT: 1 out of 2000
 LNPMS: 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
LNPMS: 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



## 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 (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:npcfmt i` 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

#### **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 IPSPG-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 00S-MT Prohibit GWS
ls11345678 001-001-003 00S-MT Prohibit -----
ls11345679 001-001-004 00S-MT Idle -----
ls1134567 001-001-005 00S-MT Prohibit -----
ls113456 001-001-006 00S-MT Prohibit -----
ls11345 001-001-007 00S-MT Prohibit GWS
ls113467 001-001-008 00S-MT Prohibit -----
ls1134 001-001-009 00S-MT Prohibit -----
ls987 009-008-007 00S-MT Idle -----
z 009-008-009 00S-MT Idle -----
cap8 008-008-008 00S-MT Idle -----

LSN APCN PST SST AST
lsnational 16383-aa 00S-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 00S-MT Prohibit GWS
ls11345678 004-008-002 00S-MT Prohibit -----
ls113456 014-012-094 00S-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 00S-MT Prohibit GWS
ls11345678 001-001-002 00S-MT Prohibit -----
ls11345679 001-001-004 00S-MT Idle -----
ls1134567 001-001-005 00S-MT Prohibit -----
ls113456 001-001-002 00S-MT Prohibit -----
ls11345 p-001-001-007 00S-MT Prohibit GWS
ls113467 001-001-008 00S-MT Prohibit -----
ls1134 p-001-001-009 00S-MT Prohibit -----
ls987 009-008-007 00S-MT Idle -----
z 009-008-009 00S-MT Idle -----
cap8 008-008-008 00S-MT Idle -----
LSN APCN PST SST AST
lsnational s-09-14-05-3-ab 00S-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 00S-MT Prohibit GWS
ls11345678 004-008-002 00S-MT Prohibit -----
ls113456 014-012-094 00S-MT Prohibit -----
;
```

This example shows the ASP state for IPSP-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.
;
```

## Legend

- **LSN**—Name of the linkset
- **APCA/APCI/APCN/APCN24**—Adjacent point code of the linkset (ANSI, ITU-I, ITU-N, ITU-N 24-bit)
- **SPCA/SPCI/SPCN/SPCN24**—Secondary point code of the linkset (ANSI, ITU-I, ITU-N, ITU-N 24-bit)
- **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**—Proxy point code of the linkset (ANSI, ITU-I, ITU-N, ITU-N 24-bit)
- **ASP STATE**—State of AS associated with each signaling link of the IPSPG-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:** MCPM cards consist of EDSM-2G and E5-MCPM-B cards. If either MCPM card is used, then the *Type* field displays MCPM.

Output example with an EDSM card isolated:

rept-stat-meas

```

MEAS SS PST SST AST
 ALARM STATUS = IS-ANR Active -----
 * 0516 Degraded Mode - 1 card failed

CARD VERSION TYPE PST SST AST
1107 P 101-009-000 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 with both EDSM cards IS-NR:

rept-stat-meas

```

MEAS SS PST SST AST
 ALARM STATUS = IS-NR Active -----
 No Alarms

CARD VERSION TYPE PST SST AST
1107 P 046-010-004 MCPM IS-NR Active -----
 IP Link A IS-NR Active -----
1109 046-010-004 MCPM IS-NR Active -----
 IP Link A OOS-MT Unavail -----

CARD 1105 ALARM STATUS = No Alarms
CARD 1106 ALARM STATUS = No Alarms

Command Completed.
;

```

Output example when the Integrated Measurements collection function is turned on:

rept-stat-meas

```

MEAS SS PST SST AST
 ALARM STATUS = IS-NR Active -----
 No Alarms

CARD VERSION TYPE GPL PST SST AST
1113 P 132-049-000 E5MCPAP OAMHC IS-NR Active -----
 IP Link A IS-NR Active -----
1115 132-049-000 E5MCPAP 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 when an E5-MCPM-B card is used.

rept-stat-meas

```

tekelec 11-03-15 20:34:15 EST EAGLE5 44.0.0
MEAS SS PST SST AST
 ALARM STATUS = IS-NR Active -----

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
- **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

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

FC MSEC SRVC_RQSTS_RCVD NUM_APPL_ORIG
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
```

| LOC  | STATUS | THERMAL | IP LINK<br>STATUS | IP LINK<br>CONGESTION | IP LINK<br>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
```

| LOC  | SERVER STATS |               |              | CLIENT STATS |               |                   |
|------|--------------|---------------|--------------|--------------|---------------|-------------------|
|      | FC<br>EVENTS | MSEC<br>IN FC | PDUS<br>RCVD | PDUS<br>SENT | PDUS<br>DSCRD | SRV REQ<br>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

| LOC  | SERVER STATS |               |              | CLIENT STATS |               |                   |
|------|--------------|---------------|--------------|--------------|---------------|-------------------|
|      | FC<br>EVENTS | MSEC<br>IN FC | PDUS<br>RCVD | PDUS<br>SENT | PDUS<br>DSCRD | SRV REQ<br>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 continuously; current values will be observed at every invocation of the command.

## Related Commands

None.

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 IPSEG 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 IPSEG 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 00S-MT Unavail
 B 00S-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 00S-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
- **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
- **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, then the ELAP (EAGLE LNP Application Processor) subsystem status is displayed.
- If the INP/AINPQ feature is turned on, then the EPAP (EAGLE Provisioning 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 5 ISS.

### **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, or the ATINP feature must be enabled before this command can be entered:

- A-Port
- AINPQ
- 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.

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 a Service Module card or a SIP card.

A Service Module card running the VSCCP/SIPHC 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 00ST-MT-DSBLD MEA -----
 DSM PORT A 00S-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.
;
```

## 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.
- **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 Manual* or the *ELAP Administration Manual*. 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 Status 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 DSM 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 a 2G DSM card means that 1G is 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 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 HMUX, HIPR, and HIPR2 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<br>(OPER) | BITRATE<br>(ACT) | BERT<br>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               | HIPR     | IS-NR    | Active | ----- |        | LOW               | LOW              | UNKNOWN        |
| 1309               | HIPR2    | IS-NR    | Active | ----- |        | HIGH              | LOW              | PASS           |
| 1310               | HMUX     | IS-NR    | Active | ----- |        | LOW               | LOW              | UNKNOWN        |
| Command Completed. |          |          |        |       |        |                   |                  |                |
| ;                  |          |          |        |       |        |                   |                  |                |

## Legend

- **CARD**—HMUX, HIPR, or HIPR2 card location
- **TYPE**—Type of card (HMUX, HIPR, or HIPR2)
- **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 HIPR2 card. BERT is a diagnostic test that is initiated by the HIPR2 cards on an all HIPR2 IMT Bus during Bus alignment. Possible values are:
  - **PASS**—BERT passed for the HIPR2 card
  - **FAIL**—BERT failed for the HIPR2 card
  - **UNKNOWN**—BERT status is reported as Unknown for HIPR2 cards if a BERT is not conducted because HMUX and HIPR cards are present on the same Bus. BERT status is always reported as Unknown for a mixture of HMUX and HIPR cards.

## Related Commands

[rept-stat-card](#)

## rept-stat-rtd

### Report Status RTD

Use this command to report Run Time Diagnostics (RTD) for EAGLE 5 ISS 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, E1/T1 MIM, HC-MIM, E5-E1T1, LIMATM, E5-ATM, E5-ATM-B, or E1-ATM 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 (TDM, MDAL cards), and all xy09 and xy10 locations where x is the frame and y is the shelf (HMUX or HIPR 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
 =====
CARD Total Rx Total Rx Total
 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
 =====
SRC/DEST Total Rx Total Rx Total Tx
CARD Error Validated
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
=====
CARD Total Rx Total Rx Total
 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
=====
SRC/DEST Total Rx Total Rx Total Tx
CARD Error Validated
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.

**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 (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*

### **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-**
```

## 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 *anni-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 00S-MT Idle INACCESS
001-001-004 00S-MT Idle INACCESS
001-001-005 00S-MT Idle INACCESS
001-001-006 00S-MT Idle INACCESS
001-001-007 00S-MT Idle INACCESS
001-001-008 00S-MT Idle INACCESS
001-001-009 00S-MT Idle INACCESS
001-001-010 00S-MT Idle INACCESS
001-001-011 00S-MT Idle INACCESS
001-001-012 00S-MT Idle INACCESS
001-001-013 00S-MT Idle INACCESS
001-001-014 00S-MT Idle INACCESS
001-001-015 00S-MT Idle INACCESS
001-001-016 00S-MT Idle INACCESS
001-001-017 00S-MT Idle INACCESS
001-001-018 00S-MT Idle INACCESS
001-001-019 00S-MT Idle INACCESS
001-001-020 00S-MT Idle INACCESS
001-001-021 00S-MT Idle INACCESS
001-001-022 00S-MT Idle INACCESS
001-001-023 00S-MT Idle INACCESS
001-001-024 00S-MT Idle INACCESS
001-001-025 00S-MT Idle INACCESS
001-002-003 00S-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-MTLP-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 00S-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 00S-MT Prohibit INACCESS
 00004 00S-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 00S-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.
;
```

## 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 together with CIC defines the CIC range that is used as exception routing criterion for this exception route.

## 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 (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:npcfmt.i` 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

**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:**

*ayyyyyyyyyyy*

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 (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:npcfmt i` 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*

**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
```

## Dependencies

If the `dpcn` parameter is specified, its format must match the format that was assigned with the `chg-stpopts:npcfmt i` 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 00S-MT Prohibit ACCESS
 12 00S-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 00S-MT Prohibit INACCESS

 OPCA PST SST AST
 003-001-020 00S-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 00S-MT Prohibit ACCESS
 12 00S-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.
;
```

## 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
- **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
- **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

## 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 (DSM, 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 DSM 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:

SERVICE SUCCESS ERRORS FAIL REROUTE\ FORWARD TOTAL
 1995 5 RATIO WARNINGS TO GTT
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:

| SERVICE | SUCCESS | ERRORS | FAIL<br>RATIO | REROUTE\<br>WARNINGS | FORWARD<br>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<br>USAGE | CPU<br>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:

| SERVICE | SUCCESS | ERRORS | FAIL<br>RATIO | REROUTE\<br>WARNINGS | FORWARD<br>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<br>USAGE | CPU<br>USAGE | DATA<br>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 ExAP feature and EPAP Data Split feature s 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<br>USAGE                      | CPU<br>USAGE           | DATA<br>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 Manual* 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 5 ISS
- **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 5 ISS 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 5 ISS. This indicator is displayed between the card location and the GPL version.
- **VERSION**—Version number of the GPL running on the Service Module card
- **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 DSM, 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 5 ISS
- **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 5 ISS 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
- **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 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

## **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 5 ISS. This command reports the status of the CCS MR connections if the SEAS Over IP feature is turned on. See the Maintenance Manual for information about the SEAS alarms.

## **Parameters**

This command has no parameters.

## **Example**

rept-stat-seas

## **Dependencies**

At least one SEAS terminal must be defined using the `chg-trm` command.

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<br>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

- **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*

## Example

```
rept-stat-sip
rept-stat-sip:peakreset=yes
rept-stat-sip: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.

## 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

```
Command Accepted - Processing

tekelecstp 12-06-25 16:14:24 EST EAGLE 45.0.0
rept-stat-sip

SIP ALARM STATUS = No Alarms
SIP cards Configured= 2 Cards IS-NR= 2

CARD VERSION PST SST TPS. PEAK TPS. PEAKTIMESTAMP

1211 028-029-001 IS-NR Active 180 1600 00:00:00
1213 028-029-001 IS-ANR Active 0 0 00:00:00
1311 028-029-001 IS-NR Active 1000 1600 00:00:00

TOTAL SERVICE STATISTICS:
=====
SERVICE SUCCESS ERROR WARNINGS BYPASS TOTAL
SIPNP: 5 1 1 2 9

Command Completed.
;
```

This example displays output when LOC parameter is specified:

rept-stat-sip:loc=1307

```
Command Accepted - Processing

tekelecstp 12-06-25 16:14:24 EST EAGLE 45.0.0
rept-stat-sip:loc=1307

CARD VERSION TYPE PST SST

1307 028-029-001 DSM IS-NR Active

CARD ALARM STATUS = No Alarms

TPS STATISTICS
=====
TPS PEAK TPS. PEAKTIMESTAMP

180 1600 00:00:00

PER CONNECTION STATISTICS
=====
CNAME INVITE 3XX ERROR
```

|    |     |    |    |
|----|-----|----|----|
| C1 | 99  | 95 | 4  |
| C2 | 100 | 90 | 10 |

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 DCM, 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 DCM, 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 DCM, E5-ENET, and E5-ENET-B card to the host.



The EAGLE Cap. field value is obtained by averaging usage percentages for DCM, 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 DCM, E5-ENET, and E5-ENET-B card.

EAGLE 5 ISS level usage for DCM, E5-ENET, and E5-ENET-B card capacity (the AVERAGE USAGE per EAGLE CAPACITY field) is obtained by averaging usage percentages for DCM, 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 SERVICE:
 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 DCM, E5-ENET, and E5-ENET-B cards used by the STPLAN contained in the system.
- **Cards IS\_NR**—Number of DCM, E5-ENET, and E5-ENET-B cards contained in the system whose status is in service normal (IS-NR)
- **CARD**—Locations of the DCM, E5-ENET, and E5-ENET-B cards
- **VERSION**—Version number of the GPL running on the STPLAN card
- **AST**—Associated state of the DCM, E5-ENET, and E5-ENET-B cards. The possible values are described in [\[\[missning link\]\]](#).
- **HOST CAP**—Amount of traffic being sent to the host from each DCM, 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 DCM, 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 DCM, E5-ENET, and E5-ENET-B card.
- **AVERAGE USAGE per HOST CAPACITY**—Amount of traffic being sent to all hosts from all DCM, 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 DCM, E5-ENET, and E5-ENET-B cards.
- **AVERAGE USAGE per EAGLE CAPACITY**—Amount of traffic being sent to all DCM, 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 DCM, 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 DCM, E5-ENET, and E5-ENET-B card.
- **EAGLE CAP**—Average of usage percentages for the DCM, 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 DCM, 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 DCM, 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 DCM, E5-ENET, and E5-ENET-B cards.
- **AVERAGE USAGE per EAGLE CAPACITY**—Amount of traffic being sent to all DCM, 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 DCM, 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 e1loc parameter (card 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 or LIMCH, 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 t1loc parameter (card location of the T1 card) and the UAM text. If the card is not type LIMT1 or LIMCH, 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:**

#### **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:

- E1 ATM card running the ATMITU application

- E1/T1 MIM, E5-E1T1, 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
- LIM card running the SS7ANSI or CCS7ITU application
- LIM ATM card running the ATMANSI 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 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*—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *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.

This command can be canceled using the **F9** function key or the **canc -cmd** command. See **canc -cmd** for more information.

The *Installation Manual – EAGLE 5 ISS* 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 lsnssp2 ----- 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 lsnspi1 ----- IS-NR Avail ----
1207,A lsnstpa ----- IS-NR Avail ----
1207,B lsnspa1 ----- 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 lsnssp2 ----- 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.
;
```

This example includes a multi-port LIM:

```
rept-stat-slk
```

```
rlghncxa03w 04-02-23 12:57:50 EST EAGLE 31.3.0
SLK LSN CLLI PST SST AST
1201,A lsnssp2 ----- 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 ----
1203,A1 lsnstpi ----- IS-NR Avail ----
1203,B1 lsnscpi ----- IS-NR Avail ----
1203,A2 lsnstpb ----- IS-NR Avail ----
1203,B2 lsnscpb ----- IS-NR Avail ----
1203,A3 lsnstpc ----- IS-NR Avail ----
1203,B3 lsnscpc ----- IS-NR Avail ----
1205,A lsnscpi ----- IS-NR Avail ALMINH
1205,B lsnspi1 ----- IS-NR Avail ----
1207,A lsnstpa ----- IS-NR Avail ----
1207,B lsnspa1 ----- IS-NR Avail ----
1211,A lsnstpn ----- OOS-MT Unavail ALMINH
1211,B lsnssp1 ----- OOS-MT Unavail ----
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 lsnssp2 ----- 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 |
| C00 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 lsnssp2 ----- 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.
;
```

This example shows the output for an 8-point IPLIM card:

```
rept-stat-slk:loc=1301
```

```
rlghncxa03w 04-02-23 13:06:25 EST EAGLE 31.3.0
SLK LSN CLLI PST SST AST
1301,A lsnip ----- OOS-MT-DSBLD Unavail ----
1301,B lsnip ----- OOS-MT-DSBLD Unavail ----
1301,A1 lsnip ----- OOS-MT-DSBLD Unavail ----
1301,B1 lsnip ----- OOS-MT-DSBLD Unavail ----
1301,A2 lsnip ----- OOS-MT-DSBLD Unavail ----
1301,B2 lsnip ----- OOS-MT-DSBLD Unavail ----
1301,A3 lsnip ----- OOS-MT-DSBLD Unavail ----
1301,B3 lsnip ----- OOS-MT-DSBLD Unavail ----

 ALARM STATUS = ** 0224 REPT-LKS: not aligned
 UNAVAIL REASON = NA
 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
- **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 (e1loc) and the UAM text. If the E1 association is not provisioned, “E1 association unknown” is displayed. If the card is not type LIME1 or LIMCH, no E1 output is displayed.

#### T1 STATUS

The status of the T1 interface associated with the link; the status includes the card location (t1loc) and the UAM text. If the card is not type LIMT1 or LIMCH, 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 IPSP 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 IPSP GPL.
- When 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.
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
VXWLAN 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 |
| 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 (HMUX, HIPR and HIPR2) 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 DSM 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 AnalyzedInformation Query subsystem
- **SIP CARD**—Status of the SIP Cards

## 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 HMUX or HIPR card locations (*xy09* and *xy10* 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.
- **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

## 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 10-03-01 10:31:06 EST EAGLE 42.0.0
SEQN UAM AL DEVICE ELEMENT TROUBLE TEXT
0002.0143 * CARD 1113 OAM System release GPL(s) not approved
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
0011.0176 * SECULOG 1116 Stdbby security log - upload required
0019.0236 *C T1PORT 1301,1 REPT-T1F:FAC-T1 LOS failure
0021.0318 ** LSN lsn1 REPT-LKST0: link set prohibited
0022.0318 ** LSN lsn2 REPT-LKST0: link set prohibited
0023.0318 ** LSN lsn3 REPT-LKST0: link set prohibited
0024.0236 ** SLK 1315,A ls11234567 REPT-LKF: not aligned
0025.0236 ** SLK 1316,A ls11345678 REPT-LKF: not aligned
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
0002.0143 * CARD 1113 OAM System release GPL(s) not approved

```

```

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
0010.0318 ** LSN lsn4 REPT-LKSTO: link set prohibited
0011.0176 * SECULOG 1116 Stdbby security log - upload required
0019.0236 *C T1PORT 1301,1 REPT-T1F:FAC-T1 LOS failure
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
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
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

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 Stdbby security log -- upload required
4121.0398 * INP SYSTEM Local Subsystem normal,card(s) abnormal

2354.0516 * MEAS SYSTEM Degraded Mode - 1 card failed
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
0046.0155 * DLK 1104,A1 STPLAN connection unavailable
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
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
0050.1114 * HS CLOCK SYSTEM Clock selection mismatch
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
5648.0382 ** E1PORT 1201,2 REPT-E1F:FAC-E1 LOF failure
0047.0392 ** SECURITY SYSTEM 1211 OA&M IP Security feature status is OFF
0036.0455 *C EIR SYSTEM EIR Subsystem is not available
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-LKST0: link set prohibited
1088.0539 * DLK 1106,A1 Ethernet Interface Down
1089.0579 * CARD 1106 FC Network Unavailable
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
3700.0536 * IP7 assoc1234567890 IP Connection Excess Retransmits
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
0917.0537 ** ENET 1112,B Ethernet error threshold exceeded
0189.0084 ** DLK 1104,A EROUTE IP Connection Unavailable

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 lsn489+ REPT-LKF: HWP -too many link interrupts

0022.0318 ** LSN lsn2 REPT-LKST0: link set prohibited
0023.0318 ** LSN lsn3 REPT-LKST0: link set prohibited
0010.0318 ** LSN lsn4 REPT-LKST0: 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-LKST0: 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 Stdbby 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

## Related Commands

[act-echo](#), [alw-trm](#), [chg-trm](#), [dact-echo](#), [inh-trm](#), [rmv-trm](#), [rst-trm](#), [rtro-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:

### 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:  

$$[(\text{current x-list entries}) / (\text{allocated x-list space})] * 100$$
- 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](#), [rtro-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](#), [rtro-obit](#), [rtro-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 the *Installation Manual – EAGLE 5 ISS* 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

**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 terminal specified by the trm parameter must be equipped.

You cannot inhibit the terminal from which this command was entered.

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  $xy09$  and  $xy10$  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.

The *Installation Manual – EAGLE 5 ISS* 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 (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:npcfmt i* 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*

### 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
```

**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.
;
```

**Related Commands**

[chg-stpopts](#), [rept-stat-cluster](#), [rept-stat-dstn](#), [rtro-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 = RRWDGTS
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:

*aaaaaaaaaaaaaaaa*

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:

### cics (optional)

The start range of circuit identification codes assigned to the routing key.

#### Range:

### 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 (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:npcfmt.i* 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

#### **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 (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:npcfmt.i* 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

**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
```

## 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*).

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.

## 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
;

```



## 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:

*aaaaaaaaaaaaaaaa*

Up to 15 alphanumeric characters; the first character must be a letter

#### Default:

Retrieve all

### asname (optional)

Name of the Application Server.

#### Range:

*aaaaaaaaaaaaaaaa*

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

```

 rlgncxa03w 05-06-05 08:40:18 EST EAGLE5 34.0.0
AS Name Mode Tr ms Association Names
m3ua_as1 LOADSHARE 2000 m3ua_assoc1
 OVERRIDE 200 m3ua_assoc1
 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:**

*m3ua*

*sua*

 $m2pa$ 

**Default:**

Retrieve all

**alhost (optional)**

Alternate local host name as defined in the IP Host table.

**Range:**

[illegible]

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:**

ayyyyyyyyyyyyyyyyy

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:**

[illegible]

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:**

**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:**

[illegible]

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

**rhosttype (optional)**

Remote host type. This parameter retrieves associations with a configured primary remote host or with configured primary and alternate remote hosts.

**Range:**

*primary*

retrieve associations with only a primary remote host

*alternate*

retrieve associations with primary and alternate remote hosts

**Default:**

retrieve all associations

**rhostval (optional)**

Remote host validation mode. This parameter retrieves associations with the specified validation mode.

**Range:**

*relaxed*

*match*

**Default:**

retrieve all associations

## Example

```
rtrv-assoc
```

```
rtrv-assoc:aname=swbel32
```

```
rtrv-assoc:lhost=gw105.nc.tekelec.com:adapter=sua
```

```
rtrv-assoc:rhosttype=alternate:display=all
```

## 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).

## 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 42.0.0

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

 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 42.0.0

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 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

| ANAME           | CARD<br>LOC | IPLNK<br>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 42.0.0

| ANAME    | CARD<br>LOC | IPLNK<br>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 42.0.0

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        | 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        | 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        |            |          |         |     |
| 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        |            |          |         |     |
| 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        |            |          |         |     |
| 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

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 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 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

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

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 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 41.0.0

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
HBTIMER 30000
RHOSTVAL RELAXED

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 42.0.0

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 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 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 42.0.0
 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 M2PATSET 1

LSN
lsm2pa05s

```

## Related Commands

*chg-assoc*, *dlt-assoc*, *ent-assoc*, *rept-stat-assoc*

## rtrv-atinpqopts

rtrv-atinpqopts

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 = GRNDLMSISDN
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
LPSET MAXCC MAXPD MAXSTAT TMR TMR TMR TMR TMR
5 4 500 67 CC KALIVE NORSP POLL IDLE
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 ERSM 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
LPSET MAXCC MAXPD MAXSTAT TMR TMR TMR TMR TMR
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<br>NRP | TMR<br>SREC | TNRNO<br>CRED | TMR<br>ERM | N<br>BLK | TMR<br>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
 CC KALIVE NORSP POLL IDLE
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
 N1
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
 TMR N TMR
 SREC BLK PROV
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
- **TMRSECC**—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

**Note:** As of Release 44.0, the type parameter is obsolete

### **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

**Note:** Locations *xy09* and *xy10* are valid only if they are equipped with a HIPR2 card.

### **type (obsolete)**

The type of board at the specified location whose BIP information is to be displayed.

#### **Range:**

*mbd*

main assembly

## 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 the Customer Care Center to find out if the card can be reprogrammed. See the "Customer Care Center" section in Chapter 1 of this manual.

## 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
Serial Number: 3110195
Week/Year: 11/1993

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
Serial Number: 102200111a0195
Week/Year: 11/2001

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
Serial Number: 10206265084
Week/Year: 26/2006
```

```

Software Match ID: EG - 001 Max Power Rating : 646 mA

END OF REPORT
;

```

This example shows the BIP data for HIPR2 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**—Serial 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—nnnyyyww\*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: nnnyyyww\*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 44.0.0 |       |         |           |      |     |           |      |     |  |
|------------------------------------------------|-------|---------|-----------|------|-----|-----------|------|-----|--|
| CARD                                           | TYPE  | APPL    | LSET NAME | LINK | SLC | LSET NAME | LINK | SLC |  |
| 1101                                           | DSM   | VSCCP   | -----     | A    | --  | -----     | B    | --  |  |
| 1102                                           | TSM   | GLS     | -----     | A    | --  | -----     | B    | --  |  |
| 1103                                           | DCM   | STPLAN  | -----     | A    | --  | -----     | B    | --  |  |
| 1108                                           | MCPM  | MCP     |           |      |     |           |      |     |  |
| 1113                                           | GPSM  | OAM     |           |      |     |           |      |     |  |
| 1114                                           | TDM-A |         |           |      |     |           |      |     |  |
| 1115                                           | GPSM  | OAM     |           |      |     |           |      |     |  |
| 1116                                           | TDM-B |         |           |      |     |           |      |     |  |
| 1117                                           | MDAL  |         |           |      |     |           |      |     |  |
| 1205                                           | LIME1 | CCS7ITU | e1lim1    | A    | 0   | -----     | B    | --  |  |
|                                                |       |         | -----     | A1   | --  | -----     | B1   | --  |  |
|                                                |       |         | -----     | A2   | --  | -----     | B2   | --  |  |
|                                                |       |         | -----     | A3   | --  | -----     | B3   | --  |  |
| 1206                                           | LIMCH | CCS7ITU | e1lim1    | A    | 1   | -----     | 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  |  |
| 1208                                           | LIMCH | SS7ANSI | e1jwk5    | A    | 8   | e1lsn1    | B    | 1   |  |
|                                                |       |         | e1jwk6    | A1   | 9   | e1lsn7    | B1   | 13  |  |

```

 e1jwk7 A2 10 e1lsn6 B2 14
 e1jwk8 A3 10 e1lsn5 B3 15
1211 LIMT1 SS7ANSI t1lsn1 A 0 t1lsn1 B 1
 ----- A1 -- t1lsn1 B1 2
 t1lsn5 A2 0 t1lsn6 B2 6
 t1lsn7 A3 13 ----- B3 --
1212 LIMCH SS7ANSI t1lsn1 A 3 t1lsn13 B 10
 t1lsn10 A1 16 t1lsn14 B1 10
 t1lsn11 A2 1 t1lsn15 B2 4
 t1lsn12 A3 8 ----- B3 --
;

```

This example shows the output for a specified card location:

rtrv-card:loc=1205

```

rlghncxa03w 04-01-15 16:34:56 EST EAGLE 31.3.0
CARD TYPE APPL LSET NAME LINK SLC LSET NAME LINK SLC
1205 LIMDS0 SS7ANSI LS1 A 0 LS1 B 1
 LS1 A1 2 LS1 B1 3
 LS1 A2 4 LS1 B2 5
 LS1 A3 6 LS1 B3 7
;

```

This example shows the output when MPL (multi-port LIM) cards are provisioned:

rtrv-card

```

rlghncxa03w 09-04-15 16:34:56 EST EAGLE 41.0.0
CARD TYPE APPL LSET NAME LINK SLC LSET NAME LINK SLC
1201 LIMDS0 SS7ANSI LS1 A 0 LS1 B 1
 LS1 A1 2 LS1 B1 3
 LS1 A2 4 LS1 B2 5
 LS1 A3 6 LS1 B3 7
1202 LIMDS0 SS7ANSI LS2 A 0 LS3 B 0
 ----- A1 -- LS3 B1 1
 LS2 A2 1 LS2 B2 2
 ----- A3 -- ----- B3 --
1204 LIMATM ATMANSI LS5 A 0 ----- B --
1205 DCM IPLIM ----- A -- LS6 B 0
1102 DSM VSCCP ----- A -- ----- B --
1113 GPSM OAM
1114 TDM-A
1115 GPSM OAM
1116 TDM-B
1117 MDAL
1303 DCM IPGWI ipgwitun A 00 ----- B --
;

```

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 37.0.0
CARD TYPE APPL UNEQUIPPED LINKS
1101 LIMDS0 SS7ANSI A1 B1 B3
1102 LIMDS0 SS7ANSI A1 B1 A2 B2 A3 B3
1103 LIMDS0 SS7ANSI A1 A2 A3
1113 GPSM OAM
1114 TDM-A
1115 GPSM 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 IPSPG 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 IPSPG 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 IPSPG 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 IPSPG 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 (1600 of 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
1301 DCM IPLIM e3e4 A 0 e3e4 B 2
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
1307 DCM SS7IPGW ls1307a A 0
1311 DCM IPLIM e3e4a A 0

```

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 GPSM OAM
1114 TDM-A
1115 GPSM OAM
1116 TDM-B
1117 MDAL
1201 LIMDS0 SS7ANSI lsa1 A 1
1202 LIME1 CCS7ITU lsi1 A 2
1203 LIMATM ATMANSI lsa1 A 3
1204 LIMT1 SS7ANSI lsa1 A 4
1205 DCM IPLIM lsa1 A 5
1206 LIME1ATM ATMITU lsi1 A 6

```

This example shows the output when we have provisioned E5APPB 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 GPSM OAM
1114 TDM-A
1115 GPSM OAM
1116 TDM-B
1117 MDAL

```

The following examples show the output when we retrieve the card information with specified location of E5APPB 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 GPSM OAM
1114 TDM-A
1115 PSM 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. If the card is an MPL or MPL-T (card type is LIMDS0 running the SS7ANSI application), or an E1/T1 MIM (card type is LIME1, LIMIT1, or LIMCH , running the SS7ANSI or CCS7ITU application), the card can support 8 ports (A, A1-A3, B, B1-B3).
- **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 E5APPB 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

HCLKSRC rs422
HCLKLL longhaul

SECONDARY

HCLKSRC rs422
HCLKLL longhaul
;
```

rtrv-clkopts

```
e5oam 09-01-02 17:26:51 MST EAGLE 40.1.0
CLK OPTIONS

PRIMARY

HCLKSRC rs422
HCLKLL longhaul

SECONDARY

HCLKSRC rs422
HCLKLL 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:**

ayyyyyy

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
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
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
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

**Note:** See [Point Code Formats and Conversion](#) for a detailed description of point code formats, rules for specification, and examples.

**Note:** The scpgta parameter is used only by the Prepaid IDP Query Relay feature.

**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 *skbcsn* 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 — SIP Number Portability *npybypass* list

**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:**

[illegible]

1 alphabetic character followed by up to 24 optional alphanumeric characters, including spaces and special characters, enclosed in double quotation marks ("").

- IDP Screening for Prepaid
- IDP Service Key Routing
- Info Analyzed Relay Base
- Prepaid IDP Query Relay
- SIP Number Portability
- 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 Tekelec personnel.

*gt*

Global Title List

*insl*

In Network Subscriber List

*npbypass*

SIP NPBYPASS List

*skbcm*

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

*npbypass*

SIP Number Portability

*skts, insl*

IDP Screening for Prepaid

*skbcm*

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*).

**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:npcfmt1` 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:

**893015501**

IDP Screening for Prepaid

**893034201**

Info Analyzed Relay Base

**893016001**

Prepaid IDP Query Relay

**893040601**

SIP Number Portability

**893016701**

VFLEX

**scpgta (optional)**

Signaling Control Point (SCP) Global Title Address (GTA).

**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="Sip Number Portability":list=npbypass
rtrv-csl:pn=893040601

```

## 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=gt—ds parameter
- list=ccnc—ds parameter
- list=skbcs—ds or scpgta parameter
- list=skts—ds parameter
- list=insl—ds parameter
- list=vmpfx—ds parameter
- list=trig—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.

SIPNP Feature must be enabled before retrieving NP prefix entries for NPBYPASS list.

The DS (Digit String) must be between 1 - 15 digits in length for SIPNP Feature.

## 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="Sip Number Portability":list=npbypass
```

```
tekelecstp 12-06-25 15:29:14 EST EAGLE 45.0.0
rtrv-csl:feature="SIP Number Portability":list=npbypass
Command entered at terminal #4.
```

```
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       |

```
PFX List (12 of 500) 2%
```

```
;
```

## Related Commands

*dlt-csl, ent-csl, rtrv-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
;

```

## 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 purchased and 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 or the command.

#### **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 5 ISS 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 5 ISS release in a system that uses no EAGLE 5 features to a release that uses at least one EAGLE 5 feature causes the EAGLE 5 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. A feature must be purchased before you can enable the feature and turn the feature on. If you are not sure whether you have purchased a feature, contact your Tekelec 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 IPSPG High TPS 893039501 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  | ---- |
| 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.
;
```

## Related Commands

*chg-ctrl-feat, enable-ctrl-feat*

## rtrv-data-rtddb

### 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=abcdefghijklm
```

Retrieve DN information from a specific Service Module card.

```
rtrv-data-rtdb:dn=19195554444:loc=1107
```

Retrieve 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 feature or the EIR 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 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 G-Flex, G-Port, INP, Prepaid SMS Intercept Ph1, or V-Flex feature must be turned on, or the ATINP feature must be enabled before the dn parameter can be specified.

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 5 ISS 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:npnxx=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=1111111111111111
```

```
tekelecstp 08-08-11 07:56:48 EST EAGLE5 39.1.0

Card Loc : 1103 Status:Coherent
 DN : Portability Type (255)
 1111111111111111 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 retrieves 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
bcd44321 RN 5-005-5 GT 000 000 00 000 none

SRFIMSI NSSN CCGT NTT NNP NNAI
no 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 : 1347823456 Portability Type (36) Category
 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 : 123456 Portability Type (255) Category
 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 : 112233 END DNBLK 445667 Portability Type (255) Category
 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.
- **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—PPSMS subscriber 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 Substitution
  - **NPA**—Number Planning Area (Area Code)
  - **NXX**—Exchange Code

## Related Commands

None.

## 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 location 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 location 1101, 1103 and 1107 are DCM, 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 (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:npcfmt i` 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

**cli (optional)**

Common Language Location Identifier. The Common Language Location Identifier assigned to the link.

**Range:**

ayyyyyyyyyyy

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 (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:npcfmt i` 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

**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

**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 (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:npcfmt i` 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*

### 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 (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:npcfmt i` 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

### **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
```

## 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 CLI 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:npfmt*i* 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* 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, cli, msar=only, and ncai parameters.

The cli=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 `scppmsgcnv` 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-\**
- `rept-stat-dstn:dpc= ni-nc-**-*`—Report showing all destinations whose network (*ni*) and cluster (*nc*) components match those specified. The network cluster address on *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 *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).

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 `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 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 --- -----
ps-2-020-0 dstn21p no --- -----
s-2-020-1 dstn22 no --- 002-020-001 -----
ps-2-020-1 dstn22p no --- 002-200-001 -----
s-2-020-2 dstn23 no --- -----
ps-2-020-2 dstn23p no --- -----
s-2-020-3 dstn24 no --- -----
ps-2-020-3 dstn24p no --- -----
s-2-070-3 tgtitui003 no --- -----
 .
 .
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 -----
p-3-030-0 dstn29p no --- s-3-031-0 -----
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 -----
08192 dstn41 no --- -----
p-08192 dstn41p no --- -----
08193 dstn42 no --- 004-000-001 -----
p-08193 dstn42p no --- 004-200-001 -----
08194 dstn43 no --- -----
p-08194 dstn43p no --- -----
08195 dstn44 no --- -----
p-08195 dstn44p no --- -----
08753 tgtitun001 no --- -----
 .
 .
 .
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 -----
p-12688 dstn57p no --- s-13688 -----
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 --- ----- SS7
p-006-005-003 dstn65p no --- ----- SS7
006-070-001 tgtitun24a no --- ----- SS7
006-005-004 dstn66 no --- ----- SS7
p-006-005-004 dstn66p no --- ----- 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 --- ----- SS7
p-006-005-003 dstn65p no --- ----- SS7
006-070-001 tgtitun24a no --- ----- SS7
006-005-004 dstn66 no --- ----- SS7
p-006-005-004 dstn66p no --- ----- 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 SCCPMSCGNV
 - - - - - - - - - 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 SCCPMSCGNV
 - - - - - - - - - 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 SCCPMMSGCNV
 ----- ---- 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 SCCPMMSGCNV
 ----- ---- 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 SCCPMMSGCNV
 ----- ---- 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 --- -----
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 (*npcfnti*) 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
;
```

## 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 E1/T1 MIM card, or an HC-MIM, or E5-E1T1 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*

Ports 3 - 8 can be specified only for HC-MIM and E5-E1T1 cards.

**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
LOC PORT CRC4 CAS ENCODE E1TSEL SI SN CHANBRDG LINK MIMSU
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
LOC PORT CRC4 CAS ENCODE E1TSEL SI SN CHANBRDG LINK MIMSU
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
LOC PORT CRC4 CAS ENCODE E1TSEL SI SN CHANBRDG LINK MIMSU
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
LOC PORT CRC4 CAS ENCODE E1TSEL SI SN CHANBRDG LINK MIMSU
1311 8 OFF OFF AMI EXTERNAL 3 6 SLAVE CLASS RATE
; 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
LOC PORT CRC4 CAS ENCODE E1TSEL SI SN CHANBRDG LINK MIMSU
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
LOC PORT CRC4 CAS ENCODE E1TSEL SI SN CHANBRDG LINK MINSU
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-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. A feature must be purchased before you turn the feature on. If you are not sure whether you have purchased a feature, contact your Tekelec 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 TCSYNC = 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:**

|             |                        |
|-------------|------------------------|
| <i>cf00</i> | Control frame          |
| <i>ef00</i> | First extension frame  |
| <i>ef01</i> | Second extension frame |
| <i>ef02</i> | Third extension frame  |
| <i>ef03</i> | Fourth extension frame |
| <i>ef04</i> | 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 FPT 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 5 ISS 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 PRI0 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 PRI0 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 removable cartridge 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:

*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-SM48G-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, E5-ENET, and E5-ENET-B 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.

*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

*hipr*—Communication software used on the High Speed IMT Packet Router (HIPR) card

*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 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 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 features. 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 SSEDCEM cards to support the STPLAN application



**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 cartridge or 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 when the removable cartridge or 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 12-03-10 15:16:33 EST EAGLE 45.0.0

| 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 | -----        |
| BPMPPL  | 1114 | 128-001-000 | 128-001-000     | 128-001-000 | 128-001-000  |
| BPMPPL  | 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 | -----       |
| BPMPPL  | 1114 | 134-000-000 | 134-000-000 | 134-000-000 | 134-000-000 |
| BPMPPL  | 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 | -----       |
| BPMPPLT | 1114 | 134-000-000 | 134-000-000 | 134-000-000 | 134-000-000 |
| BPMPPLT | 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 | 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 -----
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 -----
;

```

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 when a GPL is specified:

rtrv-gpl:gpl=hipr

```

rlghncxa03w 05-01-04 07:01:08 EST EAGLE5 33.0.0
GPL Auditing ON

GPL CARD RELEASE APPROVED TRIAL REMOVE TRIAL
HIPR 1114 118-020-000 118-020-000 118-020-000 118-020-000
HIPR 1116 118-020-000 118-020-000 118-020-000 -----
;

```

This example shows the output with the E5-based control cards feature. A removable drive and credit card USB are inserted in the active OAM. A removable drive is not present in the standby OAM removable drive.

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. All three removable drives that display version information are inserted, including the removable drive in the active OAM, the credit card drive in the active OAM, and the removable drive in the standby OAM.

rtrv-gpl

```

e5oam 12-03-01 12:24:57 EST EAGLE 45.0.0
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 | -----       | -----       | -----       | -----       |
| BPMPPL  | 1114 | 134-000-000 | 134-000-000 | 134-000-000 | 134-000-000 |
| BPMPPL  | 1116 | 134-000-000 | 134-000-000 | 134-000-000 | 134-000-000 |
| BPMPPL  | 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 | -----       | -----       | -----       | -----       |
| ;      |      |             |             |             |             |

## 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 cartridge or 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:npcfmt i` 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=9194620000000000:eaddr=9194630000000000
```

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 CGSR

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 CGSR

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 CGSR
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), atterr, 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 11-01-11 16:12:11 EST EAGLE 43.0.0
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
CCNC = NONE MCCMNC = NONE
CCNC = NONE MCCMNC = NONE
CCNC = NONE MCCMNC = NONE

SRIDN = TCAP SRIDNNOTFOUND = GTT
CRPTT = NONE SRISMGTTTRTG = 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

ENCODECUG = OFF ENCODENPS = ON
ENCDNPSPTNONE = OFF ENCDNPSDNNOTFOUND= OFF

G-Flex MLR OPTIONS :
GFLEXMAPLAYERRTG = NONE

REGSS = OFF ACTSS = OFF DACTSS = OFF
INTSS = OFF AUTHFAILRPT = OFF RSTDATA = OFF
PROCUNSTRQT = OFF RDYFORSM = OFF PURGM0BSS = 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

 GSMMMS 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

 GSMMMS OPCODE Table (9 of 257) is 4% full
;

```

This example includes 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

 GSMMMS 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

 OPNAME 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

 OPNAME OPNAME DFLTACT PCN SSN MAPSET RI TT
 OPNAME OPNAME DFLTACT PCN24 SSN MAPSET RI TT

 OPNAME OPNAME DFLTACT
 12 a disc
 13 b disc

 GSMMS OPNAME 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

 OPNAME OPNAME DFLTACT PCA SSN MAPSET RI TT
 44 rf fwd 1-221-2 13 2 gt 11

 OPNAME OPNAME DFLTACT PCN SSN MAPSET RI TT
 OPNAME OPNAME DFLTACT PCN24 SSN MAPSET RI TT

 GSMMS OPNAME 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

 OPNAME 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

 OPNAME OPNAME DFLTACT PCI SSN RI TT
 17 dd fwd 1-221-2 13 gt 244
 44 rf fwd 1-221-2 13 gt 11

 OPNAME OPNAME DFLTACT PCN SSN RI TT
 OPNAME 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 |
| MTMSGTA      | = NONE |              |        |
| MTMMSACKN    | = ACK  | MTMMSENTYLEN | = NONE |
| MTMMSLEN     | = NONE |              |        |
| IGSMSRELAY   | = NO   | DEFIS41SMSC  | = NONE |
| IS41SMSCGTTN | = NONE |              |        |

## Related Commands

[chg-gsmopts](#), [chg-gsmssmsopts](#), [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-gttset*), 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:

*aaaaaaaa*

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:

*aaaaaaaa, none*

1 leading alphabetic character and up to 8 following alphanumeric characters

**cdssn (optional)**

Starting CdPA subsystem number.

**Range:**

0 - 255

**cggmod (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:npcfmt i** 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

### 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 (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:npcfmt i* 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

**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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy, 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:npcfmt i` 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**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:npcfmt i* 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-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*

*msa*—000-255

*ssa*—000-255

*sp*—000-255

#### **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 point code types

#### **pkgtype (optional)**

Package type. The ANSI TCAP and ITU TCAP package type.

##### **Range:**

*ansiuni*

ANSI unidirectional

|                                                            |                                  |
|------------------------------------------------------------|----------------------------------|
| <i>qwp</i>                                                 | Query with Permission            |
| <i>qwop</i>                                                | Query with out Permission        |
| <i>resp</i>                                                | Response                         |
| <i>cwp</i>                                                 | Conversation with Permission     |
| <i>cwop</i>                                                | Conversation with out Permission |
| <i>ansiabort</i>                                           | ANSI abort                       |
| <i>any</i>                                                 | Wildcard value                   |
| <i>bgn</i>                                                 | Begin                            |
| <i>end</i>                                                 | End                              |
| <i>cnt</i>                                                 | Continue                         |
| <i>ituabort</i>                                            | ITU abort                        |
| <i>ituuni</i>                                              | ITU unidirectional               |
| <b>ANSI TCAP PKGTYPE</b>                                   |                                  |
| <i>ansiuni, qwp, qwop, resp, cwp, cwop, ansiabort, any</i> |                                  |
| <b>ITU TCAP PKGTYPE</b>                                    |                                  |
| <i>bgn, ituabort, ituuni, any, end, cnt</i>                |                                  |

**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 cgcvnsvn parameters.

**Range:***ayyyyyyyyy*

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=setcggtta:refgttsn=setcgpc
rtrv-gta:gttsn=setcdgta:ppmeasreqd=yes
rtrv-gta:gttsn=setcdgta:xlat=none:mrnset=1:mapset=6

```

## 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, cgpc/cgpca/cgpci/cgpcn/cgpcn24, opc/opca/opci/opcn/opcn24, and dpc/dpca/dpci/dpcn/dpcn24 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, 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, opc/opca/opci/opcn/opcn24, 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 cggmod 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 is specified, then a value of *none* must be specified for the acn and opcode parameters can.

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 gtmoidid 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, 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 a `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 5 ISS 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.

## 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
987658321198765432101 987658321198765432101 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
abcdef0123456789abcd f abcde01234567890afff DPCSSN SSN 00103
 SSN=10 CCGT=no
 GTMODID=----- TESTMODE=off
 ACTSN=----- PPMEASREQD= NO
fbcdef0123456789abcd f 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=----- OPCS=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=----- OPCS=-----
 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=----- OPCS=-----
 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:xlata=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
```

## 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 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 the on and off parameters are located in the Notes section.

### **cgpasn (optional)**

Calling Party Subsystem number. The calling party subsystem address that receives the message.

#### **Range:**

002 - 255

### **gtmodid (optional)**

GT Modification Identifier.

#### **Range:**

ayyyyyyyyy

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:**

*px*

*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:cgpas=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=
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=
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-gttset](#)), 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.

### cgggtmod (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:**

*ayyyyyyyyy*

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:npcfmt i* 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-ni-nc-ncm(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*

*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:***ayyyyyyyyy*

1 alphabetic character followed by up to 8 alphanumeric characters

**Default:**

None given

**type/typea/typeei/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 typeei 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 (typeei/typen/typen24/typeis/typens). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE 5 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:typeei=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:cggmod=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:npcfmt1 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
TYPEA 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
TYPEEN 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
TYPEEN 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=-----
abcdef0123456789abcdef fabcde01234567890afff DPCSSN SSN 00103
 SSN=10 GTMODID=-----
fbcdef0123456789abcdef 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:cggmod=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

*tcaperr*

discard message that has a specified TCAP error

*udts*

discard message and send udts/xudts

*fwd*

route the original message to a specified forward node instead of the destination indicated by the GTT / DB data

### **actid (optional)**

GTT Action Id.

#### **Range:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

1 leading alphabetic character followed by up to 8 alphanumeric characters

### **cggtmodid (optional)**

Calling party global title modification identifier.

#### **Range:**

*ayyyyyyyyy*

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-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*

*msa*—000-255

*ssa*—000-255

*sp*—000-255

### **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 provides 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 data in the GTT Action

### **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:**

*uimreqd*

*useicmsg*

*refcnt*

**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:npcfmt.i* 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-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

*msa*—000-255

*ssa*—000-255

*sp*—000-255

### ri (optional)

Routing indicator.

#### Range:

*gt*

*ssn*

**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:cggtnmodid=idda1
rtrv-gttact:cggtnmodid=cggtn1:cdgtnmodid=cdgtn2
rtrv-gttact:defactid=fallback
```

## 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 and cgpc/cgpcac/cgpci/cgpcn/cgpcn24 parameters must be a full point code and must have 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.

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 udtser parameter can be specified.

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, cggtnmodid or cdgtnmodid 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 udtser 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, udtser, act, cgpc, cgpcogmsg, defactid, cggtnmodid, and cdgtnmodid 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` parameter and the `atcaperr` or `itcaperr` parameters cannot be specified in the same command.

The `pc`, `ri`, `ssn`, `mrnset`, `mapset`, `loopset`, `on/off=useicmsg`, `cdgtmodid`, `defactid`, `cgpc`, `cgpcogmsg`, and `cggmodid` parameters cannot be specified in the same command with the `on/off=uimreqd`, `atcaperr`, `itcaperr`, and `udtserr` parameters.

The point code specified for the `pc/pci/pcn/pcn24` and `cgpc/cgpci/cgpcn/cgpcn24` 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 `cggmodid` 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` and `cgpc/cgpca/cgpci/cgpcn/cgpcn24` 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

;

```

## 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:**

*ayyyyyyyyy*

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.

**cgttsn (optional)**

GTT set name (CGPA type).

**Range:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:cggtsn=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*, *cggtsn*, 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 *pcode* 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:gttbn=path3

```
tekelecstp 10-02-04 18:29:41 EST EAGLE 42.0.0

GTTBN OPBTTSN CGBTTSN 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

GTTBN OPBTTSN CGBTTSN 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

GTTBN OPBTTSN CGBTTSN 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 theon andoff parameters 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:

*ayyyyyyyyy*

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:

*ayyyyyyyyy*

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:

*ayyyyyyyyy*

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:

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

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:**

*ayyyyyyyyy*

1 leading alphabetic character and up to 8 following alphanumeric characters

**actsn (optional)**

GTT Action Set Name.

**Range:**

*ayyyyyyyyy*

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*, or *tcaperr* 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*, or *fwd* can be specified. 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

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),<br>disc1 (DISC), -----, ----- |       |        |
| aset2      | 5        | off      | dup2 (DUP), dup1 (DUP), -----,<br>-----, -----, -----             |       |        |
| aset3      | 10       | on       | fwd1 FWD), dup4 (DUP), -----,<br>-----, -----, -----              |       |        |
| aset4      | 0        | off      | udts1 (UDTS), -----, -----,<br>-----, -----, -----                |       |        |
| aset5      | 0        | off      | -----, tcaperr1 (TCAPERR), -----,<br>-----, -----, -----          |       |        |

```

-----,-----,-----
GTT Action Set table is (5 of 20000) 1% full
;

```

## Related Commands

*chg-gttaset*, *dlt-gttaset*, *ent-gttaset*

## rtrv-gttset

### 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-gttset*), 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:

*ayyyyyyyyy*

1 leading alphabetic character and up to 8 following alphanumeric characters.

### cdgttsn (optional)

CdPA GTT set.

#### Range:

*ayyyyyyyyy*

1 leading alphabetic and up to 8 following alphanumeric characters.

### cggtsn (optional)

CgPA GTA GTT set name.

#### Range:

*aaaaaaaa*

1 leading alphabetic character and up to 8 following alphanumeric characters.

**cggtsn (optional)**

CgPA GTT set.

**Range:**

*aaaaaaaa*

1 leading alphabetic and up to 8 following alphanumeric characters.

**cgpcsn (optional)**

CgPA PC GTT set name.

**Range:**

*aaaaaaaa*

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 5 ISS generated messages.

**Range:**

*yes*

The selector is used by EAGLE 5 generated messages

**gti/gtia/gtii/gtin/gtin24/gtiis/gtins (optional)**

Global title indicator.

For all EGGT 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).

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=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:**

*ayyyyyyyyy*

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-gttset
rtrv-gttset:gtii=2
rtrv-gttset:tt=0:np=e164
rtrv-gttset:gti=2:tt=10
rtrv-gttset:gttsn=setint000
rtrv-gttset:gtia=2:tt=21:cggtsn=setcgpc:cdgttsn=setcdgta:cgssn=20:selid=1:
lsn=ls10
rtrv-gttset:gtia=2:tt=2:lsn=ls1010
rtrv-gttset:gtia=2:eaglegen=yes
rtrv-gttset:cdgttsn=setdpc
rtrv-gttset:ovrlapd=yes

```

## 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=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, cggtsn, or cdgttsn parameters cannot be specified.

The OBR feature must be enabled before the cggtsn, cgpcsn, cgssn, or cdgtasn parameters can be specified.

The GTT set specified by the cggtsn or cgpcsn parameter must exist in the database before it is assigned to a GTT selector.

The set type of the cggtsn or cgpcsn parameter must match the set type of the corresponding entry in the GTT set table. For example, the cggtsn parameter should 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 cggtsn parameter can be specified.

If the eaglegen=yes parameter is specified, then the lsn, selid, gttsn, cgssn, cggtsn, 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 gttasn, 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 gttasn, cdgtasn, or cdgttsn parameters cannot be specified.

If the lsn parameter is specified, then the cdgttsn or cggtsn parameter must be specified.

The cggtasn, cgpcsn, and cggtsn parameters cannot be specified together in the command.

The gttasn, cdgtasn, and cdgttsn parameters cannot be specified together in the command.

If the gttasn, cdgttsn, or cdgtasn parameter is specified, then the cgssn parameter cannot be specified.

If the eaglegen=yes parameter is specified, then the lsn, selid, gttasn, cdgtasn, cgssn, cggtsn, 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, cggtsn, and eaglegen parameters cannot be specified.

A value of *none* cannot be specified for the gttasn, cdgtasn, cdgttsn, cggtsn, 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

None.

## Output

This example retrieves all GTT selectors when EGTT is ON:

```
rtrv-gttset
```

```
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-gttset

```

sccprte 10-04-15 14:31:52 EST EAGLE 42.0.0
GTI
ANSI TT NP NAI SSN SELID LSN CDPA CGPA
2 5 -- --- any none lsa03 GTTSET GTTSET
 (opc) cgssn2 (cgssn)

2 5 -- --- 202 1234 any ----- (---) cggta1 (cggta)
2 5 -- --- any none any cdgta1 (cdgta) cggtta1 (cggtta)

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
INTL TT NP NAI SSN SELID LSN CDPA CGPA
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
NATL TT NP NAI SSN SELID LSN CDPA CGPA
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 SSN SELID LSN GTTSET GTTSET
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 SSN SELID LSN GTTSET GTTSET
2 --- --- 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 SSN SELID LSN GTTSET GTTSET
2 --- --- 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-gtttsel:gtii=4:tt=253

```

sccprte 09-03-16 08:53:31 EST EAGLE 41.0.0

GTI CG CDPA CGPA
INTL SSN SELID LSN GTTSET GTTSET
4 102 5678 any ----- (---) icgpc2 (cgpc)

4 15 any 5678 lsint02 icgssn2 (cgssn) iopc2 (opc)

```

;

rtrv-gttset: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-gttset: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-gttset: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

;

```

## Legend

- **GTI/GTIA/GTII/GTIN/GTIN24**—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-gttset, dlt-gttset, ent-gttset*

## 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-gttset*), 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:

*aaaaaaaa*

1 leading alphabetic and up to 8 following alphanumeric characters.

### gtmodid (optional)

Global title modification identifier.

#### Range:

*aaaaaaaa*

#### Default:

Display all

### gttsn (optional)

GTT set name. A GTT set is an entity to which global title addresses and selectors are assigned.

#### Range:

*aaaaaaaa*



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*

*cggtta*

*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
lidx 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
lidx 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
l1db 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
l1db 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
lidx 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:**

*ayyyyyyyyyyy*

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:

ayyyyyy

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
```

```
rlghncxa03w 03-03-07 00:57:31 EST EAGLE 31.3.0
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 09-06-11 16:02:09 EST EAGLE 41.1.0
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 sccp sccp ---- ---- ---- ---- ---- ---- ----

GWS action set table is (4 of 16) 25% 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 set the 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

```
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
;
```

## 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.

## 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

None.

## 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 displayed.

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 DLTPIX
----- ---
CDPNNAI SNAI
--- ----
127 unknown

;

```

## Legend

- **ASD**—Additional Subscriber Data
- **CDPNNAI**—Called Party Number Nature of Address Indicator
- **CDPNPFX**—Called Party Number Prefix
- **DLTPIX**—Delete Prefix
- **DRA**—Destination Routing Address.
- **DRANAIV**—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 08-02-22 15:35:05 EST EAGLE 38.0.0
LOC 1211
 SRCHORDR LOCAL
 DNSA 150.123.123.123
 DNSB -----
 DEFROUTER -----
 DOMAIN NC.TEKELEC.COM
 SCTPCSUM adler32
;
```

```
rtrv-ip-card
```

```
rlghncxa03w 08-02-22 15:35:05 EST EAGLE 38.0.0
LOC 1211
 SRCHORDR LOCAL
 DNSA 150.1.1.1
```

```

 DNSB -----
 DEFROUTER -----
 DOMAIN NC.TEKELEC.COM
 SCTPCSUM adler32

LOC 1213
 SRCHORDR LOCAL
 DNSA 150.1.1.1
 DNSB -----
 DEFROUTER 150.1.1.25
 DOMAIN NC.TEKELEC.COM
 SCTPCSUM adler32

LOC 1301
 SRCHORDR SRVRONLY
 DNSA 150.1.1.10
 DNSB 150.1.1.28
 DEFROUTER -----
 DOMAIN NC.TEKELEC.COM
 SCTPCSUM adler32
;

```

This example displays the output when an E5-SM4G or E5-SM8G-B card is used:

rtrv-ip-card

```

r lghncxa03w 11-03-04 22:12:42 EST EAGLE5 44.0.0
LOC 1105
 SRCHORDR LOCAL
 DNSA -----
 DNSB -----
 DEFROUTER -----
 DOMAIN -----
 SCTPCSUM crc32c
 BPIPADDR 192.168.124.2
 BPSUBMASK 255.255.255.0
LOC 1107
 SRCHORDR LOCAL
 DNSA -----
 DNSB -----
 DEFROUTER -----
 DOMAIN -----
 SCTPCSUM crc32c
 BPIPADDR 192.168.124.4
 BPSUBMASK 255.255.255.0
LOC 1111
 SRCHORDR LOCAL
 DNSA -----
 DNSB -----
 DEFROUTER -----
 DOMAIN -----
 SCTPCSUM crc32c
 BPIPADDR 192.168.124.3
 BPSUBMASK 255.255.255.0
;

```

## 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

## Related Commands

*chg-ip-card*

**rtrv-ip-conn**

## Retrieve IP Connection

Use this command to retrieve SIP connection entry. The IPCONN table supports the provisioning information related to the SIP connections.

## Parameters

**cname (optional)**

Connection name. This parameter specifies the unique logical name assigned to each SIP connection.

**Range:**

ZZZZZZZZZZZZZZZZZZZZ

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:**

[illegible]

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 connections are allowed to receive SIP traffic and which are not.

**Range:**

*yes*

SIP connection is allowed to receive SIP traffic.

*no*

SIP connection is not allowed to receive SIP traffic.

**prot (optional)**

Underlying SIP connection protocol.

**Range:**

*tcp*

Transmission Control Protocol.

## 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.

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 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 all provisioned local or remote IP Host entries.

**Range:**

*all*

host (optional)

Host name. The logical name of the device associated with the indicated IP address.

**Range:**

////////////////////////////////////

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

**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

```

## 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

If optional parameters are specified, only the entries that match the entered parameters are retrieved.

## 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.
;
```

## 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

```
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 YES
1211 B 150.123.123.124 255.255.255.0 HALF 10 DIX NO NO
1213 A 150.123.123.125 255.255.255.0 ---- --- DIX YES NO
1213 B 150.123.123.126 255.255.255.0 ---- --- DIX YES NO
1215 A 150.123.123.127 255.255.255.0 FULL 100 DIX NO YES
1215 B 150.123.123.128 255.255.255.0 FULL 100 DIX NO NO

IP-Link table is (6 of 512) 1% 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

Retrieve 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 MTSMSCSKSRC = NO
MTMSDNFMT = RN MTMSDLTR = NO
MTMSDLTRV = NONE MTMSDIGTYPE = 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-l2t

### Retrieve Level 2 Timers

Use this command to display the values of the SS7 MTP Level 2 timers. The timers are organized in 35 timer sets of 9 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, 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 identifier, or timer set number. Up to 35 different SS7 MTP Level 2 timer sets can be defined.

### **Range:**

1 - 35

### **Default:**

Displays all timer sets

## Example

```
rtrv-l2t
```

```
rtrv-l2t:l2tset=3
```

## 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 09-04-03 10:56:27 EST EAGLE 41.0.0
LEVEL 2 TIMERS (IN SECONDS)
L2TSET T1 T2 T3 T4NPP T4EPP T5 T6 T7 NODATA
1 13.0 11.5 11.5 2.3 0.60 0.10 4.0 1.5 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 13.0 11.5 11.5 2.3 0.60 0.10 4.0 1.5 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 13.0 11.5 11.5 2.3 0.60 0.10 4.0 1.5 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 40.0 30.0 2.0 8.2 0.50 0.10 4.0 1.5 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
22 150.0 130.0 1.0 30.0 0.50 0.10 5.0 0.8 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
35 151.0 14.0 14.0 30.0 3.00 0.08 3.0 0.5 0.10
;
```

This example displays timer values for a specified timer set:

rtrv-l2t:l2tset=1

```
tekelecstp 08-05-03 10:56:27 EST EAGLE 39.0.0
LEVEL 2 TIMERS (IN SECONDS)
L2TSET T1 T2 T3 T4NPP T4EPP T5 T6 T7 NODATA
1 13.0 11.5 11.5 2.3 0.60 0.10 4.0 1.5 0.10
;
```

## Legend

- **L2TSET**—SS7 MTP Level 2 timer set identifier 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

## 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:****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 - 5318, 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 LIMDS0, LIMT1, or LIMCH (associated to a LIMT1) card configured with either an 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=1202

```

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=1202: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=1202: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=1202: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 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
AMATYPE = 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
- **AMATYPE**—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 digits

## 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                                    |
| <i>gtt</i>  | GTT Maintenance                          |
| <i>gws</i>  | GWS Maintenance                          |
| <i>link</i> | Link Maintenance                         |
| <i>meas</i> | Measurements Maintenance                 |
| <i>mon</i>  | Monitoring (Sentinel or IMF) Maintenance |
| <i>mps</i>  | MPS Maintenance                          |
| <i>pu</i>   | Program Update                           |
| <i>sa</i>   | System Administration                    |
| <i>seas</i> | SEAS (Sentinel or IMF)                   |
| <i>slan</i> | SLAN Maintenance                         |
| <i>sys</i>  | System Maintenance                       |
| <i>traf</i> | 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 *yy**mm**dd*, 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, `etime` 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 from 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.

## 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=scrib 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-LKST0: 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-LKST0: 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=scrib 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 (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:npcfmt i** 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

**cggtnmod (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.

**mtprese (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 (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:npcfmt.i` 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

**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 (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:npcfmt.i` 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*

## 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 `slrsb` 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
```

## 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 slrsrb 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:npcfmt.i 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.

## 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 5 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 5 does not calculate a TFA/TCA broadcast minimum link quantity. The provisioned value is displayed in the `rtrv-ls` command output.

The EAGLE 5 `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 5 ISS 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 |             |       |      |     |     |     |     |      |     |     |     |           |
| LSN                                           | APCA        | (SS7) | SCRN | L3T | SLT | BEI | LST | LNKS | GWS | GWS | GWS |           |
| lsa111                                        | 001-001-001 |       | none | 1   | 1   | no  | B   | 0    | ACT | MES | DIS | SLSCI NIS |
|                                               |             |       |      |     |     |     |     |      | 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

LSN APCI (SS7) SCRN L3T SLT GWS GWS GWS
lsi111 1-000-1 none 1 2 no A 0 off off off no off

 SPCI CLLI TFATCABMLQ MTPRSE ASL8
 ----- - - -
 1 1 --- ---

SLRSRB 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

LSN APCI (SS7) SCRN L3T SLT GWS GWS GWS
ls4 1-007-4 none 1 2 no A 4 off off off --- off

 SPCA CLLI TFATCABMLQ MTPRSE ASL8 GSMSCRN
 ----- - - - -
 2 2 --- --- off

SLSOCBIT SLRSRB RANDSLS MULTGC ITUTFR
none 1 class0 no off

IPSG IPGWAPC GTTMODE CGGTMOD
no no CdPA no

LOC LINK SLC TYPE L2T PCR PCR E1 E1
1202 B 0 LIME1 SET BPS ECM N1 N2 LOC PORT TS
1202 B1 1 LIME1 11 56000 BASIC --- 1202 1 5
1202 B2 2 LIME1 11 56000 BASIC --- 1202 1 6
1202 B3 3 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 mtpsrse or slsocibit parameters are specified, then the output appears the same as the rtrv-ls 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

LSN APCA (SS7) SCRNL3T SLT GWS GWS GWS
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

LSN APCI (SS7) SCRNL3T SLT GWS GWS GWS
lsi311 3-001-1 none 1 2 no A 0 off off off --- off

LSN APCN24 (SS7) SCRNL3T SLT GWS GWS GWS
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

LSN APCA (SS7) SCRNL3T SLT GWS GWS GWS
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

LOC LINK SLC TYPE L2T BPS ECM PCR PCR
 SET BPS ECM N1 N2
```

```

1101 A 0 LIMDS0 1 56000 BASIC ---- -----

LOC LINK SLC TYPE LP ATM
1102 A 2 LIMATM 1 1.544M EXTERNAL 5 0 0

LOC LINK SLC TYPE IPLIML2
1201 A 5 IPLIM M2PA

LOC LINK SLC TYPE L2T PCR PCR E1 E1
1205 A 6 LIME1 1 56000 BASIC N1 N2 LOC PORT TS
 1 1 1205 1 1

LOC LINK SLC TYPE L2T PCR PCR T1 T1
1206 A 10 LIMT1 1 56000 BASIC N1 N2 LOC PORT TS
 1 1 1206 1 1

Link set table is (7 of 1024) 1% full.

;

```

This example shows output that includes a multi-port LIM:

rtrv-ls:lsn=ls1

```

tekelecstp 09-08-09 00:39:45 EST EAGLE 41.1.0

LSN APCA (SS7) SCRNL3T SLT GWS GWS GWS
ls1 240-020-000 none 1 2 no c 8 ACT MES DIS SLSCI NIS
 off off off no off

 SPCA CLLI TFATCABMLQ MTPRSE ASL8
 ----- ----- 1 no no

RANDSLS
off

IPSG IPGWAPC GTTMODE CGGTMOD
no no CdPA no

LOC LINK SLC TYPE L2T PCR PCR
1201 A 0 LIMDS0 1 56000 BASIC ---- -----
1201 A3 1 LIMDS0 2 56000 BASIC --- -----
1202 A1 2 LIMDS0 3 56000 BASIC --- -----
1202 B 3 LIMDS0 4 56000 BASIC --- -----
1202 B1 4 LIMDS0 5 56000 BASIC --- -----
1202 A2 5 LIMDS0 6 56000 BASIC --- -----
1202 B2 6 LIMDS0 7 56000 BASIC --- -----
1202 B3 7 LIMDS0 8 56000 BASIC --- -----

Link set table is (51 of 1024) 5% 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

```

```

LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
ls1 003-003-003 none SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
 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

LOC LINK SLC TYPE L2T PCR PCR
1101 B3 1 LIMDS0 SET BPS N1 N2
 1 56000 BASIC --- -----

LOC LINK SLC TYPE LP ATM
1103 A 3 LIMATM SET BPS TSEL VCI VPI LL
 1 1.544M EXTERNAL 5 0 0

LOC LINK SLC TYPE IPLIML2
1201 A 5 IPLIM M2PA

LOC LINK SLC TYPE L2T PCR PCR E1 E1
1205 A1 7 LIME1 SET BPS N1 N2 LOC PORT TS
 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

LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
ls1 003-003-003 gws1 SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
 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

LOC PORT SLC TYPE L2T PCR PCR
1101 A 0 LIMDS0 SET BPS N1 N2
 1 56000 BASIC --- -----

LOC PORT SLC TYPE LP ATM
1102 A 2 LIMATM SET BPS TSEL VCI VPI LL
 1 1.544M LINE 5 0 0

LOC PORT SLC TYPE IPLIML2
1201 A 5 IPLIM M2PA

```



```

 LOC PORT SLC TYPE L2T PCR PCR E1 E1
 1205 A 6 LIME1 SET N1 N2 LOC LOC
 56000 BASIC --- - - - - 1205 1 1

 LOC PORT SLC TYPE L2T PCR PCR T1 T1
 1206 A 10 LIMIT1 SET N1 N2 LOC LOC
 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

LSN APCA (SS7) SCRNL3T SLT GWS GWS GWS
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

LSN APCI (SS7) SCRNL3T SLT GWS GWS GWS
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

LSN APCN (SS7) SCRNL3T SLT GWS GWS GWS
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

LSN SPCA SCRNL3T SLT GWS GWS GWS
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 features allows multiple linksets to have the same adjacent point code.

```
rtrv-ls
```

| LSN    | APCA (SS7)    | SCRN | L3T SET | SLT SET | BEI | LST | LNKS | GWS ACT | GWS MES | GWS 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 |

| LSN  | APCI (SS7) | SCRN | L3T SET | SLT SET | BEI | LST | LNKS | GWS ACT | GWS MES | GWS 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 |

| LSN       | APCN (SS7)       | SCRN | L3T SET | SLT SET | BEI | LST | LNKS | GWS ACT | GWS MES | GWS 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
```

| LSN | APCA (SS7)  | SCRN | L3T SET | SLT SET | BEI | LST | LNKS | GWS ACT | GWS MES | GWS 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
LSN APCA (SS7) SCRNL 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
LSN APCA (SS7) SCRNL 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
LSN APCA (SS7) SCRNL 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
 002-002-002 CLLI TFATCABMLQ MTPRSE ASL8
 ----- 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

LSN PPCA SCRNL3T SLT GWS GWS GWS
x1 002-002-002 none 1 1 no PRX 0 off off off SLSCI NIS
 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

LSN APCA (SS7) SCRNL3T SLT GWS GWS GWS
lsa1 001-001-002 none 1 1 no A 0 off off off SLSCI NIS
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

LSN APCA (SS7) SCRNL3T SLT GWS GWS GWS
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

```

```

 IPSTG IPGWAPC GTTMODE CGGTMOD
 no no CdPA no

 LOC LINK SLC TYPE L2T BPS ECM PCR PCR
 1101 A 0 LIMDS0 SET 1 56000 BASIC N1 N2

 LOC LINK SLC TYPE LP BPS ATM VCI VPI LL
 1102 A 2 LIMATM SET 1 1.544M EXTERNAL 5 0 0

 LOC LINK SLC TYPE IPLIML2
 1201 A 5 IPLIM M2PA

 LOC LINK SLC TYPE L2T BPS ECM PCR PCR E1 E1
 1205 A 6 LIME1 SET 1 56000 BASIC N1 N2 LOC PORT TS

 LOC LINK SLC TYPE L2T BPS ECM PCR PCR T1 T1
 1206 A 10 LIMT1 SET 1 56000 BASIC N1 N2 LOC PORT TS

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

LSN APCA (SS7) SCRNL3T SLT GWS GWS GWS
ls3 002-002-003 none 1 1 no A 0 ACT MES DIS SLSCI NIS
 off off off no off

 SPCA CLLI TFATCABMLQ MTPRSE ASL8 GSMSCRN

 RANDSLS
 off

 IPSTG 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:cggmod=yes

```

tekelecstp 08-02-27 11:56:50 EST EAGLE 38.0.0

LSN APCA (SS7) SCRNL3T SLT GWS GWS GWS
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

```

```

 LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
 abc32261 330-044-000 scr1 1 1 yes a 1 ACT MES DIS SLSCI NIS
 off off off --- off

 LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
 ACT MES DIS SLSCI NIS

 LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
 ACT MES DIS SLSCI NIS

Link set table is (114 of 1024) 12% full
;

```

This example displays output for an IPSP-M2PA linkset:

rtrv-ls:lsn=m2pa12132

```

e1001501 10-04-03 16:20:43 EST EAGLE 42.0.0

 LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
 m2pa12132 001-213-002 none 1 1 no A 1 off off off no off

 SPCA CLLI TFATCABMLQ MTPRSE ASL8

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 IPSP m2pa1303a

Link set table is (20 of 1024) 2% full.
;

```

This example displays the output for an IPSP-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

 LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
 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

LSN APCI (SS7) L3T SLT GWS GWS GWS
lsnp1 1-002-1 none 1 2 no A 3 off off off
 SPCI CLLI TFATCABMLQ MTPRSE ASL8

SLRSRB RANDSLS ITUTFR ICNIMAP OGNIMAP
1 off off itui2ituis ituis2itui

IPSG IPGWAPC GTTMODE CGGTMOD
no no CdPA no

LOC LINK SLC TYPE LP ATM
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
LSN APCA (SS7) SCRNL3T SLT
ls1315a 000-015-000 none 1 1 no A 1 GWS GWS GWS
 ACT MES DIS SLSCI NIS
 off off off no off

 SPCA CLLI TFATCABMLQ MTPRSE ASL8

 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
LSN APCA (SS7) SCRNL3T SLT
ls06 002-007-008 scr4 1 4 no a 0 GWS GWS GWS
 ACT MES DIS SLSCI NIS
 on off off no on

 SPCA CLLI TFATCABMLQ MTPRSE ASL8

 RANDSLS
 off

 ISLSRSB RSL8
 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
LSN APCI (SS7) SCRNL3T SLT
 GWS GWS GWS
 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

 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
LSN APCI (SS7) SCR N SET SET BEI LST LNKS GWS GWS GWS
ls1616 6-001-6 none 1 2 no B 0 off off off no off
ls1747 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
LSN APCA (SS7) SCR N SET SET BEI LST LNKS GWS GWS GWS
ls8 001-001-001 none 1 1 no A 0 off off off no off
 SPCA CLLI TFATCABMLQ MTPRSE ASL8

 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

LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
lsa 001-001-001 none 1 1 no A 0 off off off SLSCI NIS
 off off off no off

 SPCA CLLI TFATCABMLQ MTPRSE ASL8
 ----- -
 1 --- no

RANDSLS
off

ISLSRSB RSL8
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

LSN APCN (SS7) SCRN L3T SLT GWS GWS GWS
lsi 01001-aa none 1 2 no A 0 off off off SLSCI NIS
 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

LSN APCA (SS7) SCRN L3T SLT GWS GWS GWS
ls1 001-001-001 none 1 RFT no A 0 off off off SLSCI NIS
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

LSN APCA (SS7) L3T SLT GWS GWS GWS
ls1 001-001-001 none 1 SET SET BEI LST LNKS ACT MES DIS SLSCI NIS
 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.
```

## 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**—Adjacent DPC of the linkset
- **SPC/SPCI/SPCN/SPCN24**—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
- **SLSOEBIT**—Setting of the Other CIC (Circuit Identification Code) Bit
- **SLSRB**—Setting of the Rotated SLS (Signaling Link Selection) Bit
- **ISLSRB**—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 IPSP M2PA or IPSP M3UA linkset
- **RSVDSLKTPS**—Guaranteed SLKTPS for an IPSP linkset
- **MAXSLKTPS**—Maximum SLKTPS for an IPSP linkset
- **RCONTEXT**—Routing context ID of IPSP M3UA linkset
- **ASNOTIF**—Shows whether AS notifications will be generated for IPSP M3UA linkset
- **ANAME**—Association name configured for signaling link of IPSP linkset
- **SLKTPS**—Provisioned TPS for concerned signaling link of the specified IPSP linkset
- **CGGTMOD**—Shows whether calling party global title modification indicator is yes or no for the linkset
- **PPC/PPCI/PPCN/PPCN24**—The proxy point code of the linkset
- **NUMSLKALW**—Threshold value for IPSP M3UA linkset used to transition to Allowed state from Restricted or Prohibited state
- **NUMSLKRSTR**—Threshold value for IPSP M3UA linkset used to transition to Restricted state from Allowed state
- **NUMSLKPROH**—Threshold value for IPSP 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

## 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 (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:npcfmt.i` 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*

**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
```

## Dependencies

The value of the pc/pca/pci/pcn/pcn24 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, 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
002-002-002 002-002-003 10 10 SHR *Y *Y ----- OFF
 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
002-002-002 002-002-003 10 10 SHR *Y *Y ----- OFF
 20 10 SHR *Y *Y ----- OFF

PCA Mate PCA SSN RC MULT SRM MRC GRP NAME SSO
003-101-001 003-001-000 10 30 DOM YES YES abcdefg OFF
 10 40 DOM YES YES abcdefg OFF

PCI NET Mate PC SSN RC MULT SRM MRC GRP NAME SSO
1-109-0 I 1-110-0 90 10 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 an Flexible ITU National Point Code STP option of 3-8-3-0:

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
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                                   |  | 001-001-004 | 10  | 15 | DOM  | YES | YES | -----    | OFF |
|                                               |  |             | 25  | 10 | DOM  | YES | YES | -----    | OFF |
| PCA                                           |  | Mate PCA    | SSN | RC | MULT | SRM | MRC | GRP NAME | SSO |
| 001-001-003                                   |  | 001-001-004 | 15  | 30 | COM  | YES | *Y  | -----    | OFF |
|                                               |  |             | 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 |
| 001-001-001                                   |  | 001-001-004 | 20  | 25 | SHR  | *Y  | *Y  | -----    | OFF |
|                                               |  |             | 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=dfld: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 I 1-109-0 90 20 COM NO *N ----- OFF 10 20 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. The Weighted GTT Loadsharing and Flexible Final GTT Loadsharing features are enabled:

```
rtrv-map:pcn=6-7-1
```

```
npcfnti3830 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 6-007-3 5 10 DOM NO NO ----- OFF -- --- ---
 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
001-001-001 001-001-002 10 10 SHR *Y *Y ----- ON
 20 10 SHR *Y *Y ----- OFF

PCI Mate PCI SSN RC MULT SRM MRC GRP NAME SSO
1-101-0 1-102-0 10 10 SHR *N *N ----- OFF
 10 10 SHR *N *N ----- OFF

PCN24 Mate PCN24 SSN RC MULT SRM MRC GRP NAME SSO
000-000-001 000-001-002 5 30 SHR *N *N ----- OFF
 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
001-001-001 001-001-002 10 10 SHR *Y *Y ----- ON 20 67 50
 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 1-102-0 10 10 SHR *N *N ----- OFF 10 33 1
 10 10 SHR *N *N ----- OFF 20 67 1

PCN24 Mate PCN24 SSN RC MULT SRM MRC GRP NAME SSO WT %WT THR
000-000-001 000-001-002 5 30 SHR *N *N ----- OFF 50 91 80
 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
000-000-001 000-001-002 5 30 SHR *N *N ----- OFF 50 91 80
 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 1-101-2 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 s-02002 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
001-001-001 001-001-002 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
001-001-005 001-001-006 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 1-101-2 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 I s-2-202-1 11 10 SHR *N *N itugrp OFF
 N 01002 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 01002 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 s-2-202-2 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 s-02002 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 01002 11 10 SHR *N *N ----- OFF
 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 01002 11 10 SHR *N *N ----- OFF
 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 I s-2-202-1 11 10 SHR *N *N itugrp 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
001-001-001 001-001-002 11 10 SHR *Y *Y ----- OFF -- --- ---
 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
001-001-005 001-001-006 11 20 SHR *Y *Y ----- OFF 20 67 50
 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 I s-2-202-1 11 10 SHR *N *N itugrp OFF 30 33 1
 N 01002 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 01002 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 01002 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 01002 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 I s-2-202-1 11 10 SHR *N *N itugrp 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 01002 11 10 SHR *N *N ----- OFF 40 67 1
 MAPSETPCSSN REFCNT=2 MAPSETPC REFCNT=1
 MAPSETPCSSN REFCNT=0 MAPSETPC REFCNT=*1

 MAP table is (15 of 36000) 1% full.

;
```

## Legend

- **MAPSET ID**—MAP set number or DFLT when numbered MAP sets are allowed
- **PCA/PCI/PCN/PCN24**—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**—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 CLI-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



- **GTWYLSNISM**T—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 5 ISS. 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 (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:npcfmt i* 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*

## **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
```

## **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

```
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

 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.
;
```

## 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**—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 10-02-09 16:31:40 EST EAGLE 42.0.0
```

|              |       |
|--------------|-------|
| MTCHLNP      | = off |
| MTCHNP       | = off |
| MTCHMAP      | = off |
| MTCHEIR      | = off |
| MTCHVFLEX    | = on  |
| MTCHATINPQ   | = off |
| MTCHGTTAPATH | = off |
| MTCHAIQ      | = off |
| MTCDSTP      | = off |
| MTCDLINK     | = off |
| MTCDLNKSET   | = off |
| MTCDSTPLAN   | = off |
| MTCDLNP      | = off |
| MTCDNP       | = off |
| MTCDMAP      | = off |
| MTCDEIR      | = off |
| MTCDVFLEX    | = on  |
| MTCDATINPQ   | = off |
| MTCDSCTPASOC | = off |
| MTCDSCTPCARD | = off |

```

MTCDDUA = off
MTCDDGTTAPATH = off
MTCDDAIQ = off
MTCDSIP = off
;

```

## Legend

- **MTCHEIR**—Maintenance Hourly (marginal) measurements report for Equipment Identity Register
- **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
- **MTCDFVLEX**—Maintenance Daily measurements report for V-Flex (Voice Mail Router)
- **MTCDDSTP**—Maintenance Daily measurements report for STP
- **MTCDDLNK**—Maintenance Daily measurements report for links
- **MTCDDLNKSET**—Maintenance Daily measurements report for linksets
- **MTCDDSTPLAN**—Maintenance Daily measurements report for STPLAN
- **MTCDDLNP**—Maintenance Daily measurements report for LNP
- **MTCDDNP**—Maintenance Daily measurements report for INP/AINPQ, INP CRP, and G-Port
- **MTCDDMAP**—Maintenance Daily measurements report for GSM Map Screening
- **MTCDSCTPASOC**—Maintenance Daily measurements report for SCTP associations
- **MTCDSCTPCARD**—Maintenance Daily measurements report for SCTP cards
- **MTCDDUA**—Maintenance Daily measurements report for UA associations
- **MTCDDGTTAPATH**—Maintenance Daily measurements report for GTT Action Per-Path.
- **MTCDDAIQ**—Maintenance Daily measurements report for ANSI41 AIQ
- **MTCDSIP**—Maintenance Daily measurement report for SIP

## 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 5. 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:

*ayyyyyyyyyyy*

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
 cgpngnrqd
 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
FANE : none
FANF : none
FARN : none
FASP : none
FASCRCD : none
FASCRCG : none

tifcgpn1 cc2 blrls val1 =12 cc intl 1
 dnx blnfndrls val2 =45 dn
 grnlkup val1 =56
 val2 =78
FANE : none
FANF : none
FARN : none
FASP : none
FASCRCD : none
FASCRCG : none

tifcgpn2 cc2 asdlkup cc intl 1
 dnx
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=idpin1
```

```

tekelecstp 12-02-11 15:37:41 EMS EAGLE 45.0.0

ASN CA SA SA DATA FA OFNAI REFS

idpin1 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
FASCRCDD : 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
- **FASCRCDD**— 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:svrn=tif:mode=full
rtrv-npp-serv:svrn=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         |
|         |        | fwds       | 5          |
|         |        | crp        | 92         |
|         |        | npnrls     | 91         |
|         |        | nprelay    | 80         |
|         |        | nprls      | 80         |
|         |        | sncgpn     | 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         |
|          |        | fwds       | 5          |
|          |        | crp        | 92         |
|          |        | npnrls     | 91         |
|          |        | nprelay    | 80         |
|          |        | nprls      | 80         |
|          |        | sns        | 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         |
|          |        | fwds       | 5          |
|          |        | crp        | 92         |
|          |        | npnrls     | 91         |
|          |        | nprelay    | 80         |
|          |        | nprls      | 80         |
|          |        | sns        | 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        |
|          |        | cdpnp      | 80         |
|          |        | lacck      | 60         |
|          |        | cgpnsvcrqd | 60         |
|          |        | asdlkup    | 50         |
|          |        | grnlkup    | 50         |
|          |        | cgpnasdrqd | 50         |
|          |        | cgpngrnrqd | 50         |
|          |        | inprt      | 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         |
|            |        | cdpnp      | 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         |
|            |        | cdpnp      | 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        |
|            |        | cdpnp      | 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        |
|           |        | cdpnp      | 80         |
|           |        | lacck      | 60         |
|           |        | cgpnsvcrqd | 60         |
|           |        | asdlkup    | 50         |
|           |        | grnlkup    | 50         |
|           |        | cgpnasdrqd | 50         |
|           |        | cgpngrnrqd | 50         |
|           |        | inprtq     | 95         |
|           |        | skgtartg   | 50         |
| SERVICE   | STATUS | SA         | PRECEDENCE |
| -----     | -----  | -----      | -----      |
| idprcdpn3 | off    | cdial      | 10         |
|           |        | ccncchk    | 100        |
|           |        | cdpnp      | 80         |
|           |        | lacck      | 60         |
|           |        | cgpnsvcrqd | 60         |
|           |        | asdlkup    | 50         |
|           |        | grnlkup    | 50         |
|           |        | cgpnasdrqd | 50         |
|           |        | cgpngrnrqd | 50         |
|           |        | inprtq     | 95         |
|           |        | skgtartg   | 50         |
| SERVICE   | STATUS | SA         | PRECEDENCE |
| -----     | -----  | -----      | -----      |
| idprcdpn4 | off    | cdial      | 10         |
|           |        | ccncchk    | 100        |
|           |        | cdpnp      | 80         |
|           |        | lacck      | 60         |
|           |        | cgpnsvcrqd | 60         |
|           |        | asdlkup    | 50         |
|           |        | grnlkup    | 50         |
|           |        | cgpnasdrqd | 50         |
|           |        | cgpngrnrqd | 50         |
|           |        | inprtq     | 95         |
|           |        | skgtartg   | 50         |
| SERVICE   | STATUS | SA         | PRECEDENCE |
| -----     | -----  | -----      | -----      |
| tifcgpn   | off    | cdial      | 10         |
|           |        | sncgpn     | 75         |
|           |        | cgpnp      | 80         |
|           |        | asdlkup    | 90         |
|           |        | grnlkup    | 90         |
|           |        | nscgpn     | 75         |
|           |        | fpfxrls    | 92         |
|           |        | blrls      | 91         |
|           |        | blnfndrls  | 91         |
| SERVICE   | STATUS | SA         | PRECEDENCE |
| -----     | -----  | -----      | -----      |
| tifcgpn2  | off    | cdial      | 10         |
|           |        | sncgpn     | 75         |
|           |        | cgpnp      | 80         |
|           |        | asdlkup    | 90         |
|           |        | grnlkup    | 90         |
|           |        | nscgpn     | 75         |
|           |        | fpfxrls    | 92         |
|           |        | blrls      | 91         |
|           |        | blnfndrls  | 91         |
| SERVICE   | STATUS | SA         | PRECEDENCE |

```

tifcgp3 off cdial 10
 snscgp 75
 cgpnp 80
 aslkup 90
 grnlkup 90
 nscgp 75
 fpxrls 92
 blrls 91
 blnfndrls 91
;

```

This example displays NPP Service table data for a specific Service:

rtrv-npp-serv:svn=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
 snscgp 80
 cdial 10
 fwdscs 5
 nprelay 80
 nprls 80
 snscgp 75
 cgpnpnrqd 80
 aslkup 90
 grnlkup 90
 cgpnasdrqd 90
 cgpngrnrqd 90
 nscdpn 80
 nscgp 75
 nocgpnrsls 80
 fpxrls 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:svn=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
 snscgp 80

```

```

cgpnprqd 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=aaaaabbbbcccccd dlmc=1020304050607080
dlmd=d0d0 dlme=e0e0 dlmf=f0f0
dlmg=9010 dlmh=9020 dlmi=9030
dlmj=9040 dlmk=9050 dlm1=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.

**fpx (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:fpx=91:fdl=16
```

## Dependencies

The value specified for the fpx 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 tificgpn2
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 HIPR, HIPR2 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
```

```

rlgncxa03w 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 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
```

```

rlgncxa03w 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 | ..... |

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rlghncxa03w 03-01-23 08:43:14 EST EAGLE 30.0.0

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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_INB_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

```

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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 ACN0=1 AB=0 ACTXPC: 38
CTX_0_STS: SEG=1 ACN0=2 RR=0 CTX_PC: 245

CTX_1_STS: SEG=0 ACN0=1 RR=1 CTX_PC: 15
CTX_2_STS: SEG=0 ACN0=0 RR=0 CTX_PC: 75
CTX_3_STS: SEG=1 ACN0=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 ACN0=1 AB=0 ACTXPC: 38
CTX_0_STS: SEG=1 ACN0=2 RR=0 CTX_PC: 245

CTX_1_STS: SEG=0 ACN0=1 RR=1 CTX_PC: 15
CTX_2_STS: SEG=0 ACN0=0 RR=0 CTX_PC: 128
CTX_3_STS: SEG=1 ACN0=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 ACN0=1 AB=0 ACTXPC: 38
CTX_0_STS: SEG=1 ACN0=2 RR=0 CTX_PC: 245

CTX_1_STS: SEG=0 ACN0=1 RR=1 CTX_PC: 125
CTX_2_STS: SEG=0 ACN0=0 RR=0 CTX_PC: 75
CTX_3_STS: SEG=1 ACN0=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 ACN0=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

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Report Date:03-01-23 Time:12:20:45

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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

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rlghncxa03w 03-01-23 08:43:14 EST EAGLE 30.0.0

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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 000cfff08
0020 00000001 00116bd4 00000164 00000001 k..d.....
0030 000cfff68 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= ffffffff 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 *****
WD0G_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= 003dffc0 r5= 00000000 r6= 42000360 r7= 0002c498
r8= 0000006f r9= 90003c00 r10= 00606e54 r11= 00000000
r12= 00000000 sp= 003dfff8 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 003dffc0 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_SETTINGS=   | 13000000 |
| DDR_RX_DESKEW=           | 13000013 | DDR_RDDLSEL_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_MAPPING= | 0000000eb |                        |          |

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 ACN0=02 RR=0 | CTX_PC=0064  |          |
| INDIRECT_CTX_STS1:   | SEG=0 ACN0=02 RR=0 | CTX_PC=0064  |          |
| INDIRECT_CTX_STS2:   | SEG=0 ACN0=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_RDDLSEL_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:npcfmt i` 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 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:npcfmt i* 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:npcfmt.i` 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.

## 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
;

```

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:**

[illegible]

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 04-09-20 09:04:14 EST EAGLE 34.1.0

Feature NUM Prefix Function

GSM MAP SRI Redirect 1 1a1a
GSM MAP SRI Redirect 2 ffff
GSM MAP SRI Redirect 3 1234
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 (6 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 04-09-20 09:04:14 EST EAGLE 31.11.0

Feature NUM Prefix Function

GSM MAP SRI Redirect 1 1a1a
GSM MAP SRI Redirect 2 ffff
GSM MAP SRI Redirect 3 1234
```

```
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
;

```

## Legend

- **IPC/IPCA/IPCI/PCN/PCN24**—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.

### cli (optional)

Common Language Location Identifier. This parameter specifies the Common Language Location Identifier assigned to the link.

#### Range:

*ayyyyyyyyyyy*

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 (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:npcfmt.i` 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

**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
rtrv-rte:dpcn=1000-*
rtrv-rte:dpcn=1000-*:lsn=dpcn64
rtrv-rte:dpcn=p-*aa
rtrv-rte:dpcn=s-9000-*

```

## Dependencies

The value of the dpc/dpca/dpci/dpcn/dpcn24 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.

The NRT feature must be turned on before the dpc/dpca/dpci/dpcn/dpcn24 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-*-*`).

The value of the dpc/dpca/dpci/dpcn/dpcn24 parameter must be a valid point code.

If the cilli 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<br>LSN | RTX<br>RC | CLLI<br>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<br>LSN | RTX<br>RC | CLLI<br>APCI |
|------------|-------------|-------------------|-----------|--------------|
| s-4-002-0  | 010-001-001 | s-08228-aa        | No        | -----        |
| 2-010-0    | -----       | lsn13             | No        | dstn13       |
| p-2-010-0  | -----       | -----             | 10        | 2-010-0      |
| 2-010-1    | 002-010-001 | -----             | No        | dstn13p      |
| p-2-010-1  | 002-100-001 | lsn14             | No        | dstn14       |
| 2-010-2    | -----       | -----             | 10        | 2-010-1      |
| p-2-010-2  | -----       | 04178-aa          | No        | dstn14p      |
| 2-010-3    | -----       | lsn15             | No        | dstn15       |
| p-2-010-3  | -----       | 08178-aa          | 10        | 2-010-2      |
| 2-070-1    | -----       | s-04179-aa        | No        | dstn15p      |
|            |             | lsn16             | No        | dstn16       |
|            |             | s-08179-aa        | 10        | 2-010-3      |
|            |             | -----             | No        | dstn16p      |
|            |             | lsn13             | No        | tgtitui001   |
|            |             | lsn14             | 10        | 2-010-0      |
|            |             | lsn15             | 20        | 2-010-1      |
|            |             | lsn16             | 30        | 2-010-2      |
| 2-010-4    | -----       | 002-010-004       | 40        | 2-010-3      |
| p-2-010-4  | -----       | lsn17             | No        | dstn17       |
| .          |             | 002-100-004       | 10        | 2-010-4      |
| .          |             | -----             | No        | dstn17p      |
| s-2-020-0  | -----       | -----             | No        | dstn21       |
| ps-2-020-0 | -----       | lsn21             | 10        | s-2-020-0    |
| s-2-020-1  | 002-020-001 | -----             | No        | dstn21p      |
| ps-2-020-1 | 002-200-001 | lsn22             | No        | dstn22       |
| s-2-020-2  | -----       | -----             | 10        | s-2-020-1    |
| ps-2-020-2 | -----       | 04258-aa          | No        | dstn22p      |
| s-2-020-3  | -----       | lsn23             | No        | dstn23       |
| ps-2-020-3 | -----       | 08258-aa          | 10        | s-2-020-2    |
| s-2-070-3  | -----       | s-04259-aa        | No        | dstn23p      |
|            |             | lsn24             | No        | dstn24       |
|            |             | s-08259-aa        | 10        | s-2-020-3    |
|            |             | -----             | No        | dstn24p      |
|            |             | lsn21             | No        | tgtitui003   |
|            |             | lsn22             | 10        | s-2-020-0    |
|            |             | lsn23             | 20        | s-2-020-1    |
|            |             | lsn24             | 30        | s-2-020-2    |
|            |             | -----             | 40        | s-2-020-3    |
| .          |             |                   |           |              |
| .          |             |                   |           |              |
| .          |             |                   |           |              |
| DPCI       | ALIASI      | ALIASN/N24<br>LSN | RTX<br>RC | CLLI<br>APCI |
| 3-030-0    | s-3-030-0   | -----             | No        | dstn29       |
| p-3-030-0  | s-3-031-0   | lsn29             | 10        | 3-030-0      |
| 3-030-1    | s-3-030-1   | -----             | No        | dstn29p      |
| p-3-030-1  | s-3-031-1   | 06385-aa          | No        | dstn30       |
| 3-030-2    | s-3-030-2   | lsn30             | 10        | 3-030-1      |
| p-3-030-2  | s-3-031-2   | 07385-aa          | No        | dstn30p      |
| 3-070-1    | s-3-070-1   | s-06386-aa        | No        | dstn31       |
|            |             | lsn31             | 10        | 3-030-2      |
|            |             | s-07386-aa        | No        | dstn31p      |
|            |             | -----             | 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       |

|            |             |             |     |            |
|------------|-------------|-------------|-----|------------|
| p-3-030-3  | s-3-031-3   | lsn32       | 10  | 3-030-3    |
| s-3-070-2  | s-3-070-2   | 003-031-003 | No  | dstn32p    |
|            |             | -----       | No  | tgtitun006 |
|            |             | 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   |

|               |             |           |     |             |
|---------------|-------------|-----------|-----|-------------|
| s-08272-aa    | -----       | lsn48     | 30  | 08199-aa    |
|               |             | -----     | No  | dstn49      |
| ps-08272-aa   | -----       | lsn49     | 10  | s-08272-aa  |
| s-08273-aa    | 004-010-001 | -----     | No  | dstn49p     |
|               |             | -----     | No  | dstn50      |
| ps-08273-aa   | 004-200-010 | lsn50     | 10  | s-08273-aa  |
| s-08274-aa    | -----       | -----     | No  | dstn50p     |
|               |             | 4-010-2   | No  | dstn51      |
| ps-08274-aa   | -----       | lsn51     | 10  | s-08274-aa  |
| s-08275-aa    | -----       | 4-050-2   | No  | dstn51p     |
|               |             | s-4-010-3 | No  | dstn52      |
| ps-08275-aa   | -----       | lsn52     | 10  | s-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-stpopts: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
 s-2-00-05-00-tk 2-00-06-12-tk 4-006-7 RC APCN
 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<br>LSN | RTX<br>RC | CLLI<br>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<br>LSN | RTX<br>RC | CLLI<br>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<br>LSN | RTX<br>RC | CLLI<br>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  | dstn48duprk |
| 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  | dstn47duprk |
| 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
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
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<br>LSN | RTX<br>RC | CLLI<br>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<br>LSN | RTX<br>RC | CLLI<br>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 CLI
 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 dstnrtison

DPCI ALIASA ALIASN/N24 RTX CLI
 LSN RC APCI
2-010-0 ----- ----- No dstn13

```

|         |             |             |     |            |
|---------|-------------|-------------|-----|------------|
| 2-010-1 | 002-010-001 | lsn13       | 10  | 2-010-0    |
|         |             | -----       | 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<br>LSN      | RTX<br>RC | CLLI<br>APCN              |
|-------------|-------------|--------------------|-----------|---------------------------|
| 08198       | s-4-000-6   | 4-000-6<br>lsn47   | No<br>10  | dstn47<br>08198           |
| 08199       | 4-000-7     | s-4-000-7<br>lsn48 | No<br>10  | dstn48<br>08199           |
| DPCN        | ALIASN      | ALIASI<br>LSN      | RTX<br>RC | CLLI<br>APCN              |
| 12688       | s-12688     | -----<br>lsn57     | No<br>10  | dstn57<br>12688           |
| 12689       | s-12689     | 6-050-1<br>lsn58   | No<br>10  | dstn58<br>12689           |
| 12690       | s-12690     | s-6-050-2<br>lsn59 | No<br>10  | dstn59<br>12690           |
| DPCN24      | ALIASA      | ALIASI<br>LSN      | RTX<br>RC | CLLI<br>APCN24            |
| 003-003-004 | 003-003-003 | 3-003-4            | No        | -----                     |
| 006-005-001 | -----       | lsn63              | No<br>10  | dstn63<br>006-005-001     |
| 006-005-002 | 006-005-002 | -----<br>lsn64     | No<br>10  | dstn64<br>006-005-002     |
| 006-005-003 | -----       | 6-005-3<br>lsn65   | No<br>10  | dstn65<br>006-005-003     |
| 006-070-001 | -----       | -----<br>lsn63     | No<br>10  | tgtitun24a<br>006-005-001 |
|             |             | lsn64              | 20        | 006-005-002               |
|             |             | lsn65              | 30        | 006-005-003               |
| 006-005-004 | -----       | s-6-005-4<br>lsn66 | No<br>10  | dstn66<br>006-005-004     |
| 006-005-005 | 006-005-005 | 6-005-5<br>lsn67   | No<br>10  | dstn67<br>006-005-005     |
| 006-070-002 | -----       | -----<br>lsn66     | No<br>10  | tgtitun24b<br>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<br>LSN | RTX<br>RC | CLLI<br>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<br>LSN | RTX<br>RC | CLLI<br>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<br>LSN | RTX<br>RC | CLLI<br>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<br>LSN     | RTX<br>RC | CLLI<br>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<br>LSN     | RTX<br>RC | CLLI<br>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<br>LSN     | RTX<br>RC | CLLI<br>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<br>LSN     | RTX<br>RC | CLLI<br>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<br>LSN     | RTX<br>RC | CLLI<br>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<br>LSN | RTX<br>RC | CLLI<br>APCI |
|------------|-------------|-------------------|-----------|--------------|
| s-4-002-0  | 010-001-001 | s-08228-aa        | No        | -----        |
| s-2-020-0  | -----       | lsn21             | No        | dstn21       |
| s-2-020-1  | 002-020-001 | -----             | No        | dstn22       |
| s-2-020-2  | -----       | lsn22             | 10        | s-2-020-1    |
| s-2-020-3  | -----       | 04258-aa          | No        | dstn23       |
| s-2-020-4  | -----       | lsn23             | 10        | s-2-020-2    |
| s-2-020-5  | -----       | s-04259-aa        | No        | dstn24       |
| s-2-070-3  | -----       | lsn24             | 10        | s-2-020-3    |
| s-2-020-6  | -----       | -----             | No        | tgtitui003   |
| s-2-020-7  | -----       | lsn21             | 10        | s-2-020-0    |
| s-2-020-8  | -----       | lsn22             | 20        | s-2-020-1    |
| s-2-020-9  | -----       | lsn23             | 30        | s-2-020-2    |
| s-2-020-10 | -----       | lsn24             | 40        | s-2-020-3    |
| s-2-020-11 | -----       | 002-020-004       | No        | dstn25       |
| s-2-020-12 | -----       | lsn25             | 10        | s-2-020-4    |
| s-2-020-13 | 002-020-005 | 04261-aa          | No        | dstn26       |
| s-2-020-14 | -----       | lsn26             | 10        | s-2-020-5    |
| s-2-020-15 | 002-020-006 | s-04262-aa        | No        | dstn27       |
| s-2-020-16 | -----       | lsn27             | 10        | s-2-020-6    |
| s-2-020-17 | 002-020-007 | 002-020-007       | No        | dstn28       |
| s-2-020-18 | -----       | lsn28             | 10        | s-2-020-7    |
| s-2-070-4  | -----       | -----             | No        | tgtitui004   |
| s-2-020-19 | -----       | lsn25             | 10        | s-2-020-4    |
| s-2-020-20 | -----       | lsn26             | 20        | s-2-020-5    |
| s-2-020-21 | -----       | lsn27             | 30        | s-2-020-6    |
| s-2-020-22 | -----       | lsn28             | 40        | s-2-020-7    |
| s-3-070-3  | -----       | -----             | No        | tgtitui007   |
| s-3-040-2  | -----       | lsn35             | 10        | s-3-040-2    |
| s-3-040-3  | -----       | lsn36             | 20        | s-3-040-3    |
| s-3-040-4  | -----       | lsn37             | 30        | s-3-040-4    |
| s-3-070-4  | -----       | -----             | No        | tgtitui008   |
| s-3-040-5  | -----       | lsn38             | 10        | s-3-040-5    |
| s-3-040-6  | -----       | lsn39             | 20        | s-3-040-6    |
| s-3-040-7  | -----       | lsn40             | 30        | s-3-040-7    |
| s-2-029-6  | 002-029-006 | s-04269-aa        | Yes       | rtxroute002  |
| s-2-020-23 | -----       | lsn26             | 5         | s-2-020-5    |
| DPCI       | ALIASI      | ALIASN/N24<br>LSN | RTX<br>RC | CLLI<br>APCI |
| s-3-040-2  | 3-040-2     | -----             | No        | dstn35       |
| s-3-040-3  | 3-040-3     | lsn35             | 10        | s-3-040-2    |
| s-3-040-4  | 3-040-4     | 06467-aa          | No        | dstn36       |
| s-3-040-5  | 3-040-5     | lsn36             | 10        | s-3-040-3    |
| s-3-040-6  | 3-040-6     | s-06468-aa        | No        | dstn37       |
| s-3-040-7  | 3-040-7     | lsn37             | 10        | s-3-040-4    |
| s-3-040-8  | 3-040-8     | 003-040-005       | No        | dstn38       |
| s-3-040-9  | 3-040-9     | lsn38             | 10        | s-3-040-5    |
| DPCI       | ALIASN      | ALIASN<br>LSN     | RTX<br>RC | CLLI<br>APCI |
| s-3-040-6  | s-06471-aa  | 06471-aa          | No        | dstn39       |
| s-3-040-7  | 06472-aa    | lsn39             | 10        | s-3-040-6    |
| s-3-040-8  | 06472-aa    | s-06472-aa        | No        | dstn40       |
| s-3-040-9  | 06472-aa    | lsn40             | 10        | s-3-040-7    |
| DPCN       | ALIASA      | ALIASI<br>LSN     | RTX<br>RC | CLLI<br>APCN |
| s-08272-aa | -----       | -----             | No        | dstn49       |
| s-08273-aa | 004-010-001 | lsn49             | 10        | s-08272-aa   |
| s-08274-aa | -----       | -----             | No        | dstn50       |
| s-08275-aa | -----       | 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 CLI
 LSN RC API
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 CLI
 LSN RC API
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 CLI
 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 CLI
 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 CLI
 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 CLI
 LSN RC APC
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<br>LSN      | RTX<br>RC | CLLI<br>APCN       |
| 08199-fr | -----   | s-4-006-1          | No        | dstn48dupfr        |
| 08199-tk | -----   | 4-006-2            | No        | dstn48duptk        |
| DPCN     | ALIASI  | ALIASI<br>LSN      | RTX<br>RC | CLLI<br>APCN       |
| 08199-aa | 4-000-7 | s-4-000-7<br>lsn48 | No<br>10  | dstn48<br>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<br>LSN | RTX<br>RC | CLLI<br>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<br>LSN | RTX<br>RC | CLLI<br>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 CLI
 09000-fr ----- s-4-007-1 No dstn9xfr
 09000-tk ----- 4-007-2 No dstn9xtk

 DPCN ALIASI ALIASI RTX CLI
 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 CLI
 001-001-000 ----- ----- No APCA
 e2e1 10 stp1
 003-001-000 ----- ----- No 001-001-000
 e2e3 10 mstp
 004-001-000 ----- ----- No 003-001-000
 e2e4 10 stp4
 007-001-000 ----- ----- No 004-001-000
 e2e7 10 stp7
 002-101-001 ----- ----- No 007-001-000
 e2m1s1 10 ssp201
 e2e3 20 002-101-001
 .
 .
 .
 200-200-* ----- ----- No cluster2
 005-006-001 ----- 005-006-001 No -----
 001-001-001 ----- lsn01 No dstn01
 p-001-001-001 ----- ----- 10 001-001-001
 001-001-002 1-001-2 ----- No dstn01p
 lsn02 10 dstn02
 p-001-001-002 1-011-2 ----- 10 001-001-002
 ----- 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      |

|            |             |             |     |             |
|------------|-------------|-------------|-----|-------------|
| ps-2-020-1 | 002-200-001 | lsn22       | 10  | s-2-020-1   |
| s-2-020-2  | -----       | -----       | No  | dstn22p     |
|            |             | 04258-aa    | No  | dstn23      |
| ps-2-020-2 | -----       | lsn23       | 10  | s-2-020-2   |
| s-2-020-3  | -----       | 08258-aa    | No  | dstn23p     |
|            |             | s-04259-aa  | No  | dstn24      |
| ps-2-020-3 | -----       | lsn24       | 10  | s-2-020-3   |
| s-2-070-3  | -----       | s-08259-aa  | No  | dstn24p     |
|            |             | -----       | 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<br>LSN      | RTX<br>RC | CLLI<br>APCN             |
|---------------|-------------|--------------------|-----------|--------------------------|
| 08198-aa      | s-4-000-6   | 4-000-6<br>lsn47   | No<br>10  | dstn47<br>08198-aa       |
| p-08198-aa    | s-4-040-6   | 4-040-6            | No        | dstn47p                  |
| 08199-aa      | 4-000-7     | s-4-000-7<br>lsn48 | No<br>10  | dstn48<br>08199-aa       |
| p-08199-aa    | 4-040-7     | s-4-040-7          | No        | dstn48p                  |
| s-08278-aa    | s-4-010-6   | 4-010-6<br>lsn55   | No<br>10  | dstn55<br>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<br>lsn56 | No<br>10  | dstn56<br>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<br>lsn55   | Yes<br>80 | rtxrout003<br>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<br>LSN      | RTX<br>RC | CLLI<br>APCN             |
| 12688-aa      | s-12688-aa  | -----<br>lsn57     | No<br>10  | dstn57<br>12688-aa       |
| p-12688-aa    | s-13688-aa  | -----              | No        | dstn57p                  |
| .             |             |                    |           |                          |
| .             |             |                    |           |                          |
| .             |             |                    |           |                          |
| DPCN24        | ALIASA      | ALIASI<br>LSN      | RTX<br>RC | CLLI<br>APCN24           |
| 003-003-004   | 003-003-003 | 3-003-4            | No        | -----                    |
| 006-005-001   | -----       | -----<br>lsn63     | No<br>10  | dstn63<br>006-005-001    |
| p-006-005-001 | -----       | -----              | No        | dstn63p                  |
| .             |             |                    |           |                          |
| .             |             |                    |           |                          |
| .             |             |                    |           |                          |

### Legend

- **DPC, DPCA, DPCI, DPCN, DPCN24**—Destination point code to be reached through this route
- **ALIAS, ALIASA, ALIASI, ALIASN/N24**—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**—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:npcfmt1` flexible point code option. A group code must be specified with 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*

#### **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:npcfmt i* flexible point code option. A group code must be specified with 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

#### **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
```

## **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` 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` 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:opc=*-xy`) on ITU-N DPCs and ITU-N OPCs if the ITUDUPPC feature is on. \*\* and \*\*\* is 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:opc=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
;

```

## Related Commands

[chg-rtx](#), [dlt-rtx](#), [ent-rtx](#), [rept-stat-rtx](#)

## rtrv-sccp-msg

### Retrieve 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 5 ISS.

## Parameters

**serv (optional)**

Name of the service to be retrieved.

**Range:**

*gflex*

G-Flex (GSM Flexible Numbering)

*gport*

G-Port (GSM Mobile Number Portability)

*mnv*

Mobile Number Portability

## Dependencies

The A-Port or IGM feature must be enabled before the serv=mnv 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
DFLTGTMODE 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
MTPRGTTTFALLBK mtproute
UNQGTSEL 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
MTPRGTTTFALLBK mtproute
UNQGTSEL 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
MTPRGTTTFALLBK mtproute
UNQGTSEL 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
UNQGTSEL bestmatch
DELCCPREFIX pfxwcc
GTTDIST elap
;

```

## Related Commands

[chg-sccpopts](#)

## rtrv-scr-aftp

### 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:

*ayyyyyy*

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

**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.

**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*

**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.

**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
```

## 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.

The character c is not a valid value for the ni, nc, ncm, zone, area, id, msa, ssa, sp, 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). The pcst parameter cannot be specified for ANSI and ITU-N24 point codes.

Any specified ni, nc, ncm, zone, area, id, msa, ssa, sp, npc, 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.

## Notes

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 or 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
 aft1 s-00128
 SSN NSFI NSR/ACT
 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 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:***ayyyyyy*

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

**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.

**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*

**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

**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
```

## Dependencies

A complete point code must be specified, and must be one and only one of the four point code parameter combinations: ni-nc-ncm, zone-area-id, msa-ssa-sp, 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*.

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). The pcst parameter cannot be specified for ANSI and ITU-N24 point codes.

Any specified id 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 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 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.

## Notes

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
bdp1 s-00128 NSFI NSR/ACT
FAIL -----
;
```

## 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 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](#)



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:

*ayyyyyy*

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

### 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.

**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*

**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

**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
```

## 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, 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). The pcst parameter cannot be specified for ANSI and 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 ssa=\* parameter is specified, then the sp=\* parameter must be specified.

## Notes

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
 bop1 s-00128
 NSFI FAIL NSR/ACT

 SR ZONE AREA ID NSFI NSR/ACT
 bop1 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. 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 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*

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:**

*ayyyyyy*

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

### **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.

**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.

**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.

**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

```

## 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 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). The pcst parameter cannot be specified for ANSI and ITU-N24 point codes.

Any specified ni, nc, ncm, zone, area, id, msa, ssa, sp, 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.

## Notes

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
cdp1 s-00128 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 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, 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

**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.

**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

**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.

**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
```

## 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.

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, 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 ). The pcst and npcst parameters cannot be specified for ANSI and 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.

## Notes

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 | -----   |
| ;    |         |      |    |     |    |        |      |         |

## 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 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:

*ayyyyyy*

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

**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.

**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***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.**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
```

## 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 `ssa=*` parameter is specified, then the `sp=*` 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). The pcst parameter cannot be specified for ANSI and 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 or ssa parameter must already exist in the database.

Any specified id or sp parameter must already exist in the database.

Any specified zone 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, and npc parameters cannot have a value of c.

## Notes

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 NSF1 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 NSF1 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 NSF1 NSR/ACT
IEC 240 001 010 STOP CNCF
IEC 241 010 * STOP -----

SR ZONE AREA ID NSF1 NSR/ACT
IEC 1 003 4 STOP -----
IEC 1 003 5 STOP CR

SR NPC
IEC 00235
IEC 00240
NSF1 STOP CNCF
NSF1 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 NSF1 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 NSF1 NSR/ACT
dst1 s-1 002 3 STOP -----

```

```

 SR NPC NSF1 NSR/ACT
 dst1 s-00128 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 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-destfld, dlt-scr-destfld, ent-scr-destfld*

## 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:

*ayyyyyy*

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

**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.

**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 screen 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*

**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



**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
```

**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). The pcst parameter cannot be specified for ANSI and 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 ni=\* is specified, nc=\* and ncm=\* must be specified.

If nc=\* is specified, ncm=\* must be specified.

If the zone=\* parameter is specified, then the area=\* and the id=\* 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=\* must be specified.

If the ssa=\* parameter is specified, then the sp=\* 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, 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 or ssa parameter must already exist in the allowed DPC entity for the screening reference.

Any specified id or sp parameter must already exist in the allowed DPC entity for the screening reference.

Any specified zone 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, and npc parameters cannot have a value of c.

## Notes

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 BLK0PC 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
 IEC 00235
 IEC 00240
 NSFI CGPA NSR/ACT
 CGPA cg04 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
 dpc1 s-00128
 NSFI STOP NSR/ACT
 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
dpc1 s-00128 NSFI NSR/ACT
 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 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, dlt-scr-dpc, ent-scr-dpc*

## 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:

*ayyyyyy*

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.

## Notes

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&amp;&amp;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&amp;&amp;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:

*ayyyyyy*

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

**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.

**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 referenes

**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***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

**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
```

## 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 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). The pcst parameter cannot be specified for ANSI and 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 or ssa parameter must already exist in the allowed OPC entity for the screening reference.

Any specified id or sp parameter must already exist in the allowed OPC entity for the screening reference.

Any specified zone 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, and npc parameters cannot have a value of c.

## Notes

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 NSF1 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 NSF1 NSR/ACT
IEC 1 003 4 BLK0PC 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 NSF1 NSR/ACT
IEC 240 001 010 STOP -----
IEC 241 010 * CGPA cg04

SR ZONE AREA ID NSF1 NSR/ACT
IEC 1 003 4 BLK0PC blk1
IEC 1 003 5 STOP -----

SR NPC
IEC 00235
IEC 00240
 NSF1 NSR/ACT
 CGPA cg04
 CGPA cg01

SR NI NC NCM NSF1 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 NSF1 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 NSF1 NSR/ACT
op55 007 077 007 BLK0PC bo55
;

```

```
rtrv-scr-opc:sr=opc1:npc=128:nsfi=fail
```

```
tekelecstp 05-01-06 11:30:42 EST EAGLE 31.12.0
SR NPC NSF1 NSR/ACT
opc1 s-00128 FAIL -----
;
```

## 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 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, dlt-scr-opc, ent-scr-opc*

## 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.

## Notes

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:

*ayyyyyy*

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 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.

## Notes

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

 rlgncxa03w 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

 rlgncxa03w 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:**

*ayyyyyy*

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 `nsfi` 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`.

## Notes

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 `nsfi=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

In the following example the % full is over 100% and the screen is inaccessible.

`rtrv-scrset`

```
rlghncxa03w 03-03-14 16:37:05 EST EAGLE 31.3.0
ENTIRE GWS DATABASE IS 1% FULL
CDPA + AFTPC TABLES ARE 0% FULL
SCREEN SET TABLE IS (2 OF 255) 2% FULL
THERE ARE 0 SEAS SCREEN SETS USED (prefix 00nn)
THERE ARE 2 EAGLE SCREEN SETS USED

THE FOLLOWING ARE OVER 80% FULL:
SCRN NSFI NSR/ACT FULL RULES TABLES DESTFLD
scr1 OPC 101% 4093 2 Y
```

```

 SCRN NSFI NSR/ACT FULL RULES TABLES DESTFLD
scr1 OPC opc1 101% 4093 2 Y
scr2 OPC opc2 1% 3 2 Y
;

```

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
 BLKDPC 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
;

```

## 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 5 ISS 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 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 terminals 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 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 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 YES NO YES 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 terminal 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 terminal 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:***azzzzzzzzzzzzzzzzz*

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 feature 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 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 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 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 (*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:**

*azzzzzzzzzzzzzzzzz*

1 alphabetic character followed by up to 15 alphanumeric characters

**Default:**

Display all

## Example

```
rtrv-seculog:sdate=021496:edate=021596:num=7
```

```
rtrv-seculog:mode=full:sdate=021496:edate=021496: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 year 2000 is a leap year.

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-secu log: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-secu log` command is entered, one of the first things that the reporting function does is to examine the log overflowed 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-crad:loc=1201:type=limds0:appl=+
johnlamb 05 960215 064528 OK ent-card:loc=1201:type=limds0: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 between 2/14/96 and 2/15/96 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-dpcssn-ssn-255-
yes:nmrgt2=255-255-255-255-dpcssn-ssn-255-yes:nmrgt3=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:AJP60D:50,SOM::1+
SEAS 17 070902 124856 OK ASGN-SLK::LS111-02:AJP60D:50,SOM::1+
SEAS 17 070902 124944 OK ASGN-SLK::LS111-03:AJP60D:50,SOM::1+
SEAS 17 070902 125238 OK ASGN-SLK::LS111-11:AJP60D:50,SOM::1+
SEAS 17 070902 125245 OK ASGN-SLK::LS111-05:AJP60D:50,SOM::1+
SEAS 17 070902 125257 OK ASGN-SLK::LS111-13:AJP60D:50,SOM::1+
SEAS 17 070902 130331 OK ASGN-SLK::LS111-02:AJP60D:50,SOM::1+
SEAS 17 070902 130539 OK ASGN-SLK::LS111-02:AJP60D:50,SOM::1+
SEAS 25 070902 131327 OK ASGN-SLK::LS111-03:AJP60D:50,SOM::1+
SEAS 25 070902 184758 OK ASGN-SLK::LS111-02:AJP60D: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-secu log`, 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-secu log` 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<sup>7</sup> Secure Gateway protocol options.

## Parameters

This command has no parameters.

## Example

rtrv-sg-opts

## Dependencies

None

## Notes

None

## Output

rtrv-sg-opts

```
rlghncxa03w 08-02-07 09:50:17 EST EAGLE 38.0.0
```

```

SRKQ: 250
SNMPCONT: john doe 555-123-4567
GETCOMM: public
SETCOMM: private
TRAPCOMM: public
SCTPCSUM: adler32
IPGWABATE: NO
UAMEASUSEDFTAS: YES
;

```

## 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

## 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 (*xyz*z, 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 LIMDS0 SS7ANSI ----- -- -- ----- -- --
1302 LIMDS0 SS7ANSI ----- -- -- ----- -- --
1303 LIMDS0 SS7ANSI ----- -- -- ----- -- --
1304 LIMDS0 SS7ANSI ----- -- -- ----- -- --
1305 LIMDS0 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 CLI 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 (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:npcfmt.i` 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*-

*nnnnnn*—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

**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
```

**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 before the cpctype=lnp parameter can be specified.

The INP feature must be turned on before the cpctype=inp parameter can be specified.

The EIR feature must be turned on before 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:npcfmt` 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=mnnp 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 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 or 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-).

Feature 53120 introduces Spare PC support.

## 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
;
```

## 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.
- **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.
- **(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 5 ISS STP can use, ANSI and OTHER. The value ANSI means the EAGLE 5 ISS STP supports point codes that meet the ANSI standard. The value OTHER means that the EAGLE 5 ISS 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:**

[illegible]

A string of 1 to 64 characters. Valid values are (0-9, A-Z), +, \*, #, .(period), @ or DFLT (default).

**pfx (optional)**

Prefix

**Range:**



zzzzzzzzzzzzzzzzzzzz

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:**

*aaaaaaaaaaaaaaaa*

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:**

#### **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:**

*mtp2*

Display low-speed signaling links

*saal*

Display ATM high-speed signaling links

*e1*

Display signaling links for E1 cards. Includes low speed E1 and SE-HSL links.

*t1*

Display signaling links for T1 cards. Includes low speed T1 and ST-HSL-A links.

*ipsg*

Display signaling links configured for IPSP linksets

*iplim*

Display signaling links configured for IPLIM linksets

*ipgw*

Display signaling links configured for IPGW linksets

**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
```

## 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 frame and shelf portion of the specified loc parameter must be 11, 12, 13, 21, 22, 23, 31, 32, 33, 41, 42, 43, 51, 52, 53, or 61 (loc=xyss, where *x* is the frame, *y* is the shelf, and *ss* is the slot).

The LIMATM, LIME1ATM, LIMDS0, LIMOCU, LIMV35, LIME1, LIMT1, LIMCH, and DCM card types are the only valid card types for this command.

The card must be a LIM, an E1/T1 MIM, or an 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 secs. During this period, the hardware is not detected, which may result in a lack of support for signalling 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 Manual* 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.
```

| LOC  | LINK | LSN    | SLC | TYPE   | L2T<br>SET | BPS   | ECM   | PCR<br>N1 | PCR<br>N2 |
|------|------|--------|-----|--------|------------|-------|-------|-----------|-----------|
| 1201 | A    | e3m1s1 | 0   | LIMDS0 | 1          | 56000 | BASIC | ----      | -----     |
| 1201 | B    | e3m1s2 | 0   | LIMDS0 | 1          | 56000 | BASIC | ----      | -----     |
| 1202 | A    | e3m1s1 | 1   | LIMDS0 | 1          | 56000 | BASIC | ----      | -----     |
| 1202 | B    | e3m1s2 | 1   | LIMDS0 | 1          | 56000 | BASIC | ----      | -----     |
| 1203 | A    | e3m1s1 | 2   | LIMDS0 | 1          | 56000 | BASIC | ----      | -----     |
| 1203 | B    | e3m1s2 | 2   | LIMDS0 | 1          | 56000 | BASIC | ----      | -----     |
| 1204 | A    | e3m1s1 | 3   | LIMDS0 | 1          | 56000 | BASIC | ----      | -----     |

```

1204 B e3m1s2 3 LIMDS0 1 56000 BASIC ---- -----
1205 A e3m1s1 4 LIMDS0 1 56000 BASIC ---- -----
1205 B e3m1s2 4 LIMDS0 1 56000 BASIC ---- -----
1206 A e3m1s1 5 LIMDS0 1 56000 BASIC ---- -----
1206 B e3m1s2 5 LIMDS0 1 56000 BASIC ---- -----
1207 A e3m1s1 6 LIMDS0 1 56000 BASIC ---- -----
1207 B e3m1s2 6 LIMDS0 1 56000 BASIC ---- -----
1211 A e3m2s1 0 LIMDS0 11 56000 BASIC ---- -----
1211 B e3m2s2 0 LIMDS0 11 56000 BASIC ---- -----
1212 A e3m2s1 1 LIMDS0 11 56000 BASIC ---- -----
1212 B e3m2s2 1 LIMDS0 11 56000 BASIC ---- -----
1213 A e3m2s1 2 LIMDS0 11 56000 BASIC ---- -----
1213 B e3m2s2 2 LIMDS0 11 56000 BASIC ---- -----
1214 A e3m2s1 3 LIMDS0 11 56000 BASIC ---- -----
1214 B e3m2s2 3 LIMDS0 11 56000 BASIC ---- -----
1215 A e3m2s1 4 LIMDS0 11 56000 BASIC ---- -----
1215 B e3m2s2 4 LIMDS0 11 56000 BASIC ---- -----
1216 A e3m2s1 5 LIMDS0 11 56000 BASIC ---- -----
1216 B e3m2s2 5 LIMDS0 11 56000 BASIC ---- -----
1217 A e3m2s1 6 LIMDS0 11 56000 BASIC ---- -----
1217 B e3m2s2 6 LIMDS0 11 56000 BASIC ---- -----

LOC LINK LSN SLC TYPE LP ATM
 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 IPSE m2pa1303a 1000
1303 B m3ua333a 0 IPSE m3ua1303b 500
1303 A1 m3ua323a 0 IPSE m3ua1303a 1000
1303 B1 m3ua333i 0 IPSE m3ua1303b 500
1303 B2 m3ua333n 0 IPSE m3ua1303b 500
1305 A ls1305a 0 IPSE sg1305a 1000
1305 B ls1305i 0 IPSE sg1305i 500
1305 A1 ls1305a 1 IPSE a1 1000
1305 B1 ls1305i 1 IPSE a1 500
1305 B14 lsitunbb 0 IPSE a1 1000
1305 B15 lsitunaa 0 IPSE 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 (48 of 1200) 4% 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
LOC LINK LSN SLC TYPE L2T PCR PCR E1 E1
 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
LOC LINK LSN SLC TYPE L2T BPS ECM PCR PCR T1 T1
 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
```



```

 LOC LINK LSN SLC TYPE L2T PCR PCR T1 T1
 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

 LOC LINK LSN SLC TYPE L2T PCR PCR E1 E1
 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

 LOC LINK LSN SLC TYPE LP ATM VCI VPI LL
 SET BPS TSEL LINE 5 0 0
1304 A ls1 3 LIMATM 1 1.544M LINE

```

This example shows the link information for an IPSPG card:

rtrv-slk:loc=1301

```
e1001501 10-04-03 16:20:45 EST EAGLE 42.0.0

LOC LINK LSN SLC TYPE ANAME SLKTPS/
 RSVDSLKTPS MAXSLKTPS
1301 A SCS1 0 IPGSG sg1301a 500 5000
1301 B SCS2 0 IPGSG sg1301b 1000 5000
1301 A1 MGC1 0 IPGSG sg1301a1 700 5000
1301 B1 MGC2 0 IPGSG 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/
 RSVDSLKTPS MAXSLKTPS
1211 A1 ls1211b 0 IPGSG m3ua1211a1 600 5000
1211 A2 ls1211c 0 IPGSG 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

LOC LINK LSN SLC TYPE L2T PCR PCR T1 T1
 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
LOC LINK LSN SLC TYPE LP ATM
1101 A ls333 0 LIMATM 1 1.544M LINE VCI VPI LL
 5 0 0

LOC LINK LSN SLC TYPE LP ATM E1ATM
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
LOC LINK LSN SLC TYPE LP ATM
1306 A1 ls1 1 LIMATM 1 1.544M LINE VCI VPI LL
 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/RSVD
1301 A SCS1 0 IPSG sg1301a 500
1301 B SCS2 0 IPSG sg1301b 1000
1301 A1 MGC1 0 ISPG sg1301a1 700
1301 B1 MGC2 0 IPSG sg1301b1 1200
 MAXSLKTPS
 6500
 6500
 6500
 6500

RSVDSLKTPS for LOC = 1301 is (3400 of 6500) 52%.

SLK table is (4 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 IPSP link
- **MAXSLKTPS**—Maximum SLKTPS allowed for an IPSP 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  $\pm$  200 Hz (ANSI) or 2.048 MHz  $\pm$  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)

## 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-snmppopts

### Retrieve SNMP Options

Use this command to display the system-wide SNMP Options

## Parameters

This command has no parameters.

## Example

```
rtrv-snmppopts
```

## Dependencies

This command cannot be entered while in upgrade mode.

## Notes

None.

## Output

```
rtrv-snmppopts
```

```
tekelecstp 13-06-13 15:27:39 EST 45.0.0-64.66.0
rtrv-snmppopts
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-snmopts](#)

## 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 (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:npcfmt.i` 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

**Example**

```
rtrv-spc
```

```
rtrv-spc:spc=5-3-3
```

```
rtrv-spc:spcn24=98-98-98
```

```
rtrv-spc:spcn=s-00345
```

**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:npcfmt1` 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 ssecondary 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.

;
```

## 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

## 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.

### **dflfact** (optional)

The default action ID associated with the service selector entry.

**Range:**

*aaaaaaaa*

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 AnalyzedInformation 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* or *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.

## 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, ATINP, 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 uds

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 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:

*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.

*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

*hipr*—Communication software used on the High Speed IMT Packet Router (HIPR) card

*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 E5-IPSM and E5-ENET-B cards to support the IPS application

*mcp*—Used by MCPM cards for the Measurements Platform feature

*mcp hc*—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

*vscpp*—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 SSEDCCM cards to support the STPLAN application

#### **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 appendix in the *Feature Notice* 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*

*limch*

*limds0*

*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 E5APPB 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
```

## 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 TDM and MDAL cards in the Control Frame and for the HMUX/HIPR cards in all the frames, "TDM", "E5-TDM", "MDAL", "E5-MDAL" or "MUX", respectively, is displayed as the Part Number of the card.

For HIPR2 cards in all the frames, the actual Board Part Number is displayed. 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 GPSM-II, E5-MCAP, and TDM cards, "Unavailable" is displayed as the Part Number if either the card is absent. In this case, the card power of the Active GPSM-II or E5-MCAP card is shown for the card power of the standby card also.

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 HIPR2, HIPR or HMUX card is present in the slot, then the location is equipped. When a location is unequipped, the “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 fully operational.

This command can be used to display the power consumption of HMUX/HIPR/HIPR2 cards within a frame. The power consumption displays 0 for an unequipped MUX location. A MUX location with HIPR or HMUX cards displays the default power consumption value. If the location contains a HIPR2 card, then the Part Number, Revision, and Power Consumption obtained from the BIP data associated with the HIPR2 card are displayed.

The EAGLE can have a mixture of HIPR2 cards and any other type of MUX card in the same shelf and can also contain a mixture of MUX cards on the same Bus.

## 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 5 ISS.

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 DSM VSCCP
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 870-1789-04 A 10302135627 LIMDS0 - SS7ANSI 027-010-000
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
 Frame Power Threshold Power Consumption
 (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 location 1109 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
 Frame Power Threshold Power Consumption
 (Amps) (Watts) (Amps) (Watts)

 CF00 45 2160 34.58 1795
 Card Part Number Revision Power Consumption
 (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 DSM cards that contain the specified Board Part Number:

rtrv-stp:partnum=870-1275-01

```

tekelecstp 07-03-30 11:07:17 EST EAGLE 37.0.0
Card Part Number Rev Serial Number Type DB APPL GPL Version
---- -
1101 870-1275-01 W 10245689323 DSM 4096M VSCCP 027-010-000
1205 870-1275-01 W 10246789323 DSM 4096M VSCCP 027-010-000
1307 870-1275-01 W 10204764378
Command Completed.
;

```

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

1112 870-1789-04 A 10302135627 LIMDS0 - SS7ANSI 027-010-000
1203 870-1789-04 A 10302135777 LIMDS0 - SS7ANSI 027-010-000
1216 870-1789-04 A 10302135655 LIMDS0 - SS7ANSI 027-010-010
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 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 134-067-000

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 IPGHC 009-003-000
1102 870-2212-03 E 10207425102 ENET 512M IPGHC 009-003-000
1103 870-2212-03 E 10207425103 ENET 512M IPGHC 009-003-000
1104 870-2212-03 E 10207425104 ENET 512M IPGHC 009-003-000
1105 870-2212-03 E 10207425107 ENET 512M IPGHC 009-003-000
1106 870-2212-03 E 10207425106 ENET 512M IPGHC 009-003-000
1107 870-2212-03 E 10207425108 ENET 512M IPGHC 009-003-000
1108 870-2212-03 E 10207425109 ENET 512M IPGHC 009-003-000
1109 870-2872-01 B 10209135026 ENET 512M HIPR2 009-003-000
1110 870-2872-01 B 10209125156 ENET 512M HIPR2 009-003-000
1111 870-2971-01 C 10210245182 ENETB 2048M IPGHC 009-003-000
1112 870-2212-03 E 10207425093 ENET 512M IPGHC 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
1210 870-2872-01 B 10209135079 DCM 512M 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 | Empty       |   |             |      |       |        |             |
| 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 GSM - EOAM 255-255-255
1114 Unavailable GSM - EOAM 255-255-255
1115 Unavailable GSM - 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.
;
```

## 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 11-03-17 16:02:05 EST EAGLE 44.0.0
STP OPTIONS

MTPT31CTL 1
MTPLTI yes
MTPLTCTDPCQ 3
MTPLTST 10000
MTPDPCQ 2000
TFATERPR 1000
MTPLPRST yes
MTPT10ALT 30000
UIMRD yes
SLSCNV perl s
CRITALMINH yes
DISPACTALMS no
NPCFMTI 14-0-0-0
RPTLNPMRSS yes
RANDSLS off
RSTRDEV on
HSCLKSRC RS422
HSCLKGAIN LONGHAUL
ARCHBLDID off
MFC off
;
```

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
```

## 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.
- **NPCFTI**—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 5 ISS 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 5 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 5 has a route to the OPC of the MTP network management message on the linkset which the message was received.
  - The EAGLE 5 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 5 should not receive an SCCP network management message unless:
  - The EAGLE 5 has a route to the OPC of the SCMG message on the linkset on which the message was received.
  - The EAGLE 5 has a route to the Affected Point Code (also called the Concerned Point Code in EAGLE 5) 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

## 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
ID Subnet
 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](#)

## rtrv-t1

### Retrieve T1 Information

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 E1/T1 MIM card or an HC-MIM or E5-E1T1 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

Ports 3-8 can be specified only for HC-MIM and E5-E1T1 cards.

**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 xy09 and xy10 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
LOC PORT ENCODE T1TSEL FRAMING LL CHANBRDG LINK MINSU
1211 1 ami external esf 10 ----- CLASS RATE
 CHAN ----
```

```

 1307 2 b8zs line sf 133 ----- CHAN ----
 1311 1 ami external esf 500 ----- CHAN ----
;

```

rtrv-t1:loc=1311:t1port=1

```

 rlgncxa03w 09-03-20 09:07:58 EST EAGLE 41.0.0
 T1
 LOC PORT ENCODE T1TSEL FRAMING LL CHANBRDG LINK MINSU
 1211 1 ami external esf 100 ----- CLASS RATE
 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

```

 rlgncxa03w 09-04-04 09:07:58 EST EAGLE5 41.0.0
 T1
 LOC PORT ENCODE T1TSEL FRAMING LL CHANBRDG LINK MINSU
 1211 1 ami external esf 10 ----- CLASS RATE
 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

```

 rlgncxa03w 09-04-04 09:07:58 EST EAGLE5 41.0.0
 T1
 LOC PORT ENCODE T1TSEL FRAMING LL CHANBRDG LINK MINSU
 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
LOC PORT ENCODE T1TSEL FRAMING LL CHANBRDG LINK MINSU
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 unchanneled linksets have ST-HSL-A links.

rtrv-t1

```

rlghncxa03w 09-04-02 09:07:58 EST EAGLE5 41.0.0
 T1
LOC PORT ENCODE T1TSEL FRAMING LL CHANBRDG LINK MINSU
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 5 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 "unchanneled" 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

### Retrieve 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 configured 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
CGPACCK = 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 48: 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 48: Retrieve Commands for Additional Table Information**

| Command         | Table name | Description of table                     |
|-----------------|------------|------------------------------------------|
| rept-stat-xlist | XLIST      | Destination - Routeset Extension         |
| 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                 |

| Command         | Table name | Description of table         |
|-----------------|------------|------------------------------|
| 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 200) 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 5 ISS documentation set.

## Parameters

This command has no parameters.

## Example

```
rtrv-th-alm
```

## Dependencies

None

## Notes

None

## Output

rtrv-th-alm

```
tekelecstp 11-03-23 13:14:44 EST EAGLE 44.0.0
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%
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
NPTYPEPLS = sprn
NPTYPEPLY = 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 feature is turned on. The maximum total provisioned System TPS is 500,000 if the HIPR2 High Rate feature is turned off and 750,000 if the feature is 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  $(\text{num\_ipsg\_links} * \text{the value of the } \text{maxslktps} \text{ parameter (see the } \text{ent/chg-ls} \text{ commands)})$ .
- 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  $((\text{ATM ANSI links}) * \text{per ATM ANSI links TPS (1630)})$
- Sum all ATM over E1 links  $((\text{ATM ITU links}) * \text{per ATM ITU links TPS (2038)})$

### 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  $(\text{num\_ipsg\_links} * \text{the value of the } \text{slktps} \text{ or } \text{rsvdslktps} \text{ parameter (see the } \text{ent/chg-ls} \text{ commands)})$ .
- 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  $((\text{ATM ANSI links}) * \text{per ATM ANSI links TPS (1630)})$
- Sum all ATM over E1 links  $((\text{ATM ITU links}) * \text{per ATM ITU links TPS (2038)})$

## 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](#)

## rtrv-trbl

### Retrieve Trouble

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                         |
| <i>appss</i> | Application Subsystem                      |
| <i>card</i>  | Card                                       |
| <i>clk</i>   | Clock                                      |
| <i>db</i>    | Database                                   |
| <i>dbg</i>   | Debug                                      |
| <i>gtt</i>   | GTT Maintenance                            |
| <i>gws</i>   | GWS Maintenance                            |
| <i>link</i>  | Link Maintenance                           |
| <i>meas</i>  | Measurements Maintenance                   |
| <i>mon</i>   | Monitoring (Sentinel or IMF) Maintenance   |
| <i>mps</i>   | MPS Maintenance                            |
| <i>pu</i>    | Program Update                             |
| <i>sa</i>    | System Administration                      |
| <i>seas</i>  | SEAS (Sentinel or IMF)                     |
| <i>slan</i>  | SLAN Maintenance                           |
| <i>sys</i>   | System Maintenance                         |
| <i>traf</i>  | Traffic                                    |
| <i>all</i>   | 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 output 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 emsaln type terminals with IDs 17 - 40 can be specified.

The specified terminal must be equipped.

If a value of *telnet*, *seas*, or *emsaln* 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 YES
10 NO NO NO NO NO NO NO NO
11 NO NO NO NO NO NO NO NO
12 NO NO NO NO NO NO NO NO
13 NO NO NO NO NO NO NO NO
14 NO NO NO NO NO NO NO NO
15 NO NO NO NO NO NO NO NO
16 NO 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 YES NO NO
2 YES YES YES YES YES YES YES YES YES YES YES NO NO
3 YES YES YES YES YES YES YES YES YES YES YES NO NO
4 YES YES YES YES YES YES NO YES YES YES YES NO NO
5 YES YES YES YES YES YES YES YES YES YES YES NO NO
6 YES YES YES YES YES YES YES YES YES YES YES NO NO
7 NO YES YES YES YES YES YES YES YES YES YES NO NO
8 YES 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 YES
10 NO 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 NO
12 NO 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 NO
14 NO 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 NO
16 NO 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<br>(sec) | LOGOUTTMR<br>(sec) | PNGTIMEINT<br>(msec) | PNGFAILCNT |
|-----|-------------------|--------------------|----------------------|------------|
| 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 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    |

| TRM | APP<br>SERV | APP<br>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 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.
- Terminal 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-gttset), 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:

ayyyyyyyyy

1 alphabetic character followed by up to 8 alphanumeric characters

#### Default:

Display all

### type/typea/typeei/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 typeei 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 (typeei/typen/typen24/typeis/typens). However, they are separate entities.

The point code domain translation types for GTT are handled by the EAGLE 5 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).

Overlapped TT does not exist with the mentioned 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-gttset` 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-gttset` command, then that entry cannot be retrieved.
- If the GTT set name of a true selector is changed using the `chg-gttset` command or if a selector is deleted using the `dlt-gttset` 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**—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 0 016 254
lsn1 0 128 238
TTMAP table for lsn1 is (2 of 64) 3% full

lsn2 I 128 055
lsn2 I 238 128
lsn2 0 128 238
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 0 016 254
nc001 0 128 238
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 0 128 238
nc002 I 128 055
nc002 0 128 238
lsn1 0 128 238
lsn2 I 128 055
lsn2 0 128 238
;

```

```
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

### Retrieve 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 configured 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

CGPACCK nonintl
DLMA NONE
DLMB NONE
DLMC NONE
DFLTRN NONE
SPORTTYPE none
SPFILL off
RNSPFILL off
CGPNSKRTG no
DRAFRMT grn
DRANAI 3
CDRNRSP connect
CDSRSP relay
CDNOENTITYRSP continue
CDDNOTFDRSP release
CDDRA rndn
CDDRANAI natl
CDDRANP e164
CDRELCAUSE 31
CDCNP off
CGRNRSP connect
CGSRSP relay
CGNOENTITYRSP continue
CGDNOTFDRSP 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

```
eagle10213 10-02-17 14:01:00 EST EAGLE 42.0.0
SET TIMER TVALUE PARM PVALUE
 1 1 0 1 3
 1 2 3000 2 0
 1 3 10000 3 0
 1 4 5000 4 0
 1 5 0 5 0
 1 6 0 6 0
 1 7 0 7 0
 1 8 0 8 0
 1 9 0 9 0
 1 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 IPSP application.
TVALUE : Valid range = 32-bits

TIMER 3: UA HeartBeat Period Timer T(beat), time (ms) between sending
 of BEAT msgs by NE. IPSP, 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. IPSP, SS7IPGW and IPGWI
 applications enforce 100(ms)-10000(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 IPSP
 application.
PVALUE : Valid range = 32-bits
 BIT
 0=Broadcast
 1=Response Method
 2-5=Reserved
 6=Broadcast Congestion Status Change 0=Disabled , 1=Enabled
 7-31=Reserved
 BIT VALUE
 0=Disabled , 1=Enabled
 0=Disabled , 1=Enabled

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 IPSP application.
PVALUE : Valid range = 32-bits
 BIT
 0=ASP Active Notifications
 1=ASP Inactive Notifications
 2=ASP AS State Query
 3-31=Reserved
 BIT VALUE
 0=Disabled , 1=Enabled
 0=Disabled , 1=Enabled
 0=Disabled , 1=Enabled

PARM 3: UA Serviceability Options. Each bit is used as an
```

```

 enabled/disabled flag for a particular UA Serviceability
 option. Supported on IPSP, SS7IPGW, and IPGWI applications.
 UA Graceful Shutdown supported on IPSP 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 IPSP-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 YES 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

**vendnum (optional)**

Vendor Number

**Range:**

1 - 3

## Example

```
rtrv-vendid
```

```
rtrv-vendid:vendnum=1
```

## 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 04-09-21 16:11:21 EST EAGLE 31.11.0
Vendor Vendor Vendor
Type Number ID

1 1 123123123456789
1 1 1234567890abcde
1 2 112233445566778
1 2 214365870912543
2 3 098765432112345
2 3 098767890143251

VENDID table is (5 of 200) 3% full
;
```

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=2

```
tekelecstp 04-09-21 16:13:54 EST EAGLE 31.11.0
Vendor Vendor Vendor
Type Number ID

1 2 112233445566778
1 2 214365870912543

VENDID table is (5 of 200) 3% full
;
```

## 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 |                    |              |                           |                     |                  |
|-----------------------------------------------|--------------------|--------------|---------------------------|---------------------|------------------|
| RD<br>---                                     | DN Status<br>----- | BCAP<br>---- | VM Number/Prefix<br>----- | VMRN Index<br>----- | CD Name<br>----- |
| 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*

## rtrv-vflx-opts

### Retrieve V-Flex Options

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.

If no DRANP value or DRANPV value has been provisioned, the command output displays the DRANPV 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:***ayyyyyyyy*

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 1000000000abcdef

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 rname parameter must already exist in the Routing Number table.

The value specified for the id parameter must already exist in the VMSID table.

The rname 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 intrvl 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-TRSHLD: 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

[rtro-gtwy-acthresh](#), [rtro-gtwy-prmtrs](#), [set-gtwy-acthresh](#)

## set-time

### Set Time

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 49: Time Zones Set by the set-time Command](#).

#### Default:

Current value

**Table 49: 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 |

| Abbreviation | Time Zone                        | Abbreviation | Time Zone                        |
|--------------|----------------------------------|--------------|----------------------------------|
| 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       |
| bst          | British Summer Time              | cet          | Central European Time            |
| cest         | Central European Summer Time     | met          | Middle European Time             |
| mest         | Middle European Summer Time      | fwf          | 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             |

| Abbreviation | Time Zone                  | Abbreviation | Time Zone                  |
|--------------|----------------------------|--------------|----------------------------|
| 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\*](#), [\*rtro-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

**Note:** Locations *xy09* and *xy10* are valid only if they are equipped with a HIPR2 card.

## 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*

Use this command prior to an upgrade, or as a diagnostic tool, to test the integrity of an EAGLE 5 ISS fixed drive or removable cartridge or 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

**1117**

Removable cartridge drive

**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*

Argument to be used by Tekelec 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 on one side of the removable cartridge or drive

#### **Default:**

*all*

## Example

```
tst-disk:loc=1116
```

## Dependencies

The card in the specified location (loc) must be a TDM or MDAL 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 disk 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.

If an E5-MCAP card is installed, then 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.

## Notes

A physical fixed disk (TDM) or removable cartridge or 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).

For a removable cartridge or drive, each side of the disk will contain the maximum number of partitions (up to 4) that the disk size can accommodate. Only one side of the disk is tested with one tst-disk command. For example, a 2.3 GB removable disk has one partition on each side that is slightly larger

than 1 GB. A 4.1 GB removable disk has one 2 GB partition on each side. Only `tst-disk:partition=1` is valid for either of these disks.

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 50: Test Disk Execution Times](#) outlines execution time estimates based on disk capacity.

**Table 50: 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)<br>5 hours (partition=disk)<br>depending on amount of disk tested and EAGLE 5 ISS provisioning/activity | (Not determined)                       |
| 2.3 GB Magneto Optical Removable | 18 minutes                                                                                                                       | 7.4 hours                              |
| 4.1 GB Magneto Optical Removable | 25 minutes<br>(requires 806 MDAL)                                                                                                | 7.4 hours                              |
| 507 MB                           | 5 minutes                                                                                                                        | 3.4 hours                              |
| 2.0 GB                           | 20 minutes                                                                                                                       | 13.5 hours                             |
| 4.0 GB                           | 40 minutes                                                                                                                       | 27.5 hours                             |
| Magneto Optical Removable        | 20 minutes                                                                                                                       | 7.4 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 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

Ports 3 - 8 can be specified only for HC-MIM and E5-E1T1 cards.

**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 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](#)*

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 HIPR2 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 5 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 HIPR2 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 an all HIPR2 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**

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 HIPR2 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 5 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 HIPR2 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 HIPR2 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 HIPR2 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 HIPR 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=faultttest
```

```
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 HIPR2 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-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 5 ISS 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:**

|                 |                                                                                                               |
|-----------------|---------------------------------------------------------------------------------------------------------------|
| <i>ttr</i>      | Service Feature for processing Prepaid IDP Query Relay test messages                                          |
| <i>tif</i>      | Service Feature for processing ISUP test messages when the provisioned Gateway Screening Stop Action is TIF.  |
| <i>tif2</i>     | Service Feature for processing ISUP test messages when the provisioned Gateway Screening Stop Action is TIF2. |
| <i>tif3</i>     | Service Feature for processing ISUP test messages when the provisioned Gateway Screening Stop Action is TIF3. |
| <i>mosmsnpp</i> | Service Feature for processing MO SMS NPP test messages                                                       |
| <i>gtt</i>      | Service feature for processing GTT test messages.                                                             |
| <i>iar</i>      | 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 = cdpnpn EXECUTED = Y FORMAT = Y
 SA3 = cgpnpnprqd 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 = idprcgp 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 = cgpnpn 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 = cdpnp EXECUTED = Y FORMAT = Y
RTDB LKPSUCC Entity=1 Cdpn=919818000001
SA3 = lacck EXECUTED = Y FORMAT = Y
FPFX & PFXA FAs set to None
SA4 = cgpnprqd 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 = 00910123459818000001
 OUTG FNAI = intl
;

tekelecstp 09-08-05 18:20:46 EST EAGLE 41.1.0

CGPN NPP PROCESSING

SERVICE NAME = idprcpgn 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 = ffffffff1
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 = cdpnp 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 = 91989999901
 COND DIGITS = 91989999901

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 = cdpnp 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 = 9177744409918000004
 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 = 91989999901
 COND DIGITS = 91989999901

SERVICE APPLICATION
 SA1 = fraudchk EXECUTED = Y FORMAT IND = N
 FRAUDCHK:CgPN is not Ported/Migrated
 RTDB LKPSUCC DN=91989999901
 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 = cdpnp 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 = setup1
GTT user action: Discard MSU

 Actid Action DPC RI SSN MAPSET/ ErrCode UIMREQD
 Action DPC RI SSN 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 = cdpnp EXECUTED = Y FORMAT = Y
SA2 = cgpnasdrqd EXECUTED = Y FORMAT = Y
SA3 = cgpngnrqd 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 = 15555924613861044443333
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 = cdpnp 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 = cgpnp 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 PFX = 500
 ACTION SET NAME = as90
 INVOKE SERVICE = tifcgp

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 = tifcgp SERVICE STATUS = ON
 INC DIGITS = 5701234567
 NAI = 4 FNAI = intl FDL = 10

MATCHING RULE
 FNAI = intl FDL = 10 PFX = 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 = tificgpn

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 = tificgpn 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 = tificgpn

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 = tificgpn 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 = fpxrls 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 = cdpnpn EXECUTED = Y FORMAT = N
 CDPNPN 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 = idprcgp 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 = cgpnpn 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*

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 provisioned 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 (lvxr), 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, LVXR and SLTC tests are allowed.
- For LIM-ATM cards, LVXR, 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 E1/T1 MIM cards, the SLTC test is allowed.
- For E1 ATM cards (ATMITU application), LVXR, OAM, and SLTC tests are allowed.
- For E5-ENET or E5-ENET-B cards running the IPSP application, the command is only supported for IPSP-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 52: 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. This test is prohibited for the E1 ATM card.

*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. This test is prohibited for the E1 ATM card.

### *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 links on the E1/T1 MIM card, and 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

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

A card location that is valid and defined in the database must 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 IPSP-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, LIMT1, and LIMCH.

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 command is already in progress. The 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 IPSP-M3UA signaling link is used, then this command cannot be entered.

If an IPSP-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:

- E1 ATM card running the ATMITU application
- E1/T1 MIM, E5-E1T1, 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 IPSP application
- LIM card running the SS7ANSI or CCS7ITU application
- LIM ATM card running the ATMANSI 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 you try to test the links on the card:

```
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:loc=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, cancel-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 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

Ports 3 - 8 can be specified only for HC-MIM or E5-E1T1 cards.

**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 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 indicate if the request was acted upon or received. The local card which hosts the T1 span in the EAGLE 5 ISS 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 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 boots 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

 rlgncxa03w 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. IPSPG-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:

### 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::

- LIM card running the SS7ANSI, ATMANSI, or CCS7ITU application
- E1 ATM card running the ATMITU application
- E1/T1 MIM card or an HC-MIM card running the SS7ANSI or CCS7ITU application
- E5-ENET or E5-ENET-B card running the IPLIM, IPLIMI, or IPSP application
- E1/T1 MIM, HC-MIM, or E5-E1T1 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 SSWIPGW 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 a TDM card, an MDAL card, an HMUX or HIPR 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*—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

## 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 Manual – EAGLE 5 ISS* 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, VXWSLAN, MCPM, and FC-capable cards

*e1port*

E1 port on E1/T1 MIM or HC-MIM cards

*ls*

Linksets

*lsmsconn*

Communication link between the LSMS and the EMS

*route*



|               |                                      |
|---------------|--------------------------------------|
|               | Route                                |
| <i>slk</i>    | Signaling links                      |
| <i>t1port</i> | T1 port on E1/T1 MIM or HC-MIM cards |
| <i>trm</i>    | Terminals                            |
| <i>rtx</i>    | Exception Route                      |
| <i>enet</i>   | Ethernet                             |
| <i>tps</i>    | 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:**

*aaaaaaaaaaaaaaaa*

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 (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:npcfmt.i` 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

**e1port (optional)**

Port ID. The E1 port on the specified HC-MIM card. This parameter is mandatory if dev=e1port is specified.

**Range:**

1 - 8

Ports 3 through 8 can be specified only for HC-MIM cards.

**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 dev=cdt 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*

*a, b* —dev=dlk, dev=slk for a two-port LIM

*a1, a2, b1, b2* —dev=lsmsconn

*a, b, a1, b1, a2, b2, a3, b3* —dev=slk for a multi-port LIM

*a, b, a1-a31, b1-b31* —dev=slk for an HC-MIM

*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 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 (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:npcfmt.i` 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*

**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:**

*aaaaaaaaaaaaaaaa*

1 to 15 alphanumeric characters

**t1port (optional)**

Port ID. T1 port on the specified HC-MIM card. This parameter is mandatory if dev=t1port is specified.

**Range:**

*1 - 8*

Ports 3 through 8 can be specified only for HC-MIM cards.

**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

## 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 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 — 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, IPSP, IPLIM, IPLIMI, SS7IPGW, or IPGWI application.

## 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:



**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:

- E1 ATM card running the ATMITU application
- E1/T1 MIM, E5-E1T1, 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
- LIM card running the SS7ANSI or CCS7ITU application
- LIM ATM card running the ATMANSI 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 a TDM card, an MDAL card, an HMUX or HIPR 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*—E1-ATM card running the ATMITU application or the LIM-ATM card running the ATMANSI application
- *a-a1, b*—E5-ATM or E5-ATM-B card running the ATMANSI or ATMITU application

**Notes**

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

The *Installation Manual – EAGLE 5 ISS* 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 *Customer Care Center* 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-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](#)

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 *converttoam* 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 with the software access key.
- *converttoam*—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 MASP's to full-function mode with measurement collection turned back on.
- *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).
- *getrel*—Retrieves the upgrade target release file from either the EAGLE 5 ISS software release distribution server or the credit card USB. 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.

### 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 credit card USB.

### Range:

*xyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy*

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 credit card drive

*server*

The upgrade target release is on the remote server

**Note:** The `src=remove` parameter cannot be specified for E5-MDAL or E5-MCAP cards.

**thres (optional)**

Network Threshold value. The percentage of signaling links that are 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
```

This example shows a variation finds the release on the credit card USB:

```
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=converttoam—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 *converttoam*, *oamcomplete*, or *netcomplete* can be specified for the action parameter.

A valid upgrade release must reside on the removable cartridge, credit card 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).

TALI sockets cannot be configured in the system.

ISUP Normalization feature-related configuration cannot be present in the system.

The DCM cards are obsolete for SS7IPGW, IPGWI, IPLIM, and IPLIMI applications.

TALI links cannot be configured in the system.

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 removable cartridge or credit card 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 is not at the correct database version for the upgrade to proceed.

The removable cartridge cannot contain an EAGLE 5 ISS backup image.

If the `src=usb` parameter is selected, then the credit card USB upgrade media must be inserted in the Active OAMs flush mount USB slot.

The internal ramdisk is not available for the credit card USB upgrade image to be unpackaged.

The disk that contains the upgrade target release is in an unknown 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 5 ISS PVN address in the source database cannot be identical to the EAGLE 5 ISS 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.

If an OAP terminal is configured in the system, then this command cannot be entered.

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).

## 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 removable cartridge 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, and an E5-MCAP card is used, then the release is obtained from the credit card USB 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 5 ISS 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
 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 -----
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](#)



- **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 51: Subrange Parameters for cmd Keywords](#).

**Table 51: 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 <b>act-cachetst</b> , <b>act-checkbit</b> , <b>act-memtst</b> , <b>fill-mempat</b> , and <b>tst-mempat</b> . |
| <b>Range:</b>                                                                                                                                                                                                                                         |
| <b>For cards other than the DSM</b><br><i>h'00100000–h'bffffffe</i>                                                                                                                                                                                   |
| <b>For act-checkbit only</b><br><i>h'80000000–h'bffffffc</i>                                                                                                                                                                                          |
| <b>For act-cachetst only</b><br><i>h'01400000–h'ffd40000</i>                                                                                                                                                                                          |
| <b>For 1GB DSM card only</b><br><i>h'01400000–h'3ffffffc</i>                                                                                                                                                                                          |
| <b>For 2GB DSM card only</b><br><i>h'01400000–h'7ffffffc</i>                                                                                                                                                                                          |
| <b>For 3GB DSM card only</b><br><i>h'01400000–h'bffffffc</i>                                                                                                                                                                                          |
| <b>For 4GB DSM card only</b><br><i>h'01400000–h'ffdffffc</i>                                                                                                                                                                                          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>end = (mandatory)</p> <p>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 <code>act-checkbit</code>, <code>act-cachetst</code>, <code>act-memtst</code>, <code>fill-mempat</code>, and <code>tst-mempat</code>.</p> <p>Range:</p> <p><b>For cards other than the DSM</b><br/> <code>h'00100002-h'c0000000</code></p> <p><b>For act-checkbit only</b><br/> <code>h'80000004-h'c0000000</code></p> <p><b>For act-cachetst only</b><br/> <code>h'01440000-h'ffefffff</code></p> <p><b>For act-memtst on 1GB DSM card only</b><br/> <code>h'01400000-h'40000000</code></p> <p><b>For act-memtst on 2GB DSM card only</b><br/> <code>h'01400000-h'80000000</code></p> <p><b>For act-memtst on 3GB DSM card only</b><br/> <code>h'01400000-h'c0000000</code></p> <p><b>For act-memtst on 4GB DSM card only</b><br/> <code>h'01400000-h'ffe00000</code></p> |
| <p>loop = (optional)</p> <p>The number of times a test is performed. The value is a hexadecimal or a decimal number. This parameter is used with keywords <code>act-memtst</code>, <code>act-cachetst</code>, <code>act-memflt</code>, <code>actcheckbit</code>, <code>act-qcktst</code>, and <code>act-pingtst</code>.</p> <p><b>Range:</b> <code>h'0-h'ffff</code></p> <p>The value <code>h'0</code> indicates that an infinite number of tests is performed.</p> <p><b>Default:</b> <code>h'1</code></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>data = (mandatory)</p> <p>The hexadecimal of the data pattern. This parameter is used with keywords <code>act-cachetst</code>, <code>fill-mempat</code>, and <code>tst-mempat</code>.</p> <p><b>Range:</b> <code>h'0000-h'ffff</code></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>port =(mandatory)</p> <p>The port address from which to start the ping. This parameter is used with keyword <code>act-pingtst</code>.</p> <p><b>Range:</b> <code>a, b</code></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <p>dest = (mandatory)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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 `act-memtst: 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 - 0xFFDFFFFFF 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: 0xaa5
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:**

*ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ*

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

**Note:** *xy09* and *xy10* locations are valid only if they are equipped with HIPR2 card.

**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 cartridge.

## 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:**

*ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ*

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

**Note:** xy09 and xy10 are valid locations only if they are equipped with HIPR2 card.

**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 cartridge.

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-tbl

### Change Table

Use this command to create, rename, or reset any table on a fixed disk, removable cartridge, or removable drive.

**CAUTION**

**Caution:** Before entering the chg-tbl command, contact the Customer Care Center.

## 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 cartridge or drive

##### *fixed*

Fixed disk

##### *usb*

Argument to be used by Tekelec 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 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 OK : 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 OK : 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 5 ISS 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

### 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.

#### Range:

0 - 1023

### sak (optional)

Software access key. The software access key used to allow the EAGLE 5 ISS to upgrade to the target release.

#### Range:



zzzzzzzzzzzzzz

13-character alphanumeric text

**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 cartridge

**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

## Example

```
chg-upgrade-config:addtblcnv=327
```

```
chg-upgrade-config:deltblcnv=327
```

```
chg-upgrade-config:sak=vbjyapdpbtejb:src=fixed
```

## Dependencies

One of the optional parameters must be specified in the command.

## 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

**1117**

Removable cartridge drive

**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

**1117**

Removable cartridge drive

**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 cartridge or drive

*usb*

Argument to be used by Tekelec personnel only.

**Default:**

*fixed*

**dprtnggrp (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 cartridge or drive

*usb*

Argument to be used by Tekelec 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, respectively.

## 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-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, IPSTG, 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 IPSTG 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 (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:npcfmt.i* 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.

**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:**

*ayyyyyyyyy*

**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 specified 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.

## 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 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 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 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]
SUCCESSIVE 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

**Note:** Locations *xy09* and *xy10* are valid only if they are equipped with a HIPR2 card.

### 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 cartridge.

## 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
0010 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
0030 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
0050 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
0070 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
0010 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
0030 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
0050 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
0070 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
0010 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
0030 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
0050 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
0070 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*

*atmansi, atmitu, atmh, bpdcm, bpdcm2, bphcap, bphcapt, bphmux, bpmpl, bpmplt, eoam, eroute, erthc, hipr, hipr2, ipghc, iplhc, ipsg, ipshc, mcp, mcphc, pktgen, sccphc, slanhc, ss7epm, ss7hc, ss7ml, utility, vsccp, vxutil, vxwslan*

#### *Subsystem ID*

*a, b, act, stb, all*

The *oam* 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 eoam 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=vscpp-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 cartridges or 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 cartridge or drive

*usb*

The credit card drive

**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 a extension

An E5-MCAP card must be installed before the `src=usb` parameter can be specified.

The `src` parameter must be specified.

The 1117 location is used by MDAL cards. The 1113 and 1115 locations are used by E5-MCAP cards. The 1114 and 1116 locations are used by TDM or E5-TDM cards.

A removable cartridge or 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:

 Appl Id Cache Read Disk Read Cache Write Disk Write
 ----- - 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:

 Appl Id Cache Read Disk Read Cache Write Disk Write
 ----- - 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: |                 |                    |                        |                     |
|-------------------------------------|-----------------|--------------------|------------------------|---------------------|
| Appl Id                             | Cache Read Hits | Disk Read Accesses | Cache Write Hits       | Disk Write Accesses |
| 29                                  | 113             | 23                 | 25                     | 40                  |
| 120                                 | 12              | 223                | 225                    | 361                 |
| Table Id                            | Cache Read Hits | Disk Read Accesses | Cache Write Hits       | Disk Write Accesses |
| 185                                 | 12              | 223                | 225                    | 361                 |
| 201                                 | 113             | 23                 | 25                     | 40                  |
| Total Cache Read Hits               |                 | Total Disk Reads   | Total Cache Write Hits | Total Disk 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-lba

### Display Logical Block Access

Use this command to display the contents of a logical block of data at a specified logical block address of a fixed disk or removable cartridge.

## Parameters

### **lba (mandatory)**

The logical block address.

#### **Range:**

0 - 1953125

### **loc (mandatory)**

The card location in the system. A fixed disk or removable cartridge location must be specified.

#### **Range:**

1114

The standby TDM

1116

The standby TDM

1117

The removable cartridge

#### Default:

Active fixed disk

## Example

```
disp-lba:lba=676:loc=1117
```

## Dependencies

The requested disk must be available.

The logical block address specified must be within the valid range for the disk specified.

If E5-MCAP, E5-MDAL, or E5-TDM cards are installed, then this command cannot be entered.

## Notes

None

## Output

```
disp-lba:lba=676:loc=1117
```

```
rlghncxa03w 01-03-02 16:21:12 EST Rel 28.1.0
0504 DISP-LBA DEVICE ID=H'0021, LBA=H'000002a4, LOC=1117
0000 ff 44 4d 53 2e 43 46 47 00 00 00 00 00 00 00 00 .DMS.CFG.....
0010 20 00 01 00 00 02 00 00 00 00 00 00 03 00 00 00
0020 00 55 4e 55 53 45 44 54 41 42 4c 45 00 00 00 00 .UNUSEDTABLE....
0030 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0040 ff 64 62 73 74 61 74 2e 62 6b 70 00 00 00 02 00 .dbstat.bkp.....
0050 2e 00 01 00 01 00 00 00 00 00 00 00 01 00 00 00
0060 ff 64 62 73 74 61 74 2e 74 62 6c 00 00 00 03 00 .dbstat.tbl.....
0070 2e 00 01 00 01 00 00 00 00 00 00 00 03 00 00 00
0080 00 55 4e 55 53 45 44 54 41 42 4c 45 00 00 00 00 .UNUSEDTABLE....
0090 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00a0 ff 6d 63 66 67 2e 62 6b 70 00 00 00 00 00 05 00 .mcfg.bkp.....
00b0 9c 00 01 00 01 00 00 00 00 00 00 00 01 00 00 00
00c0 ff 6d 63 66 67 2e 74 62 6c 00 00 00 00 00 06 00 .mcfg.tbl.....
00d0 9c 00 01 00 01 00 00 00 00 00 00 00 03 00 00 00
00e0 ff 69 6d 74 61 2e 62 6b 70 00 00 00 00 00 07 00 .imta.bkp.....
00f0 28 00 01 00 00 01 00 00 00 00 00 00 01 00 00 00 (.
0100 ff 69 6d 74 61 2e 74 62 6c 00 00 00 00 00 08 00 .imta.tbl.....
0110 28 00 01 00 00 01 00 00 00 00 00 00 03 00 00 00 (.
0120 00 55 4e 55 53 45 44 54 41 42 4c 45 00 00 00 00 .UNUSEDTABLE....
0130 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0140 ff 6c 64 74 62 6c 2e 73 79 73 00 00 00 00 0a 00 .ldtbl.sys.....
0150 b8 00 01 00 14 00 00 00 00 00 00 00 03 00 00 00
0160 ff 73 68 65 6c 66 2e 62 6b 70 00 00 00 00 0b 00 .shelf.bkp.....
```

```

0170 03 00 02 00 03 00 00 00 03 00 00 00 01 00 00 00
0180 ff 73 68 65 6c 66 2e 74 62 6c 00 00 00 00 0c 00 .shelf.tbl.....
0190 03 00 02 00 03 00 00 00 03 00 00 00 03 00 00 00
01a0 ff 6c 69 6e 6b 2e 62 6b 70 00 00 00 00 00 0d 00 .link.bkp.....
01b0 10 00 01 00 00 02 00 00 00 00 00 00 01 00 00 00
01c0 ff 6c 69 6e 6b 2e 74 62 6c 00 00 00 00 00 0e 00 .link.tbl.....
01d0 10 00 01 00 00 02 00 00 00 00 00 00 03 00 00 00
01e0 00 55 4e 55 53 45 44 54 41 42 4c 45 00 00 00 00 .UNUSEDTABLE....
01f0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
;

```

## Related Commands

[set-lba](#)

## 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*— *atmansi, atmitu, atmhc, bpdcm, bpdcm2, bphcap, bphcapt, bphmux, bpmpl, bpmplt, eoam, eroute, erthc, hipr, hipr2, ipghc, iplhc, ipsg, ipshc, mcp, mcphc, pktgen, sccphc, slanhc, ss7epm, ss7hc, ss7ml, utility, vsccp, vxutil, vxwslan*

*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 value specified for the `bc` parameter cannot exceed 65535.

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

All of the subsystem values can be specified with the *oam* 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–Subsystem ID*

*GPLID— atmansi, atmitu, atmhc, bpdcm, bpdcm2, bphcap, bphcapt, bphmux, bpmpl, bpmplt, eoam, eroute, erthc, gls, hipr, hipr2, ipghc, ipgwi, iplhc, ipsg, ipshc, mcp, mcphc, pktgen, sccphc, slanhc, ss7epm, ss7hc, ss7ml, utility, vsccp, vxutil, vxwslan*

*Subsystem ID— a, b, act, stb, all*

The OAM 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'ffffff*

**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=hipr-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 *oam* 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-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, less than, greater 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'ffffff*

**card (optional)**

The card location, in the form of *GPLID-Subsystem ID*.

**Range:**

*GPLID-Subsystem ID*

*GPLID*—*atmansi, atmitu, atmhc, bpdcm, bpdcm2, bphcap, bphcapt, bphmux, bpmpl, bpmplt, eoam, eroute, erthc, gls, hipr, hipr2, ipghc, ipgwi, iplhc, ipsg, ipshc, mcp, mcphc, pktgen, sccphc, slanhc, ss7epm, ss7hc, ss7ml, utility, vsccp, vxutil, vxwslan*

*Subsystem ID*—*a, b, act, stb, all*

The OAM 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, less than, greater 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'ffffff*

**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'ffffff*

**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*—*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'ffffff***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'ffffff*

**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 x46-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=hipr-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 OAM 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.

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*, *cb*, and *drarm* parameters are valid on an IXP-based card ARM processor.

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*, *epl*, *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 *int* 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-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 5 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 5 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*, *dn*, *entityid*, *imei*, *imsi*
- LIM card running ANSI applications—*error*, *ssp/sspa*, *opc/opca*, *dpc/dpca*, *tlnpisuptype*, *gt*
- LIM card running ITU applications—*error*, *sspi/sspn/sspn24*, *opci/opcn/opcn24*, *dpci/dpcn/dpcn24*, *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*, *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 5 ISS.

#### 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-stopts:npcfmt.i* 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*

**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-nm)*

**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:npcfmt i* 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

**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 *h1* 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-ncncm*). 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:npcfmt i` 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-nnnnnngc*, *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

### **rep (optional)**

The number of MSUs to trap.

#### **Range:**

0 - 255

### **service (optional)**

The service offered by the EAGLE 5.

#### **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:npcfmt.i` 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

**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=VS CCP-ALL
ent-trace:imsi=c122d:card=VS CCP-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=VS CCP-ALL
ent-trace:entityid=c123:card=VS CCP-ALL
ent-trace:loc=1305:si=5:brief=yes
ent-trace:dn=98912345:loc=1105
```

## 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.

Theopci/opcn/opcn24, dpci/dpcn/dpcn24, and sspi/sspn/sspn24 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.

Theopc/opca, dpc/dpca, and ssp/sspa ANSI point code parameters are invalid for LIM cards running the IPLIMI GPL.

The opc, dpc, and tlnpisuptye 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.

## 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.
;

tklcl071501 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.
;

tklcl071501 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.
;

tklcl071501 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:111111119703819111100

TRACE OUTPUT COMPLETE.
;

tklcl071501 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.
;

```

```

tklcl071501 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.
;

tklcl071501 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.
;

tklcl071501 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.
;

tklcl071501 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.
;

```

## Related Commands

None.

## 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 5 ISS 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 *xy09* and *xy10* 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 an HMUX or HIPR card.

If the bus parameter is not specified with an HMUX or HIPR card location on imt B (such as *xy10*), 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— atmansi, atmitu, atmhc, bphcap, bphmux, bpdcm, bpdcm2, ccs7itu, eoam, eroute, erthc, hipr, hipr2, ipghc, iplhc, ipsg, ipshc, mcp, mcphc, mplga, mplgi, pktgen, sccp, sccphc, slanhc, ss7ansi, ss7epm, ss7hc, ss7ml, stplan, utility, vscdp, vxutil, vxwslan*

*Subsystem ID— a, b, act, stb, all*

The OAM 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'ffffff*

**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'ffffff***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=hipr-all:paddr=h'202000:word=h'2a:op=and:mask=h'fff
```

## Dependencies

The *loc*, *int*, or *card* parameter must be specified.

Only one of the *loc*, *int*, 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 OAM 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.

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 IP address. 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 address**MAC 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.

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 `as log` command has the parameter asname. The Application Server name must be specified for which the log will be displayed, as in the command `as log 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

 rlgncxa03w 00-01-27 08:10:00 EST EAGLE5 31.6.0
 pass:loc=1105:cmd="aslog as1"
 Command entered at terminal #3.
;
 rlgncxa03w 00-01-27 08:10:00 EST EAGLE5 31.6.0
 PASS: Command sent to card
;
 rlgncxa03w 00-01-27 08:10:00 EST EAGLE5 31.6.0
 ASLOG command in progress
;
 rlgncxa03w 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 aname. 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: ASOVRTT 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
ASSOVRTT 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
ASSOVRTT: 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
ASSOVRTT 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

 rlgncxa03w 04-07-02 15:37:12 EST EAGLE5 31.6.0
 pass:loc=1107:cmd="connmgr -d"
 Command entered at terminal #1.
;
 rlgncxa03w 04-07-02 15:37:12 EST EAGLE5 31.6.0
 PASS: Command sent to card
;
 rlgncxa03w 04-07-02 15:37:12 EST EAGLE5 31.6.0
 CONNMGR: command being processed
;
 rlgncxa03w 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-activ 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-activ 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-cnsgd-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

 rlgncxa03w 04-07-29 11:31:09 EST EAGLE5 31.6.0
 pass:loc=1215:cmd="ftptest -h"
 Command entered at terminal #3.
;

 rlgncxa03w 04-07-29 11:31:09 EST EAGLE5 31.6.0
 PASS: Command sent to card
;

 rlgncxa03w 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
;

 rlgncxa03w 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
;

 rlgncxa03w 04-07-29 11:31:09 EST EAGLE5 31.6.0

FTPTEST: Command In Progress
;

 rlgncxa03w 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* signalling links are supported. For IPSG cards, the *a:a15* - *b:b15* signalling links are supported.

## 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.

`-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 IPSP 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 IPSP cards.

-i *event*

This option includes (does not filter) a link event in the log. For IPSP 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, 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 IPSP cards, this measurement is supported for only IPSP-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 IPSP 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 IPSP 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, 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.

```
pass:loc=1301:cmd="linkinfo a -c "
```

## Dependencies

None

## Notes

None

## Output

This example shows the output for the help command:

```
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 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=00000000004)
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=00000000004)
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=00000000004)
08-01-16 16:19:45.755 ASPACTIVE PDU Received (RC=none)
08-01-16 16:19:45.755 ASPACTIVEACK PDU Transmitted (RC=00000000004)
08-01-16 16:19:45.755 Transition to SERVER_ACTIVE LOADSHARE
(RC=00000000004)
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=00000000004)

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 IPSP-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 IPSP-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 IPSP-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 IPSP-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 IPSP-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 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 *-aaname* is specified on the same line as *-k rtkey*, the output is assumed to be routing key output. When *-aaname* is specified on the command line without *-k rtkey*, association statistics output is generated.

For IPSP 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 IPSP 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 IPSP 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 IPSP cards.

The *rtkey* variable is optional when used with *-tdefault*, 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 IPSP 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 IPSC 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 IPSC cards.

**-l**

link -f

This option displays the full link report. For IPSC-M2PA links, this option displays the same report as the -l <link> option. For IPSC-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, ITU international spare, and ITU national spare) in the routing key that follows the -k option in the command.

**Range:**

*ansi, itui, itun, itun24, 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 IPSC 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"
```

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 linkdata 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 keydata 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 `-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.

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 (-aaname option) contains statistics for a specified IP connection data about MSUs (transmit/receive), MSU bytes (transmit/receive), and discarded data (transmit/receive).

When the -aaname option is specified in the command with the -k option, the output type is assumed to be routing key output.

When -aaname is specified on the command line without -k, 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 statistic 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 signalling 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, 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, 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        |
| 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
```

| rate | msus       | bytes      |
|------|------------|------------|
| 2000 | 4294967295 | 4294967295 |

```
Receive Counts
```

| rate | msus       | bytes      |
|------|------------|------------|
| 2000 | 4294967295 | 4294967295 |

```

MTP Primitive (MTPP) counts

sent pdus rcvd pdus dscrd pdus

4294967295 4294967295 4294967295

Reroute Counts

sent msus rcvd msus

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
```

```

rate msus bytes

2000 4294967295 4294967295
```

```
Receive Counts
```

```

rate msus bytes

2000 4294967295 4294967295
```

```
MTP Primitive (MTPP) Counts
```

```

sent pdus rcvd pdus dscrd pdus

4294967295 4294967295 4294967295
```

```
Reroute Counts
```

```

sent msus rcvd msus

4294967295 4294967295
```

```
Transmit Discard Counts
```

```

reason count

no ss7 rtbl entry 4294967295
no ss7 rtkey 4294967295
no conn avail to pc 4294967295
no conn avail to rtkey 4294967295
congested connection 4294967295
sccp msg type 4294967295
sccp class 4294967295
circular rte 4294967295
normalization error 4294967295
invalid traffic type 4294967295
M3UA conversion error 4294967295
SUA conversion error 4294967295
AS-Pending overflow 4294967295
AS timer Tr expiry 4294967295
reroute failure 4294967295
unexpected for APC 4294967295
```

```
Receive Discard Counts
```

```

reason count

link state 4294967295
sccp msg type 4294967295
sccp class 4294967295
sccp called party 4294967295
sccp calling party 4294967295
isup sio 4294967295
normalization error 4294967295
error in XSRV packet 4294967295
M3UA PDU error 4294967295
SUA PDU error 4294967295
invalid rcontext 4294967295
management blocking 4294967295
lrg MSU not supported 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 `-aaname` is in the same input command with `-krtkey`, only the connection association data for the specified connection is displayed. If `-aaname` is not specified with `-krtkey`, all connection associations are listed. If `-xrc` 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
```

| bytes/<br>sec | avg<br>msu | max<br>avg msu | max<br>msu |
|---------------|------------|----------------|------------|
| 444400        | 2020       | 2020           | 2020       |

```
SLK Receive counts
```

| bytes/<br>sec | avg<br>msu | max<br>avg msu | max<br>msu |
|---------------|------------|----------------|------------|
| 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 RKRPMGMT 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
;

```

## Signalling 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
 avg avg max
slk bytes/sec msu msu msu

A 35000 140 273 273
B 35000 140 273 273
A1 35000 140 578 578
B1 35000 140 273 273
A2 35000 140 140 140
B2 35000 140 169 169
A3 35000 2048 2048 2048
B3 35000 140 166 166

 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
 avg avg max
slk bytes/sec msu msu msu

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 IPSP Cards

The option to display a full help report is not supported for IPSP 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 IPSP 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 rate msus bytes

A 0 3 72
B 0 62 1916
A1 0 2 48
A2 0 1 24
A3 0 0 0
A4 0 0 0

 0 68 2060

SLK Receive counts

rate msus bytes

0 0 0
0 62 1916

MSUCOUNT: command complete
```

This example shows a measurement report for an IPSP-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 rate msus bytes

A 0 3 72

SLK Receive counts

rate msus bytes

0 0 0

Replicated M3UA PDU counts

sent rcvd

0 0

SS7 SNM counts

sent

3
```

This example shows a measurement report for an IPSP-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 rate msus bytes

B 0 62 1916

SLK Receive counts

rate msus bytes

0 62 1916
```

```
MSUCOUNT: command complete
```

The `msucount -l <link> -f` report displays the same information as the brief report (`msucount -l <link>`) for IPSPG-M2PA links. For IPSPG-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 IPSPG-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 rate msus bytes
--- -
A 0 3 72

SLK Receive counts

rate msus bytes
--- -
0 0 0

Replicated M3UA PDU counts

sent rcvd

0 0

SS7 SNM counts

sent

3

Transmit Discard Counts

reason count

M3UA conversion error 2

Receive Discard Counts

reason count

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

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

Stored Receive Discard Data

no stored receive discard data

MSUCOUNT: command complete
```

This example shows a full report for an IPSPG-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 rate msus bytes

A 0 58 3380
```

```
SLK Receive counts
```

```

rate msus bytes

0 5 292
```

```
Replicated M3UA PDU counts
```

```

sent rcvd

1 1
```

```
SS7 SNM counts
```

```

sent

13
```

```
Transmit Discard Counts
```

```

reason count

M3UA conversion error 3
```

```
Receive Discard Counts
```

```

reason count

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 rate msus bytes

B 0 62 1916

SLK Receive counts

rate msus bytes

0 62 1916

MSUCOUNT: command complete
```

This example shows a full link report for an IPSPG-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 rate msus bytes

A 0 3 72

SLK Receive counts

rate msus bytes

0 0 0

Replicated M3UA PDU counts

sent rcvd

0 0

SS7 SNM counts

sent

3

Transmit Discard Counts

reason count

M3UA conversion error 2

Receive Discard Counts

reason count

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 IPSPG-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 rate msus bytes

A 0 58 3380
```

```
SLK Receive counts
```

```

rate msus bytes

0 5 292
```

```
Replicated M3UA PDU counts
```

```

sent rcvd

1 1
```

```
SS7 SNM counts
```

```

sent

13
```

```
Transmit Discard Counts
```

```

reason count

M3UA conversion error 3
```

```
Receive Discard Counts
```

```

reason count

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 |            |                |            |  |
|---------------------|---------------|------------|----------------|------------|--------------------|------------|----------------|------------|--|
| slk                 | bytes/<br>sec | avg<br>msu | max<br>avg msu | max<br>msu | bytes/<br>sec      | avg<br>msu | max<br>avg msu | max<br>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 |            |                |            |  |
|---------------------|---------------|------------|----------------|------------|--------------------|------------|----------------|------------|--|
| slk                 | bytes/<br>sec | avg<br>msu | max<br>avg msu | max<br>msu | bytes/<br>sec      | avg<br>msu | max<br>avg msu | max<br>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

```

pdus bytes

58 3380

```

Receive PDUs

```

pdus bytes

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:cmd="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 -ppoint 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, ITU international spare, ITu national spare) in the routing key that follows the -k option in the command.

#### **Range:**

*ansi, itui, itun, itun24, 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
```

## **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, 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
12345678901234567890123456789012345678901234567890123456789012345678
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, 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    |
| 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
MSURROUTE 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
MSURROUTE 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

MSURROUTE 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
MSURROUTE 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

MSURROUTE 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
MSURROUTE 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

MSURROUTE 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
MSURROUTE 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    |

MSURROUTE 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 version 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, 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*
- *msa-ssa-sp*—24-bit ITU-N DPC in the format *main signaling 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.

-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"

```

## 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 msutrace 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, 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, 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        |
| 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 retrieves 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 *msutracegetfilter* 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 `msutracegetfilter` 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.

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-DSM 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:**

|             |                                      |
|-------------|--------------------------------------|
| <i>tcp</i>  | transmission control protocol        |
| <i>udp</i>  | user datagram protocol               |
| <i>ip</i>   | internet protocol                    |
| <i>icmp</i> | internet control message protocol    |
| <i>sctp</i> | 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 0xffffffff00 Subnetmask 0xffffffff00
 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 0xffffffff00 Subnetmask 0xffffffff00
 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
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 Multicast 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

Multicast 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
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 Foreign Address (state)

2354720 TCP 0 0 0.0.0.0.23 0.0.0.0.0 LISTEN
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 5 ISS. 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 Signalling 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 0xfffffc00
 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 0xffffffff Subnetmask 0xffffffff
 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 0xffffffff Subnetmask 0xffffffff00
 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 0xffffffe00
 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 0xffffffff00 Subnetmask 0xffffffff00
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 0xffffffff00 Subnetmask 0xffffffff00
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 0xffffffff Subnetmask 0xffffffff00
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 | avgsz |
|------|----------|-------|-----------|---------|---------|-------|
| 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 | avgsz |
|------|----------|------|-------|---------|---------|-------|
| 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
good octets rx = 16988038 tx no crs = 0
good octets tx = 137538057 total octets rx = 16988038
 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.

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
 Address Port Address Port Remote
assoc1 192.168.110.12 2222 192.168.112.4 5555
 192.168.112.12 192.168.110.2

 Configuration
 Retransmission Mode = LIN
 Min. Retransmission Timeout = 10000
 Max. Retransmission Timeout = 800000
 Max. Number of Retries = 10
 Min. Congestion Window = 3000

 State
 State = OPEN
 ULP association id = 18
 Number of nets = 2
 Inbound Streams = 1
 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 Error 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 acknowledgements 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
;

 rlgncxa03w 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"

```

 rlgncxa03w 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.
- Unknown 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 rcv-Init acknowledgement chunk was received.
- Shutdown ack rcv-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.

## sockrftt

### 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 `sockrftt` command has the option socket name. The socket name must be specified for which statistics will be displayed, as in the command `sockrftt 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

```
sockrftt
```

```
sockrftt -h
```

```
sockrftt socyellow
```

```
sockrftt socyellow -r
```

## Dependencies

None

## Notes

The `sockrftt` 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.

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: SOIPLLOG [[-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.

## tracert

### 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 `tracert` 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 `tracert 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 command:

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)

;
 rlgncxa03w 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="tracert www.remotedest.com -m 20"
```

```

Command entered at terminal #1.
;

 rlgncxa03w 04-07-27 08:32:34 EST EAGLE5 31.6.0
PASS: Command sent to card
;

 rlgncxa03w 04-07-27 08:32:34 EST EAGLE5 31.6.0
TRACEROUTE command in progress
;

 rlgncxa03w 04-07-27 08:32:34 EST EAGLE5 31.6.0
;

 rlgncxa03w 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.atlna03.us.bb.verio.net (129.250.2.49)
11 95ms 95ms 95ms p4-0-2-0.r01.bcrftl01.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="tracert 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.atlna03.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="tracert 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-cl-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.atlna03.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="tracert 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-cl-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.atlna03.us.bb.verio.net(129.250.2.49)

11 95ms 95ms 95ms p4-0-2-0.r01.bcrftl01.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="tracert 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="tracert 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.atlna03.us.bb.verio.net(129.250.2.49)
11 95ms 95ms 95ms p4-0-2-0.r01.bcrftl01.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.

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 `ua log` command has the parameter aname. The association name must be specified for which the user adapter log will be displayed, as in the command `ua log 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 unsupported Message Class.
- **0x04—Unsupported Message Type**  
A message was received with an unexpected or unsupported 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 inconsistent 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 the 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 as reception of a parameter that 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 response to 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 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 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

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### Topics:

- [\*Summary of Range Values for :link Parameter.2924\*](#)
- [\*Commands Listed by Class.....2925\*](#)
- [\*Possible Values for PST/SST/AST .....2939\*](#)
- [\*Point Code Formats and Conversion.....2942\*](#)
- [\*Valid CIC Ranges for SI and MSU Types in Routing Key Static Entries.....2949\*](#)
- [\*DRANAIV/DRANAI Mapping.....2950\*](#)
- [\*DRANPV/DRANP Mapping.....2950\*](#)
- [\*NAIV/NAI Mapping.....2951\*](#)
- [\*NPV/NP Mapping.....2951\*](#)
- [\*Cards that use the ent-card Command.....2952\*](#)
- [\*Summary of Loopback Testing Commands and Functions.....2955\*](#)

This Appendix contains information that is used by multiple commands.

## Summary of Range Values for :link Parameter

*Table 52: Summary of Ranges for link Parameter* lists the valid *link* parameter range values signaling links assigned to each type of card for which a location can be specified in the command *loc* parameter. The commands that use these values refer to this table in their *link* parameter description.

**Note:** The link parameter is a synonym for the port parameter in signaling link definitions for a few EAGLE 5 ISS releases. Then the port parameter will be removed.

**Table 52: Summary of Ranges for *link* Parameter**

| Card                | Link            | Supported Application                                                                                                                                               |
|---------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Multi-port LIM      | A - A3, B - B3  | SS7ML GPL with DS0 interface at 56 Kb running the SS7ANSI application.                                                                                              |
| E1/T1 MIM           | A-A3, B-B3      | SS7ML GPL running the SS7ANSI or CCS7ITU application.                                                                                                               |
| HC-MIM              | A-A31, B-B31    | SS7ANSI or CCS7ITU application.<br>A maximum of 64 links can be assigned to each HC-MIM card.                                                                       |
| HC-MIM for SE-HSL   | A, B            | SS7ANSI or CCS7ITU application.<br>The card can support a maximum of 2 SE-HSL links.                                                                                |
| HC-MIM for ST-HSL-A | A, B            | SS7ANSI application.<br>The card can support a maximum of 2 ST-HSL-A links.                                                                                         |
| LIM-ATM             | A               | ATMANSI application for ANSI ATM high-speed signaling links.                                                                                                        |
| E5-ATM/E5-ATM-B     | A, B            | ATMANSI or ATMITU application. The card can support up to 3 signaling links.                                                                                        |
| E5-ENET/E5-ENET-B   | A - A15, B1-B15 | IPLIM or IPLIMI GPL running the IPLIM or IPLIMI application with sockets, M2PA/SCTP associations, or M3UA/SCTP associations. IPSP GPL running the IPSP application. |
| E5-E1T1             | A -A15, B - B15 | SS7ANSI or CCS7ITU application.                                                                                                                                     |

| Card                 | Link | Supported Application                                             |
|----------------------|------|-------------------------------------------------------------------|
|                      |      | The card can support up to 32 links.                              |
| E5-E1T1 for SE-HSL   | A    | SS7ANSI, CCS7ITU<br>Only 1 SE-HSL link can be assigned to a card. |
| E5-E1T1 for ST-HSL-A | A    | SS7ANSI. 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\*](#)
- [\*rtro-cmd\*](#)
- [\*rtro-cmdclass\*](#)
- [\*rtro-sccp-serv\*](#)
- [\*rtro-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-gttset*
- *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-aftp*
- *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-snmppopts*
- *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-frn-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-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-blkdp*
- *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-srvel*
- *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-gttset*
- *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-srssel*
- *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*
- *rtro-acg-mic*
- *rtro-acg-noc*
- *rtro-ainpopts*
- *rtro-aiopts*
- *rtro-appl-rtkey*
- *rtro-as*
- *rtro-assoc*
- *rtro-atinpopts*
- *rtro-atm-lps*
- *rtro-atm-prm*
- *rtro-card*
- *rtro-clkopts*
- *rtro-csl*
- *rtro-cspc*
- *rtro-ctrl-feat*
- *rtro-data-rtdb*
- *rtro-dlk*
- *rtro-dstn*
- *rtro-e1*
- *rtro-feat*
- *rtro-frm-pwr*
- *rtro-ftp-serv*
- *rtro-gserv-data*
- *rtro-gsm-msg*
- *rtro-gsmmap-scrn*
- *rtro-gsmopts*

- *rtrv-gsms-opcode*
- *rtrv-gsmsmsopts*
- *rtrv-gsmssn-scrn*
- *rtrv-gta*
- *rtrv-gtcnv*
- *rtrv-gtmod*
- *rtrv-gtt*
- *rtrv-gttact*
- *rtrv-gttapath*
- *rtrv-gttaset*
- *rtrv-gttset*
- *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-slkl*
- *rtrv-slt*
- *rtrv-snmp-host*
- *rtrv-snmppopts*
- *rtrv-spc*
- *rtrv-srvel*
- *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*

- *rtro-ttmap*
- *rtro-ttr-msg*
- *rtro-ttropts*
- *rtro-uaps*
- *rtro-uim-acthresh*
- *rtro-vendid*
- *rtro-vflx-cd*
- *rtro-vflx-opts*
- *rtro-vflx-rn*
- *rtro-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-slkl*

- *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-lba*
- *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*
- *sockrtrt*
- *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.

**DDLunstab**

(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 entity 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, *:npcfmt1* 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 *npcfmt1* 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:

- *nnnnnn016383*
- *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-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 `npcfmt.i` 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 allow the EAGLE 5 ISS to fully support ITU National and International Spare Point Codes. [Table 53: 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 54: 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 53: Commands that support the Spare Point Code Prefix

| Command     | Description                                      | Applicable Point Code Parameters                                                                                                                  |
|-------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| alm         | Alarm                                            | <i>dpci</i> and <i>dpcn</i>                                                                                                                       |
| appl-rtkey  | Application Route Key                            | <i>dpci</i> and <i>dpcn</i> ; <i>opci</i> and <i>opcn</i>                                                                                         |
| cspc        | Concerned Signaling Point Code                   | <i>pci</i> and <i>pcn</i>                                                                                                                         |
| dstn        | Destination                                      | <i>spci</i> and <i>spcn</i> ; <i>dpci</i> and <i>dpcn</i> ; and Alias combinations.                                                               |
| ent-trace   | Enter Trace                                      | <i>dpci</i> and <i>dpcn</i> ; <i>opci</i> and <i>opcn</i>                                                                                         |
| gsmap-scrn  | GSM MAP Screening                                | <i>npci</i> and <i>npcn</i>                                                                                                                       |
| gsmopts     | GSM Options                                      | <i>ppsmspci1</i> , <i>ppsmspci2</i> , <i>ppsmspcn1</i> , <i>ppsmspcn2</i>                                                                         |
| gsms-opcode | GSM Short Message Services OP-Code               | <i>pci</i> and <i>pcn</i>                                                                                                                         |
| gtt/gta     | Global Title Translation/Global Title Address    | <i>pci</i> and <i>pcn</i>                                                                                                                         |
| ls          | Linkset                                          | <i>apci</i> and <i>apcn</i>                                                                                                                       |
| map         | Mated Application                                | <i>pci</i> and <i>pcn</i> ; <i>mpci</i> and <i>mpcn</i>                                                                                           |
| mrn         | Mated Relay Node                                 | <i>pci</i> and <i>pcn</i> ; <i>pci1</i> and <i>pcn1</i> ; <i>pci2</i> and <i>pcn2</i> ; <i>pci3</i> and <i>pcn3</i> ; <i>pci4</i> and <i>pcn4</i> |
| na          | Network Appearance                               | <i>type=ituis</i> , <i>type=ituns</i>                                                                                                             |
| pass        | Pass Commands                                    | Syntax for routing keys                                                                                                                           |
| rmt-appl    | Remote Application                               | <i>ipci</i> and <i>ipcn</i>                                                                                                                       |
| rte         | Route                                            | <i>dpci</i> and <i>dpcn</i>                                                                                                                       |
| scr-aftpc   | Gateway Screening Allowed Affected Point Code    | <i>pcst</i> and <i>pctype</i>                                                                                                                     |
| scr-blkdp   | Gateway Screening Blocked Destination Point Code | <i>pcst</i> and <i>pctype</i>                                                                                                                     |
| scr-blkop   | Gateway Screening Blocked Origination Point Code | <i>pcst</i> and <i>pctype</i>                                                                                                                     |

| Command     | Description                                                     | Applicable Point Code Parameters                                                             |
|-------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| scr-cdpa    | Gateway Screening Called Party (CDPA PC Destination) Point Code | <i>pcst</i> and <i>pctype</i>                                                                |
| scr-cgpa    | Gateway Screening Calling Party (Origination) Point Code        | <i>pcst</i> and <i>pctype</i>                                                                |
| scr-destfld | Gateway Screening Affected Destination (Concerned) Point Code   | <i>pcst</i> and <i>pctype</i>                                                                |
| scr-dpc     | Gateway Screening Destination Point Code                        | <i>pcst</i> and <i>pctype</i>                                                                |
| scr-opc     | Gateway Screening Origination Point Code                        | <i>pcst</i> and <i>pctype</i>                                                                |
| sid         | Site ID                                                         | True <i>pci</i> and <i>pcn</i> ; <i>cpci</i> and <i>cpn</i> ; <i>ncpci</i> and <i>ncpn</i> . |
| spc         | Secondary Point Code                                            | <i>spci</i> and <i>spcn</i>                                                                  |

Table 54: Commands that support the Private Point Code Prefix

| Command           | Description               | Applicable Point Code Parameters                                                                                 |
|-------------------|---------------------------|------------------------------------------------------------------------------------------------------------------|
| dstn              | Destination               | <i>spci</i> and <i>spcn</i> ; <i>dpc</i> , <i>dpca</i> , <i>dpci</i> , and <i>dpcn</i> Does not apply to Aliases |
| ls                | Linkset                   | If <i>ipgwapc=yes</i> , <i>apc</i> , <i>apcn</i> , <i>apci</i> , and <i>apcn</i>                                 |
| gtt/gta           | Global Title Translation  | <i>pc</i> , <i>pca</i> , <i>pci</i> , and <i>pcn</i>                                                             |
| inh/unhb-alm      | Destination alarm inhibit | <i>dpc</i> , <i>dpca</i> , <i>dpci</i> , and <i>dpcn</i>                                                         |
| rept-stat-cluster | Report Cluster Status     | <i>dpc</i> and <i>dpca</i>                                                                                       |
| rept-stat-dstn    | Report Destination Status | <i>dpc</i> , <i>dpca</i> , <i>dpci</i> , and <i>dpcn</i>                                                         |
| rmt-appl          | Remote Application        | <i>ipc</i> , <i>ipca</i> , <i>ipci</i> , and <i>ipcn</i>                                                         |
| rst-dstn          | Restore Destination       | <i>dpc</i> and <i>dpca</i>                                                                                       |
| rte               | Route                     | <i>dpc</i> , <i>dpca</i> , <i>dpci</i> , and <i>dpcn</i>                                                         |

## Valid CIC Ranges for SI and MSU Types in Routing Key Static Entries

*Table 55: 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 55: 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.<br>Range is 0-4095. | The TUP protocol is used only in ITU networks. |
| 5 (ISUP)   | CIC is 14 bits.<br>Range is 0-16383.      | CIC is 12 bits.<br>Range is 0-4095. |                                                |
| 13 (QBICC) | CIC is 32 bits.<br>Range is 0-4294967295. |                                     |                                                |

## DRANAIV/DRANAI Mapping

*Table 56: DRANAIV/DRANAI Mapping* shows the mapping between the *drainaiv* and *dranai* parameters.

**Table 56: 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 57: DRANPV/DRANP Mapping* shows the mapping between the *dranpv* and *dranp* parameters.

**Table 57: 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 58: NAIV/NAI Mapping* shows the mapping between the *naiv* and the *nai* parameters.

**Table 58: 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 59: NPV/NP Mapping* shows the mapping between the *npv* and the *np* parameters.

**Table 59: 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 60: Valid Card Applications and Types](#) contains information about cards that use the ent - card command for provisioning.

**Table 60: Valid Card Applications and Types**

| Card Name<br>(as shown on card label) | Part Number                                                                                                                                                                           | Card Type (:type) | Application Type (:appl) | Maximum Cards in the Database                                   |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------|-----------------------------------------------------------------|
| DCM                                   | 870-1945-01<br>870-1945-02<br>870-1945-03<br>870-1984-01                                                                                                                              | dcm<br>stc        | stplan<br>eroute         | 32 for stplan<br>32 for eroute<br>(minimum of 17 for 500 links) |
| EDCM<br>(SSEDCM)                      | 870-2372-01<br>870-2372-08 /<br>870-2372-13 (R)                                                                                                                                       | dcm<br>stc        | stplan<br>eroute         | 32 for stplan<br>32 for eroute<br>(minimum of 14 for 500 links) |
| EDCM-A<br>(SSEDCM)                    | 870-2508-01 /<br>870-2508-02 (R)                                                                                                                                                      | dcm<br>stc        | stplan<br>eroute         | 32 for stplan<br>32 for eroute<br>(minimum of 14 for 500 links) |
| DSM***                                | 870-1984-02<br>870-1984-03<br>870-1984-05<br>870-1984-06<br>870-1984-08<br>870-1984-07 /<br>870-1984-13 (R)<br>870-1984-16 (R)<br>870-1984-09 /<br>870-1984-15 (R)<br>870-1984-17 (R) | dsm               | vsccp                    | 32 for vsccp                                                    |
| EDSM-2G*                              | 870-2372-03<br>870-2372-07<br>870-2372-09 /<br>870-2372-14 (R)<br>870-2372-15 (R)                                                                                                     | mcpm              | mcp                      | 250                                                             |



| Card Name<br>(as shown on card label) | Part Number                                                                   | Card Type (:type)       | Application Type (:appl)                                | Maximum Cards in the Database                                                                                        |
|---------------------------------------|-------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| E1/T1 MIM++                           | 870-2198-01<br>870-2198-02<br>870-2198-03<br>870-2198-04 /<br>870-2198-07 (R) | lime1<br>limt1<br>limch | ss7ansi<br>ccs7itu                                      | 250 for each application                                                                                             |
| E1-ATM                                | 870-2455-01<br>870-2455-02                                                    | lime1atm                | atmitu                                                  | 115                                                                                                                  |
| E5-APP-B                              | 870-3096-01                                                                   | e5appb                  | epap<br>elap<br>lsms<br>nas                             | 2<br>2<br>2<br>1                                                                                                     |
| E5-ATM                                | 870-1872-01 (R)<br>870-1872-02 (R)                                            | limatm<br>lime1atm      | atmansi<br>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<br>lime1atm      | atmansi<br>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<br>870-1873-03 (R)<br>870-1873-04 (R)                             | lime1<br>limt1          | ss7ansi<br>ccs7itu                                      | 250 for each application                                                                                             |
| E5-ENET                               | 870-2212-02<br>870-2212-03 (R)<br>870-2212-04 (R)<br>870-2212-05 (R)          | dcm<br>enet<br>stc      | ss7ipgw<br>ipgwi<br>iplim<br>iplimi<br>stplan<br>eroute | 64 for IPGWx<br>100 for IPLIMx<br>100 for ipsg<br>32 for stplan<br>32 for eroute                                     |

| Card Name<br>(as shown on card label) | Part Number                                              | Card Type (:type)                   | Application Type (:appl)                                               | Maximum Cards in the Database                                                    |
|---------------------------------------|----------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|                                       |                                                          |                                     | ipsg                                                                   |                                                                                  |
| E5-ENET-B                             | 870-2971-01 (R)                                          | dcm<br>enet<br>eneth<br>ipsm<br>stc | ss7ipgw<br>ipgwi<br>iplim<br>iplimi<br>stplan<br>eroute<br>ips<br>ipsg | 64 for IPGWx<br>100 for IPLIMx<br>100 for ipsg<br>32 for stplan<br>32 for eroute |
| E5-IPSM                               | 870-2877-01 (R)<br>870-2877-02 (R)                       | ipsm                                | ips                                                                    | 3                                                                                |
| E5-MCPM-B*                            | 870-3089-01 (R)                                          | mcpm                                | mcp                                                                    | 250                                                                              |
| E5-SM4G***                            | 870-2860-01 (R)<br>870-2860-02 (R)                       | dsm                                 | vsccp                                                                  | 18 for use with ELAP<br>32 for use with EPAP                                     |
| E5-SM8G-B***                          | 870-2990-01 (R)                                          | dsm                                 | vsccp                                                                  | 18 for use with ELAP<br>32 for use with EPAP                                     |
| E5-SM8G-B                             | 870-2990-01 (R)                                          | dsm                                 | siphc                                                                  | 16 of the E5-SM8G-B cards connected to ELAP or EPAP                              |
| E5-TSM                                | 870-2943-03 (R)                                          | tsm                                 | gl                                                                     | 8                                                                                |
| HC-MIM++                              | 870-2671-01<br>870-2671-02<br>870-2671-03 (R)            | lime1<br>limt1                      | ss7ansi<br>ccs7itu                                                     | 125 for each application                                                         |
| LIM-ATM                               | 870-1293-02<br>870-1293-03<br>870-1293-06<br>870-1293-07 | limatm                              | atmansi                                                                | 115                                                                              |

| Card Name<br>(as shown on card label)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Part Number                                                    | Card Type (:type) | Application Type (:appl) | Maximum Cards in the Database |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------|--------------------------|-------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 870-1293-08<br>870-1293-10 /<br>870-1293-13 (R)                |                   |                          |                               |
| MPL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 870-2061-01<br>870-2061-03<br>870-2061-04 /<br>870-2061-06 (R) | limds0            | ss7ansi                  | 250 for ss7ansi               |
| TELCO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 870-2904-01                                                    | telco             | switch                   | 136                           |
| <p>* Though the system allows 250 MCPM cards, practical usage is 2.</p> <p>*** If any MPS-based features are running in the system, up to 25 DSMs are allowed in the system. If only GTT is running, up to 32 DSMs can be used in the system with the 50,000 GTT feature.</p> <p>† † 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 <i>Database Administration Manual - SS7</i>.</p> <p>Part numbers followed by (R) are ROHS numbers. These numbers are equivalent to the non-ROHS numbers that they are paired with.</p> <p>***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.</p> |                                                                |                   |                          |                               |

## Summary of Loopback Testing Commands and Functions

[Table 61: 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, LIMT1, or LIMCH cards, or for the E5-ENET or E5-ENET-B cards running the IPSC application, only the `loopback=sltc` test is allowed.
- The E5-E1T1 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 LBP's may be entered in any order.

See the command descriptions in this manual for details on entering parameters and using the commands.

**Table 61: Loopback Testing Commands and Functions**

| Command/Function                                                                                                                                                                                                                                                                                                                                                                                                            | Card Supported                                                                                                                                                                  | Testing limits                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| <code>act/dact -cdl NETWORK</code><br><i>payload low-level loopback test.</i><br>Link State-Down<br>Equipment tested-All links on the T1 port<br>Purpose-tests connectivity between 2 nodes at the T1 level with some isolation for hte LIU and/or framer<br>Description-Tests near-end card for line, lxvr, and network payload loopback and far-end card for line and payload loopback.<br>Typical use-Tests connectivity | <ul style="list-style-type: none"> <li>• HC-MIM</li> <li>• E5-E1T1</li> <li>• E1-ATM</li> <li>• LIM-ATM</li> <li>• E5-ATM</li> <li>• E1/T1 MIM</li> </ul>                       | 1024 concurrent tests per system             |
| <code>ent - lbp</code> OAM Database for<br><i>Multiple LFS points per LFS tests</i><br>No impact on link behavior other than allowing multiple points                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• E1/T1 MIM (T1 Mode)</li> <li>• HC-MIM (T1 mode) (channelized)</li> <li>• E5-E1T1 (T1 mode) (channelized)</li> <li>• DS0 MPL</li> </ul> | 32 points per card<br>no limit on # of cards |
| <code>act/dact - lbp</code><br><i>EAGLE initiated Level 1 DS0 LFS tests</i><br>Link State-Down<br>Equipment tested-Level 1 element(s) in a signaling path<br>Purpose-Test the error rates of a signaling path                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>• E1/T1 MIM (T1 mode)</li> <li>• HC-MIM (T1 mode) (channelized)</li> <li>• E5-E1T1 (T1 mode) (channelized)</li> <li>• DS0 MPL</li> </ul> | 1024 concurrent tests per system             |

| Command/Function                                                                                                                                                                                                                                                                                                                                                                                                               | Card Supported                                                                                                                                                                                                           | Testing limits                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <p>Description-Sends loopback code to establish loopback, then performs BERT test for a specified period of time</p> <p>Typical use-Validates signaling path has acceptable error rate</p>                                                                                                                                                                                                                                     |                                                                                                                                                                                                                          |                                       |
| <p><b>Remote Loopback</b> <i>FAR END initiated DS0 LFS Test</i></p> <p>Link State-Up or down</p> <p>Equipment tested-Near end hardware up to level 2 and far end hardware level 1 interface</p> <p>Purpose-Auto-Loopback a BERT test to the far end</p> <p>Description-When receiving a loopback code, deactivate the link and go into loopback</p> <p>Typical use-Remotely tests the far end with standard DS0 BERT tests</p> | <ul style="list-style-type: none"> <li>• E1/T1 MIM</li> <li>• HC-MIM (T1 mode) (channelized)</li> <li>• DS0 MPL</li> <li>• E5-E1T1 (channelized)</li> </ul>                                                              | no limit on # of cards                |
| <p><b>tst -slk SLTC</b> <i>EAGLE initiated Level 3 SS7 SLT</i></p> <p>Link State-Up</p> <p>Equipment tested-Near and far end up to Level 3</p> <p>Purpose-Test the entire path to the far end at Level 3</p> <p>Description-Sends an SLTM out and expects an SLTA back</p> <p>Typical use-Validates connectivity of a signaling path</p>                                                                                       | <ul style="list-style-type: none"> <li>• E1/T1 MIM</li> <li>• HC-MIM</li> <li>• E5-E1T1</li> <li>• DS0 MPL</li> <li>• E1-ATM</li> <li>• LIM-ATM</li> <li>• IPLIM (not M3UA)</li> <li>• IPGW</li> <li>• E5-ATM</li> </ul> | 1024 concurrent link tests per system |
| <p><b>tst -slk OAM</b> <i>EAGLE initiated Level 1 ATM test</i></p> <p>Link State-Down</p> <p>Equipment tested-Near and far end level 1 software and hardware including all hardware on the cards</p>                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• E1-ATM</li> <li>• T1-ATM</li> <li>• E5-ATM</li> </ul>                                                                                                                           | 1024 concurrent link tests per system |

| Command/Function                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Card Supported                         | Testing limits                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------|
| <p>Purpose-Test the entire near and far end level 1 hardware by exchanging ATM cells</p> <p>Description-Sends OAM cells out to far end for 60 seconds if no errors, or 2 minutes if errors are received</p> <p>Typical use-Verifies ATM cells can be exchanged between 2 signaling points</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                        |                                              |
| <p><code>tst -s lk</code> LINE <i>EAGLE initiated Level 1-2 ATM test</i></p> <p>Link State-Down</p> <p>Equipment tested-Near end hardware up to level 2 and far end hardware level 1 interface</p> <p>Purpose-Hardware continuity check between near and far end</p> <p>Description-The following steps occur:</p> <ol style="list-style-type: none"> <li>1. Device under test (DUT) sends T1 Payload bit-oriented code (BOC) to remote device</li> <li>2. Remote device receives BOC and programs hardware</li> <li>3. DUT attempts level 2 alignment</li> <li>4. If link aligns (level 2), test passes, else test fails</li> <li>5. DUT sends BOC to remote device to remove loopback</li> <li>6. Remote device receives BOC and re-programs hardware</li> </ol> <p><b>Note:</b> If the DUT boots in the middle of sequence, activate or de-activate the link, and the remote device returns to the original programming.</p> <p>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</p> | <p>LIM-ATM</p> <p>E5-ATM (T1 mode)</p> | <p>1024 concurrent link tests per system</p> |

| Command/Function                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Card Supported                                                                                  | Testing limits                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------|
| <p><code>tst -slk PAYLOAD EAGLE</code><br/> <i>initiated Level 1-2 ATM test</i></p> <p>Link State-Down</p> <p>Equipment tested-Near end hardware up to level 2 and far end hardware level 1 interface</p> <p>Purpose-Hardware continuity check between near and far end</p> <p>Description-The following steps occur:</p> <ol style="list-style-type: none"> <li>1. Device under test (DUT) sends T1 Payload bit oriented code (BOC) to remote device</li> <li>2. Remote device receives BOC and programs hardware</li> <li>3. DUT attempts level 2 alignment</li> <li>4. If link aligns (level 2), test passes, else test fails</li> <li>5. DUT sends BOC to remote device to remove loopback</li> <li>6. Remote device receives BOC and re-programs hardware</li> </ol> <p><b>Note:</b> If the DUT boots in the middle of sequence, activate or de-activate the link, and the remote device returns to the original programming.</p> <p>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</p> | <ul style="list-style-type: none"> <li>• LIM-ATM</li> <li>• E5-ATM (T1 mode)</li> </ul>         | 1024 concurrent link tests per system |
| <p><code>tst -slk LXVR (DS1 loop)</code><br/> <i>EAGLE initiated Level 1 Internal card loopback</i></p> <p><b>Note:</b> A DS1 loop is not supported for MPL cards.</p> <p>Link State-Down</p> <p>Equipment tested-Local card</p> <p>Purpose-Test the near end card only</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• DS0 MPL</li> <li>• E1-ATM</li> <li>• T1-ATM</li> </ul> | 1024 concurrent link tests per system |

| Command/Function                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Card Supported                                                                          | Testing limits                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------|
| <p>Description-Test the near end card up through level 2.</p> <p>Typical use-Validates the card on the Eagle as good</p>                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                         |                                  |
| <p><b>tst -e1</b> LINE, LXVR (DS1 loop), PAYLOAD <i>EAGLE Initiated E1 Port test</i></p> <p>Link State-Down</p> <p>Equipment tested-All links on the E1 port</p> <p>Purpose-Tests connectivity between 2 nodes at the E1 level with some isolation for the LIU and/or framer</p> <p>Description-Tests near-end card for line, lxvr, and payload loopback</p> <p>Typical use-Tests connectivity</p>                                                                                                                                                | <ul style="list-style-type: none"> <li>• E5-E1T1</li> <li>• HC-MIM</li> </ul>           | 1024 concurrent tests per system |
| <p><b>tst -t1</b> LINE, LXVR (DS1 loop), PAYLOAD, FELINE, FEPAYLOAD <i>EAGLE initiated T1 port test</i></p> <p><b>Note:</b> FELINE and FEPAYLOAD are not supported for HC-MIM cards.</p> <p>Link State-Down</p> <p>Equipment tested-All links on the T1 port</p> <p>Purpose-Tests connectivity between 2 nodes at the T1 level with some isolation for the LIU and/or framer</p> <p>Description-Tests near-end card for line, lxvr, and payload loopback and far end card for line and payload loopback</p> <p>Typical use-Tests connectivity</p> | <ul style="list-style-type: none"> <li>• E5-E1T1 (T1 mode)</li> <li>• HC-MIM</li> </ul> | 1024 concurrent tests per system |



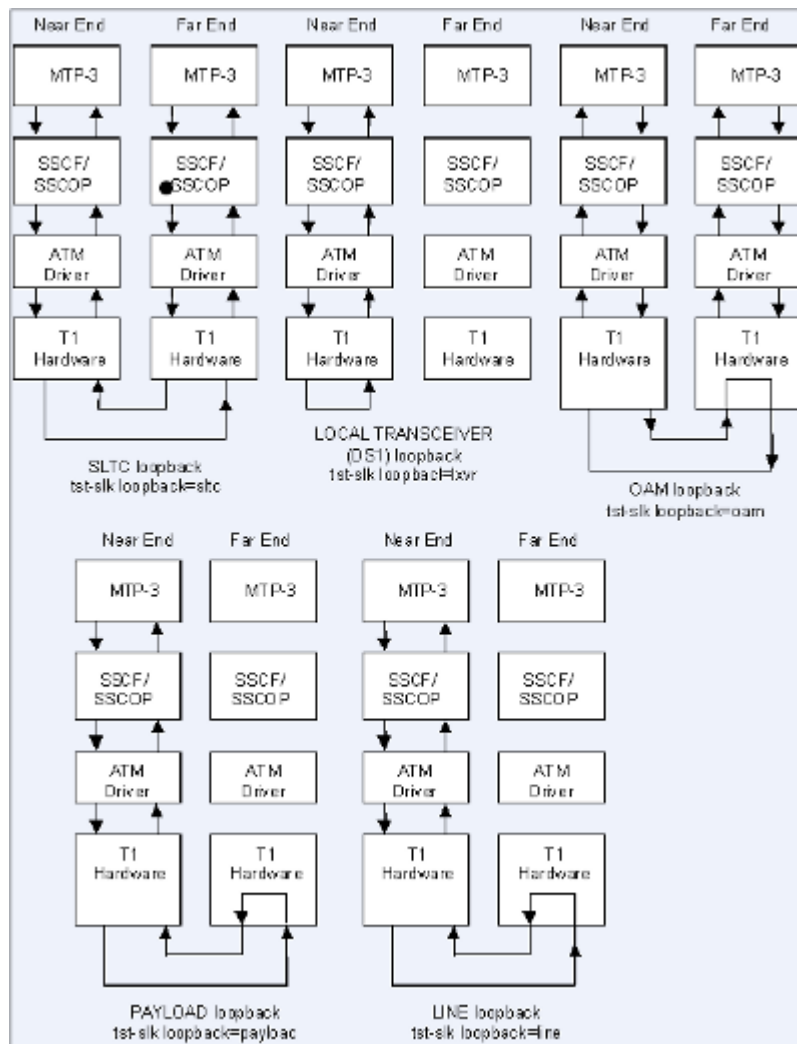


Figure 12: ATM Loopback Tests

# Appendix B

## Acronyms and Abbreviations

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Topics:

- [Acronyms and Abbreviations.....2963](#)



## 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                                                                    |
| <b>ASP</b>     | Application Server Process                                                                     |
| <b>ATI</b>     | Any Time Interrogation                                                                         |
| <b>ATM</b>     | Asynchronous Transfer Mode                                                                     |
| <b>ATMANSI</b> | The application software for the ATM (high-speed) SS7 signaling links                          |
| <b>ATM HSL</b> | Asynchronous Transfer Mode High Speed Link                                                     |
| <b>ATMM</b>    | ATM Layer Management                                                                           |
| <b>AVL</b>     | Availability Measurements report                                                               |
| <b>AVLD</b>    | Daily Availability measurements report                                                         |
| <b>AVLDTH</b>  | Day-to-Hour Availability measurements report                                                   |
| <b>BCSM</b>    | Basic Call State Model                                                                         |
| <b>BIP</b>     | Board Identification PROM                                                                      |
| <b>BITS</b>    | Building Integrated Timing System                                                              |
| <b>BLM</b>     | Bulk Load Module                                                                               |
| <b>BPHCAP</b>  | The application software used by the application processor and the IMT processor of the LIMATM |
| <b>BPDCM</b>   | The application software for flash memory management on the DCM card.                          |
| <b>BSD</b>     | Berkeley Software Distribution                                                                 |
| <b>BSN</b>     | Backward Sequence Number                                                                       |
| <b>CAS</b>     | Channel Associated Signaling                                                                   |

|                |                                                          |
|----------------|----------------------------------------------------------|
| <b>CCM</b>     | Command Class Management                                 |
| <b>CCS</b>     | Common Channel Signaling                                 |
| <b>CCS7</b>    | Common Channel Signaling System #7                       |
| <b>CCS7ITU</b> | The application software for the ITU SS7 signaling links |
| <b>CDPA</b>    | Called Party Address                                     |
| <b>CDPN</b>    | Called Party Number                                      |
| <b>CGPA</b>    | Calling Party Address                                    |
| <b>CF</b>      | Control Frame                                            |
| <b>CIC</b>     | Circuit Identification Code                              |
| <b>CLLI</b>    | Common Language Location Identifier                      |
| <b>CLU</b>     | Network Cluster                                          |
| <b>CM</b>      | Cluster Management                                       |
| <b>CNCF</b>    | Calling Name Conversion Facility                         |
| <b>CP</b>      | Communication Processor                                  |
| <b>CPU</b>     | Central Processing Unit                                  |
| <b>CRC</b>     | Cyclic Redundancy Check                                  |
| <b>CRMD</b>    | Cluster Routing and Management Diversity                 |
| <b>CRP</b>     | Circular Route Prevention                                |
| <b>CSL</b>     |                                                          |

|                |                                                                              |
|----------------|------------------------------------------------------------------------------|
|                | Common Screening List                                                        |
| <b>CSPC</b>    | Concerned Signaling Point Code Group                                         |
| <b>CSU</b>     | Channel Service Unit                                                         |
| <b>DB</b>      | Database                                                                     |
| <b>DCM</b>     | Database Communications Module                                               |
| <b>DIP</b>     | Dual In-Line Package                                                         |
| <b>DIX</b>     | Digital/Intel/Xerox de facto standard for Ethernet Media Access Control Type |
| <b>DN</b>      | Dialed or Directory Number                                                   |
| <b>DPC</b>     | Destination Point Code                                                       |
| <b>DRAM</b>    | Dynamic Random Access Memory                                                 |
| <b>DS0</b>     | Digital Signal Level - 0                                                     |
| <b>DSM</b>     | Database Services Module                                                     |
| <b>DSU</b>     | Data Service Unit                                                            |
| <b>DTA</b>     | Database Transport Access                                                    |
| <b>E5-E1T1</b> | EPM-based E1/T1 Multi-Channel Interface Module                               |
| <b>E5-ENET</b> | EPM-based Ethernet card                                                      |
| <b>E5IS</b>    | Eagle 5 Integrated Monitoring Support                                        |
| <b>EBDA</b>    | Enhanced Bulk Download and Audit                                             |
| <b>EDR</b>     | Efficient Data Representation                                                |

|               |                                                                           |
|---------------|---------------------------------------------------------------------------|
| <b>EF</b>     | Extension Frame                                                           |
| <b>EGTT</b>   | Enhanced Global Title Translation                                         |
| <b>EIA</b>    | Electronic Industries Association                                         |
| <b>EILA</b>   | Enhanced Integrated LIM Applique                                          |
| <b>EIR</b>    | Equipment Identity Register                                               |
| <b>ELAP</b>   | Eagle LNP Application Processor                                           |
| <b>EMP</b>    | Eagle Monitoring Protocol                                                 |
| <b>EMSALM</b> | Element Management System Alarm Monitor                                   |
| <b>ENET</b>   | Ethernet                                                                  |
| <b>EOAM</b>   | Enhanced Operations, Administration, and Maintenance                      |
| <b>EOAP</b>   | Enhanced OSS Application Process                                          |
| <b>EPAP</b>   | Eagle Provisioning Application Processor                                  |
| <b>EPM</b>    | Embedded Processor Module (E5-E1T1 and E5-ENET cards are EPM-based cards) |
| <b>EPROM</b>  | Erasable PROM                                                             |
| <b>ESP</b>    | Extended Services Platform                                                |
| <b>FAK</b>    | Feature Access Key                                                        |
| <b>FAP</b>    | Fuse and Alarm Panel                                                      |
| <b>FAS</b>    | Frame Alignment Signal                                                    |
| <b>FISU</b>   |                                                                           |

|               |                                         |
|---------------|-----------------------------------------|
|               | Fill In Signal Unit                     |
| <b>FPBA</b>   | Frame Power Budget Alarm                |
| <b>FPCR</b>   | Full Point Code Routing                 |
| <b>FPT</b>    | Frame Power Threshold                   |
| <b>FSN</b>    | Forward Sequence Number                 |
| <b>FTA</b>    | File Transfer Area                      |
| <b>FTP</b>    | File Transfer Protocol                  |
| <b>FTRA</b>   | FTP-based Table Retrieve Application    |
| <b>GDB</b>    | GSM Real-Time Database                  |
| <b>G-Flex</b> | GSM Flexible Numbering                  |
| <b>G-Port</b> | GSM Mobile Number Portability           |
| <b>GLS</b>    | Generic Loading Service                 |
| <b>GMSC</b>   | Gateway MSC                             |
| <b>GPL</b>    | Generic Program Load                    |
| <b>GPSM</b>   | General Purpose Service Module          |
| <b>GSL</b>    | Generic Software Load                   |
| <b>GSM</b>    | Global System for Mobile Communications |
| <b>GTA</b>    | Global Title Address                    |
| <b>GTI</b>    | Global Title Indicator                  |



|               |                                              |
|---------------|----------------------------------------------|
| <b>GTT</b>    | Global Title Translation                     |
| <b>GTWY</b>   | Gateway Administration measurements report   |
| <b>GWS</b>    | Gateway Screening                            |
| <b>GWSA</b>   | Gateway Screening Application                |
| <b>GWSM</b>   | Gateway Screening Messages                   |
| <b>HC-MIM</b> | High Capacity Multi-Channel Interface Module |
| <b>HDB3</b>   | High Density Bipolar 3 encoding              |
| <b>HIPR</b>   | High Speed IMT Packet Router                 |
| <b>HLR</b>    | Home Location Register                       |
| <b>HOMERN</b> | Home Network Routing Number Prefix           |
| <b>HMUX</b>   | High-Speed Multiplexer                       |
| <b>HRN</b>    | Home Routing Number                          |
| <b>HSL</b>    | High-Speed Links                             |
| <b>IAM</b>    | Initial Address Message                      |
| <b>IC</b>     | Integrated Circuit                           |
| <b>ICMP</b>   | Internet Control Message Protocol            |
| <b>ID</b>     | Identity                                     |
| <b>IDP</b>    | Initial Detection Point                      |
| <b>IEC</b>    |                                              |

|               |                                                                                    |
|---------------|------------------------------------------------------------------------------------|
|               | International Escape Code                                                          |
| <b>IETF</b>   | Internet Engineering Task Force                                                    |
| <b>IGM</b>    | IS41 GSM Migration                                                                 |
| <b>IGTTLS</b> | Intermediate Global Title Translation Load Sharing                                 |
| <b>IL</b>     | Incremental loading                                                                |
| <b>ILA</b>    | Integrated LIM Applique                                                            |
| <b>IMEI</b>   | International Mobile Equipment Identifier                                          |
| <b>IMF</b>    | Integrated Message Feeder                                                          |
| <b>IMSI</b>   | International Mobile Station Identifier                                            |
| <b>IMT</b>    | Inter-processor Message Transport                                                  |
| <b>IN</b>     | Intelligent Network                                                                |
| <b>INAP</b>   | Intelligent Network Application Part                                               |
| <b>INET</b>   | Internet                                                                           |
| <b>INH</b>    | Inhibit                                                                            |
| <b>INP</b>    | INAP-based Number Portability                                                      |
| <b>INSL</b>   | In-Network Subscriber List                                                         |
| <b>IP</b>     | Internet Protocol                                                                  |
| <b>IPGWI</b>  | An ITU version of SS7IPGW                                                          |
| <b>IPGWx</b>  | 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

|                 |                                               |
|-----------------|-----------------------------------------------|
| <b>LED</b>      | Light Emitting Diode                          |
| <b>LFS</b>      | Link Fault Sectionalization                   |
| <b>LIM</b>      | Link Interface Module                         |
| <b>LIM-AINF</b> | Link Interface Module with the AINF interface |
| <b>LIM-ATM</b>  | LIM with ATM interface                        |
| <b>LIM-DS0</b>  | LIM with DS0 Applique                         |
| <b>LIM-E1</b>   | LIM with E1 Applique                          |
| <b>LIM-OCU</b>  | LIM with Office Channel Unit Applique         |
| <b>LIM-V35</b>  | LIM with V35 Interface                        |
| <b>LNP</b>      | Local Number Portability                      |
| <b>LNPMR</b>    | LNP Message Relay                             |
| <b>LNPQS</b>    | LNP Query Service                             |
| <b>LNP SMS</b>  | LNP Short Message Service                     |
| <b>LPE</b>      | Logical Processing Element                    |
| <b>LPO</b>      | Link Processor Outage                         |
| <b>LRN</b>      | Location Routing Number                       |
| <b>LS</b>       | Link Set                                      |
| <b>LSA</b>      | Link Status Alignment                         |
| <b>LSB</b>      |                                               |

|                |                                              |
|----------------|----------------------------------------------|
|                | Least Significant Bit (bit 1)                |
| <b>LSL</b>     | Low-Speed Link                               |
| <b>LSMS</b>    | Local Service Management System              |
| <b>LSN</b>     | Link Set Name                                |
| <b>LSO</b>     | Link Status out of Service                   |
| <b>LSPE</b>    | Link Status Proving Emergency                |
| <b>LSPN</b>    | Link Status Proving Normal                   |
| <b>LSR</b>     | Link Status Ready                            |
| <b>LSSU</b>    | Link Status Signal Unit                      |
| <b>M2PA</b>    | SS7 MTP2-User Peer-to-Peer Adaptation Layer  |
| <b>M3UA</b>    | SS7 MTP3-User Adaptation Layer               |
| <b>MAAL</b>    | Management ATM Adaptation Layer              |
| <b>MAP</b>     | Mobile Application Part                      |
| <b>MAPSCRN</b> | GSM MAP Screening measurements report        |
| <b>MCAP</b>    | MAS Communication Application Processor Card |
| <b>MCC</b>     | Mobile Country Code                          |
| <b>MCM</b>     | Maintenance Communication Module             |
| <b>MCP</b>     | Measurement Collection Processor             |
| <b>MCPM</b>    | 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                                             |
| <b>MSB</b>    | Most Significant Bit                                       |
| <b>MSC</b>    | Mobile Switching Center                                    |
| <b>MSAR</b>   | Memory space accounting reporting                          |
| <b>MSISDN</b> | Mobile Station ISDN Number or Mobile Switching ISDN Number |
| <b>MSRN</b>   | Mobile Station Roaming Number                              |
| <b>MSU</b>    | Message Signal Unit                                        |
| <b>MTCD</b>   | Maintenance Daily measurements report                      |
| <b>MTCDTH</b> | Maintenance Day-to-Hour measurements report                |
| <b>MTCH</b>   | Maintenance Hourly (marginal) measurements report          |
| <b>MTCS</b>   | Maintenance Status (link/link set) measurements report     |
| <b>MTP</b>    | Message Transfer Part                                      |
| <b>MTP2</b>   | Message Transfer Part, Level 2                             |
| <b>NAI</b>    | Nature of Address Indicator                                |
| <b>NCAI</b>   | Nested Cluster Allowed Indicator                           |
| <b>NCR</b>    | Nested Cluster Routing                                     |
| <b>NEC</b>    | National Escape Code                                       |
| <b>NFAS</b>   | Non-Frame Alignment Signal                                 |
| <b>NI</b>     | Network Indicator                                          |

|               |                                                 |
|---------------|-------------------------------------------------|
| <b>NIC</b>    | Network Information Center                      |
| <b>NID</b>    | Network Identification                          |
| <b>NM</b>     | Network Management                              |
| <b>NP</b>     | Number Plan                                     |
| <b>NPA</b>    | Numbering Plan Area                             |
| <b>NPAC</b>   | Number Portability Administration Center        |
| <b>NPANXX</b> | Numbering Plan Area and Exchange                |
| <b>NRT</b>    | Network Routing                                 |
| <b>NSAP</b>   | Network Service Access Point                    |
| <b>NSE</b>    | Network Security Enhancement                    |
| <b>NSFI</b>   | Next Screening Function Indicator               |
| <b>NSP</b>    | Network Services Part                           |
| <b>NSPC</b>   | New Secondary Point Code                        |
| <b>OAM</b>    | Operations, Administration, and Maintenance     |
| <b>OAP</b>    | Operation System Support Application Processor  |
| <b>OAMP</b>   | Operations, Administration and Maintenance Part |
| <b>OBSR</b>   | Origin-based SCCP Routing feature               |
| <b>OCU</b>    | Office Channel Unit                             |
| <b>OOS-MA</b> |                                                 |



|                     |                                                      |
|---------------------|------------------------------------------------------|
|                     | Out of Service - Memory Administration               |
| <b>OOS-MT</b>       | Out of Service - Maintenance                         |
| <b>OOS-MT-DSBLD</b> | Out of Service - Maintenance Disabled                |
| <b>OPC</b>          | Origination Point Code                               |
| <b>OPCODE</b>       | Operation Code                                       |
| <b>OPNAME</b>       | Operation Name                                       |
| <b>OSI</b>          | Open Systems Interconnection                         |
| <b>OSS</b>          | Operations Systems Support                           |
| <b>PC</b>           | Point Code                                           |
| <b>PCR</b>          | Preventive Cyclic Retransmission                     |
| <b>PCS</b>          | Personal Communications Service (North American GSM) |
| <b>PDBA</b>         | Provisioning Database Application                    |
| <b>PDBI</b>         | Provisioning Database Interface                      |
| <b>PDN</b>          | Packet Data Network                                  |
| <b>PDS</b>          | Persistent Device States                             |
| <b>PLNP</b>         | PCS 1900 LNP                                         |
| <b>PLNPQS</b>       | LNPQS support provided for PLNP                      |
| <b>PPSMS</b>        | Prepaid Short Message Service Intercept              |
| <b>PROM</b>         | Programmable Read-Only Memory                        |

|              |                                       |
|--------------|---------------------------------------|
| <b>PSEL</b>  | Presentation Selector                 |
| <b>PST</b>   | Primary State for Maintenance         |
| <b>PSTN</b>  | Public Switched Telephone Network     |
| <b>PVC</b>   | Permanent Virtual Circuit             |
| <b>PVN</b>   | Private Virtual Network               |
| <b>Q3</b>    | Q.3 Protocol                          |
| <b>RAM</b>   | Random Access Memory                  |
| <b>RBASE</b> | Record Base measurements report       |
| <b>RC</b>    | Relative Cost                         |
| <b>RI</b>    | Routing Indicator                     |
| <b>RFC</b>   | Request for Comments                  |
| <b>RMC</b>   | Remote Maintenance Center             |
| <b>RMTP</b>  | Reliable Multicast Transport Protocol |
| <b>RN</b>    | Routing Number                        |
| <b>RTDB</b>  | DSM Real-time database                |
| <b>RTT</b>   | Round Trip Time                       |
| <b>SAAL</b>  | Signaling ATM Adaptation Layer        |
| <b>SAPC</b>  | Secondary Adjacent Point Code         |
| <b>SCCP</b>  |                                       |

|               |                                                 |
|---------------|-------------------------------------------------|
|               | Signaling Connection Control Part               |
| <b>SCM</b>    | System Configuration Manager                    |
| <b>SCMG</b>   | SCCP Management                                 |
| <b>SCP</b>    | Service Control Point                           |
| <b>SCRSET</b> | Screen Set                                      |
| <b>SCSI</b>   | Small Computer System Interface                 |
| <b>SCTP</b>   | Stream Control Transmission Protocol            |
| <b>SE-HSL</b> | Synchronous E1 High Speed Link                  |
| <b>SEAS</b>   | Signaling Engineering and Administration System |
| <b>SIB</b>    | Status Indication “Busy”                        |
| <b>SIE</b>    | Status Indication “Emergency” Alignment         |
| <b>SIN</b>    | Status Indication “Normal Alignment”            |
| <b>SIO</b>    | Service Information Octet                       |
| <b>SIO</b>    | Status Indication “Out of Alignment”            |
| <b>SIOS</b>   | Status Indication “Out of Service”              |
| <b>SK</b>     | Service Key                                     |
| <b>SKTS</b>   | Service Key/TeleService List                    |
| <b>SLK</b>    | Signaling Link                                  |
| <b>SLS</b>    | Signaling Link Selection                        |

|                |                                                           |
|----------------|-----------------------------------------------------------|
| <b>SLSCI</b>   | Signaling Link Conversion Indicator                       |
| <b>SLTA</b>    | Signaling Link Test Acknowledgement                       |
| <b>SLTM</b>    | Signaling Link Test Message                               |
| <b>SMS</b>     | Short Message Service                                     |
| <b>SMSC</b>    | Short Message Service Center                              |
| <b>SMSMR</b>   | Prepaid Short Message Service                             |
| <b>SNAI</b>    | Service Nature of Address Indicator                       |
| <b>SNM</b>     | Signaling Network Management                              |
| <b>SNR</b>     | Subsystem Normal Routing                                  |
| <b>SOR</b>     | Support for Optimal Routing                               |
| <b>SORP</b>    | Socket Option Registration Primitive                      |
| <b>SPC</b>     | Secondary Point Code Signaling Point Code                 |
| <b>SRF</b>     | Signaling Relay Function                                  |
| <b>SRI</b>     | Send Routing Information                                  |
| <b>SRVSEL</b>  | Service Selector                                          |
| <b>SS7</b>     | Signaling System #7                                       |
| <b>SS7ANSI</b> | The application software for the ANSI SS7 signaling links |
| <b>SS7GX25</b> | The application software for the X.25/SS7 gateway feature |
| <b>SS7IPGW</b> |                                                           |

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

|             |                                            |
|-------------|--------------------------------------------|
| <b>TFR</b>  | Transfer Restricted                        |
| <b>TLNP</b> | Triggerless LNP                            |
| <b>TOS</b>  | Type of Service                            |
| <b>TPS</b>  | Transactions Per Second                    |
| <b>TRA</b>  | Traffic Restarting Allowed                 |
| <b>TRBL</b> | Trouble                                    |
| <b>TRW</b>  | Traffic Restarting Waiting                 |
| <b>TSC</b>  | Time Slot Counter Synchronization          |
| <b>TSM</b>  | Translation Services Module                |
| <b>TT</b>   | Translation Type                           |
| <b>TUP</b>  | Telephone User Part                        |
| <b>TV</b>   | Ticket Voucher                             |
| <b>TVG</b>  | Group Ticket Voucher                       |
| <b>UA</b>   | IETF User Adaptation Layers                |
| <b>UAM</b>  | Unsolicited Alarm Message                  |
| <b>UART</b> | Universal Asynchronous Receiver - Transmit |
| <b>UDP</b>  | User Datagram Protocol                     |
| <b>UDTS</b> | Unit Data Transfer Service                 |
| <b>UI</b>   |                                            |

|                |                                                           |
|----------------|-----------------------------------------------------------|
|                | User Interface                                            |
| <b>UID</b>     | User ID                                                   |
| <b>UIM</b>     | Unsolicited Informational Message                         |
| <b>UPD</b>     | Update                                                    |
| <b>VGTT</b>    | Variable Length GTT                                       |
| <b>VLR</b>     | Visitor Location Register                                 |
| <b>VMSC</b>    | Voice Mail Service Center Visited Mobile Switching Center |
| <b>VSCCP</b>   | VxWorks Signaling Connection Control Part                 |
| <b>WNP</b>     | Wireless Number Portability                               |
| <b>WNPQS</b>   | Wireless Number Portability Query Service                 |
| <b>X.25 DE</b> | X.25 Destination Entity                                   |
| <b>XGTT</b>    | Expanded GTT (GTT Table Expansion)                        |
| <b>XMAP</b>    | Expanded MAP Table                                        |